



UNIVERSIDAD DE CHILE

INSTITUTO DE ESTUDIOS INTERNACIONALES

**WHY DO FOREIGN OIL COMPANIES CONTINUE TO
OPERATE IN EXPLORATION AND PRODUCTION ACTIVITIES
IN BOLIVIA'S HYDROCARBON INDUSTRY AFTER ITS 2006
NATIONALIZATION?**

Dissertation for the Master's program in International Strategy and Trade Policy

Student: Verónica Hali Rodríguez Lozada

Supervisor: Astrid Espaliat L

Santiago, Chile 2014

Universidad de Chile

ABSTRACT

This report explores the question: Why do foreign oil companies continue operate in exploration and production activities in Bolivia's hydrocarbon industry after its 2006 nationalization?

The history of Bolivia's hydrocarbon industry is filled with cycles of nationalization and privatization. Each cycle has produced dramatic changes in Bolivia's petroleum fiscal regime. Bolivia's 2006 nationalization of its hydrocarbon industry has given Bolivia an international reputation as a high risk country to investment in. However, foreign direct investment is still occurring since the 2006 nationalization. The most interesting aspect of this continued foreign direct investment is that, the majority of it is from existing foreign companies that were there before the 2006 nationalization. This report exposes the underlying reasons as to why foreign companies continue to operate in Bolivia's hydrocarbon sector despite its most recent nationalization in 2006. A historical analysis will be conducted on Bolivia's hydrocarbon industry; more specifically, the time period between 1990 until 2009 will be the main focus of this report. The legal changes in Bolivia's hydrocarbon industry since the 1990s will be evaluated in order to understand Bolivia's strategy of nationalization in 2006.

Throughout the history of Bolivia's petroleum fiscal regime, there has been a fluctuation of contractual agreements in use with foreign oil companies. After 2006, Bolivia's contractual agreements finally began to benefit the state by allowing it to receive its fair share of wealth from its hydrocarbon resources. Additionally, Bolivia's "nationalization" did not involve expropriation; instead it consisted of the enforcement of renegotiations of contractual agreements between the Bolivian State and foreign oil companies. The renegotiations are instrumental in explaining why foreign companies continue to operate in Bolivia's hydrocarbon industry after its nationalization in 2006. This report will focus on examining Bolivia's contractual agreements from 1990 until 2009 in order understand why foreign oil companies continue to operate in Bolivia's hydrocarbon industry in spite of its 2006 nationalization.

Bolivia's main source of revenue comes from foreign companies' exploitation and exploration of its hydrocarbon resources, yet Bolivia has always lost its fair share of wealth from its natural resources due to unfavorable contractual agreements with foreign oil companies.

Before the 2006 Nationalization, Bolivia had continuously given foreign investors the majority of revenue from its hydrocarbon resources in an effort to attract and keep foreign investors in its hydrocarbon industry. In the 1990s, Bolivia wanted to increase its levels of foreign direct investment in order to import new technologies as well as to improve the expertise in exploration, extraction, transport and production activities within its hydrocarbon industry. Bolivia's main goal behind seeking FDI was to develop its hydrocarbon sector in order to increase its national wealth from its natural resources. In addition, Bolivia's hydrocarbon sector was extremely undeveloped. The Bolivian State was ill equipped and had inefficient state assets to develop its hydrocarbon industry. Bolivia's petroleum fiscal regime in the 1990s was designed to favor foreign investors in order to attract and maintain foreign investment within its hydrocarbon industry. However, this caused Bolivia to lose significant control over its hydrocarbon industry as well as the wealth from its hydrocarbon resources.

As a result, it became necessary for Bolivia in 2006 to renegotiate their contracts with foreign energy companies in order for Bolivia to obtain its fair share of revenue from its hydrocarbon resources. Since 2005, the government has sought to increase its share of total hydrocarbon revenues. In May 2005, the former president, Carlos Mesa introduced a new Hydrocarbon Law No. 3058 which created a direct tax, the IDH (Direct Tax on Hydrocarbons), which required companies to pay 32% of production value to the state, in addition to an 18% royalty rate that was already required. However, this law was not yet implemented until Evo Morales became the president of Bolivia in 2006. Shortly after Evo Morales became president of Bolivia, he implemented the 2006 Nationalization Decree which mandated the Hydrocarbon Law No. 3058. This law required renegotiation of contractual agreements with all foreign oil companies operating in Bolivia. The Law No. 3058 made the Bolivian State owner of all hydrocarbon resources and private companies were permitted to only keep 18 percent of production value. This law also nationalized refineries and hydrocarbon distribution companies in order to ensure the presence of Bolivia's national oil company YPFB (Yacimientos Petrolíferos Fiscales Bolivianos) in every stage of the value chain. These actions, together with the rising international hydrocarbon prices have increased the Bolivian state's hydrocarbon revenues.

The information obtained from the research in this report, will explain why foreign companies continue to operate in exploration and production activities in Bolivia's hydrocarbon industry since its 2006 nationalization. Bolivia's strategy behind its nationalization and its current use of contractual agreements will provide the main arguments as to why foreign companies continue to operate in Bolivia in spite of its hydrocarbon nationalization in 2006.

Key words: Bolivia, Hydrocarbon, Foreign Direct Investment, Contracts, Nationalization

ACKNOWLEDGEMENT

I would like to gratefully and sincerely thank Professor Astrid Espaliat and Professor Felipe Muñoz for their guidance, understanding, patience and contribution to this dissertation. Without their support, this dissertation would not be complete.

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INTRODUCTION

This case study will answer the question: Why do foreign oil companies continue to operate in exploration and production activities within Bolivia's hydrocarbon industry after its 2006 nationalization?

To begin, one must understand Bolivia's geo-political location in order to understand the hydrocarbon industry in the country. Bolivia is located in the center of South America; it is a landlocked country with an abundant amount of natural resources. It has a population of over 10.4 million people and is one of the poorest and least developed countries in Latin American. Its strongest economic and political relationships are with its regional neighbors. It is bordered by Brazil to the north and east, Paraguay and Argentina to the south, Chile to the southwest, and Peru to the west. Brazil and Argentina are two of its largest trading partners as well the largest consumers of Bolivia's dominant export, natural gas. Bolivia's natural gas is shipped exclusively to Brazil and Argentina. Bolivia's revenues from its hydrocarbon exports account for 45 percent of total public revenue. One of Bolivia's exceptional characteristics is its FDI (Foreign Direct Investment) composition. Most of Bolivia's FDI inflows come from existing gas-producing companies rather than new investments. (Deutsche Bank Research, 2013)

In my hypothesis there are three main arguments as to why foreign oil companies continue to operate in Bolivia's hydrocarbon industry after the 2006 Nationalization:

- Bolivia's "nationalization" did not include expropriation of assets; instead it required foreign companies to sign new contracts where the Bolivian state increased its share of revenue.
- Bolivia's hydrocarbon industry continues to be profitable and beneficial for foreign investors.
- The legal incentives in Bolivia's hydrocarbon industry during its privatization period in the 1990s spurred the increase of exploration and as a result, 600 percent more natural gas reserves were discovered which incentivized foreign companies to stay in Bolivia.

The reason why foreign oil companies have stayed in Bolivia after its 2006 nationalization is linked to Bolivia's strategy of "nationalization" which did not expropriate any foreign private assets. Instead, it required the renegotiation of new contractual agreements between the Bolivian State and foreign oil companies. An in-depth analysis will be conducted on Bolivia's contractual agreements from 1990 to 2009 which will provide the underlying reasons as to why foreign oil companies continue to operate in Bolivia's hydrocarbon industry despite its 2006 nationalization.

The citizens of Bolivia have demanded changes in their national relationship with foreign investors within its hydrocarbon industry since the early 2000s. This is a result of Bolivia's 1990s contractual agreements that negatively affected the Bolivian economy. The 2005 Hydrocarbon Law No. 3058 was highly supported by the citizens of Bolivia because it was able to change Bolivia's investment climate which allowed the state to receive no less than 50 percent from hydrocarbon revenues. This was in contrast to what the Bolivian state received before the 2006 nationalization which was only 18 percent. Between 1996 until 2006, Bolivia lost a total of 3,400 million dollars from receiving only a small portion of its hydrocarbon revenues which was supported by the neoliberal laws of the 1990s. (Vargas, 2006)

Although the Bolivian citizens were eager to implement Law No. 3058 in 2005, it was not officially authorized until Evo Morales became president of Bolivia in 2006 and he executed the "2006 Nationalization Decree" (Supreme Decree No. 28701) which mandated the 2005 Hydrocarbon Law No. 3058. Subsequently, after Law No. 3058 was mandated, foreign companies operating in Bolivia's hydrocarbon sector were obligated to convert their Risk Sharing Contracts into the new forms of petroleum contracts under a deadline of six months. During these six months, foreign oil companies had to negotiate new operating contracts which transferred their entire production chain to YPF. The new petroleum contracts consisted of: (i) production sharing contracts, (ii) Operating Contracts, (iii) association contracts, and under all three contracts, hydrocarbon reserves and production belong to the State.

In October 2006, all foreign oil companies that were operating in Bolivia signed a total of forty-four Operating Contracts which forced them to comply with the new terms of agreement in Law No.3058. All new contractual agreements were enforced on May 2, 2007; after this date all foreign oil companies existing in Bolivia prior to 2006 accepted and adapted to the new terms

and conditions under the new contracts. These new contracts were based on direct renegotiations between the Bolivian state and foreign investors.

This report will explore the history of contractual agreements within Bolivia's hydrocarbon industry which eventually led to its 2006 nationalization. This paper will also provide a comprehensive analysis of Bolivia's legal changes since 1990 until 2009. The evaluation is based on the following:

- Bolivia's Hydrocarbons Laws in the 1900s: 1990 Law No. 1194, 1994 Capitalization Law, 1996 Law No. 1689 which outlines Bolivia's petroleum fiscal regime in the 1990s.
- Bolivia's 2005 Hydrocarbon Law No. 3058 and Evo Morales's "2006 Nationalization Decree" which outlines the process of nationalization within its hydrocarbon industry.
- An analysis of Bolivia's 2009 Constitution which was amended to support the 2005 Hydrocarbon Law No. 3058 and the 2006 Nationalization Decree.
- An analysis of Bolivia's current petroleum fiscal regime that only uses service contracts since 2009.

STATE OF THE ART

There are several explanations for Bolivia's 2006 nationalization. Some explanations are extremely critical of Bolivia's 2006 nationalization and view it as a short-term solution to internal political and social issues. While some view it as a necessary step for the Bolivian government because Bolivia has continuously lost its share of wealth from its hydrocarbon resources and the nationalization allowed Bolivia to take part in its national wealth. The following authors provide distinct perspectives as to why Bolivia decided to nationalize its hydrocarbon industry in 2006.

According to Sidney Weintraub, the author of the article: "Bolivia's Natural Gas Nationalization", Bolivia's 2006 nationalization occurred for two reasons: The first reason was for a greater return on natural gas exports to Brazil and Argentina because hydrocarbon product prices were rising. He is a believer in the notion that hydrocarbon producing countries such as Bolivia usually renegotiate contracts when prices for its products are rising sharply. The second reason is that the actions taken by Bolivia were impulsive, shortsighted and heavily influenced by Venezuela's nationalization process which started in 2001. He supports his second reason by describing Hugo Chavez's influence on Bolivia as natural because both countries have similar history in dealing with unfair contractual agreements with foreign energy companies. Additionally, Evo Morales and Hugo Chavez were political allies in the region and Chavez's support for Bolivia's 2006 nationalization was expected. Chavez encouraged Morales to view resource nationalization for three reasons: (1) as a way to trigger economic growth (2) these actions dissolve many of Bolivia's internal struggles such as race and economic inequalities (3) gives the Bolivian state more control over his natural resources.

In Juan Forero's, "History Helps Explain Bolivia's New Boldness" he argues that Bolivia's 2006 nationalization was necessary in order for Bolivia to exemplify its strength and character. This is because Bolivia's history is filled with great losses due to war, land disputes, and foreign control over natural resources. Forero goes on to explain that many Bolivians considered their history, one of humiliation especially after their defeat in the War of the Pacific with Chile which cost Bolivia to lose access to the sea. Forero argues that Bolivia's resentment towards their history of humiliation is what triggered the 2006 nationalization of its hydrocarbon

industry. For most Bolivians, this nationalization became a source of national pride. Evo Morales is quoted describing the meaning behind the 2006 nationalization as:

“The time has come, the awaited day, a historic day in which Bolivia retakes absolute control of our natural resources. The looting by foreign companies has ended” (Forero, 2006).

Evo Morales played a pivotal role within the nationalization. He provided the 2006 Nationalization Decree which mandated the 2005 Hydrocarbon Law No. 3058 which gave Bolivia’s national oil company, Yacimientos Petrolíferos Fiscales Bolivianos (YFPB) control over all aspects of oil and gas development including “control and direction” of production, commercialization, transportation, and the setting of price and volume levels.

Juan Forero supports the argument that Sidney Weintraub makes in regards to Hugo Chavez being extremely influential to Evo Morales during the 2006 nationalization. Forero emphasizes the fact that Evo Morales was heavily influenced and inspired by Venezuela’s hydrocarbon industry nationalization process that began in 2001. Forero also details how Hugo Chavez was an instrumental advisor to Evo Morales during Bolivia’s hydrocarbon industry’s nationalization process. This regional support was an essential element to Bolivia’s boldness during its renegotiation process with foreign investors in 2006.

Joseph E. Stiglitz, author of “Who Owns Bolivia”, argues in favor of Bolivia’s decision to nationalize. Stiglitz emphasizes the pivotal role Evo Morales played within the nationalization process and how the international community should not only view Bolivia’s 2006 nationalization in a positive light but also celebrate it because it was an historic moment for Bolivia. Evo Morales was Bolivia’s first democratically elected indigenous president promising to represent the interests of the marginalized people of his country. Stiglitz emphasizes that during Evo Morales’s campaign, he made it clear that his intention was not to expropriate the property of the foreign energy companies and that he wanted investors to stay in Bolivia. Morales kept true to his promise in 2006 when he renegotiated contractual agreements with foreign energy companies in order to keep foreign investors in the country. He understood that Bolivia needed foreign expertise to achieve growth; however, fair contractual agreements were needed in order for Bolivia to witness a growth. Stiglitz believes the nationalization was necessary for Bolivia because it allowed Bolivia to get a fair return, in monetary terms, from

their natural wealth. He details how Bolivia's history with foreign investors has been unfair and their contractual agreements lacked transparency, this explains Bolivia's deficiency in economic growth in the past.

In John Dillon's "Bolivia Emulates Norway; Why Doesn't Canada?" he argues that Bolivia's nationalization mirrors Norwegian policies within its hydrocarbon sector. President Morales in one of his speeches to investors stated, "We don't want masters any more. We want partners" (Dillon, 2006). Bolivia's previous relationship with foreign investors forced Bolivia to seek alternatives in its negotiation strategy in order to guarantee increased revenue from hydrocarbon resources. Five weeks before Bolivia's 2006 nationalization, a Norwegian delegation met Bolivian officials to discuss how to design petroleum contracts and establish export prices. (Dillon, 2006) As a result, similarities can be found between Norway and Bolivia's contractual agreements.

Norway's petroleum fiscal regime is designed for the state-controlled company, Norsk Hydro which receives 90 percent of revenues generated by its hydrocarbon industry. By Norwegian standards, Bolivia's 2006 nationalization strategy was rather modest due to the fact that Bolivia applied an 18 percent royalty, a 32 percent direct tax on production and an additional 32 percent from a participation tax enforced by the state-owned petroleum firm YPF. This is a total of 82 percent of revenue for the Bolivian state. As a result, this leaves 18 percent of the proceeds from hydrocarbon product sales to foreign companies. Bolivia's 2006 nationalization required 8 percent less in state revenue than what Norway's petroleum fiscal regime obligates. Additionally, this article highlights the differences between perceptions of renegotiations of contractual agreements between developed and less developed countries.

In the article, "Bolivia: Social Movements, Populism, and Democracy", the authors argue that the 2006 Nationalization occurred because of the populist rhetoric behind Bolivia's social movements from 2000-2005. (Larson, Madrid, Mayorga, and Varat, 2008) These social movements were a result of Bolivia's history of racial and economic inequality as well the unfair contractual terms of agreement with foreign investors. Racial and economic inequality among Bolivians is a major element in Bolivia's societal makeup which was one of the driving forces behind the social movements that triggered the 2006 nationalization. Additionally, the neo-

liberal policies of 1990s in Bolivia's hydrocarbon sector were unfavorable for Bolivia because they were explicitly established to encourage foreign direct investment. These neo-liberal policies along with the unfair contractual agreements of the 1990s heightened the racial and economic inequality within Bolivia which led to the increased growth of social movements which began in 2000. These social movements were filled with a great deal of populist propaganda in favor of radical changes within Bolivia's political system especially as it pertains to the relationship with foreign investors. Bolivia's Gas War from 2003-2005 resulted in several violent protests. Much of the populist rhetoric behind these protests included the demand for the nationalization of Bolivia's hydrocarbon industry. (Larson, Madrid, Mayorga, and Varat, 2008)

These social movements directed Bolivia's political trajectory and allowed the citizens to practice democracy for the first time (in terms of presidential elections). Evo Morales was elected president of Bolivia in 2006 by the majority of Bolivian citizens. Throughout his campaign for presidency he promised to nationalize the country's hydrocarbon industry. Essential, this article argues that Evo Morales had to nationalize Bolivia's hydrocarbon industry when he became president because of the populist rhetoric surrounding the presidential elections. Evo Morales was democratically elected in order to fulfill the populist goals that created the social movements in the first place. The populist goals of nationalization ultimately led to the 2006 nationalization of its hydrocarbon industry.

The motives behind Bolivia's 2006 nationalization of its hydrocarbon industry are multifaceted. The history of Bolivia's hydrocarbon industry is complex and has continuously been dominated by overlapping power structures between the policies of privatization versus nationalization. The nationalization was expected following the violent populist social movements that occurred from 2000-2005. This nationalization meant more to Bolivians than just greater control of their natural resources; it provided Bolivians with a newfound sense of national pride along with hope for better economic opportunities. Literature that explains why foreign oil companies continue to operate in Bolivia's hydrocarbon sector after the 2006 nationalization is limited.

CHAPTER ONE: GENEAL BACKGROUND

1.1) Foreign Direct Investment and Resource nationalism

Since globalization, the relationship between foreign investors and host states has been based on attraction from both parties. The party with the most leverage is multinational companies due to their investment power, especially in developing countries. Developing countries with extractive industries seek to attract foreign investors because this leads to the importation of new technologies and improves expertise in various fields. In addition, FDI advances the technical, quality control, legal, and management development aspects in respective industries and enhances access to export markets. Host states have been convinced by multilateral organizations and transnational corporations that the distinct mechanisms that form foreign direct investment protection are vital in order attract and incentivize foreign investment. The supposed correlation between host states implementation of various forms of FDI protection (to attract foreign investors) and the supposed increase in foreign investment that host states are to receive is debatable. This correlation is weak, however; it proves to be true in regards to foreign investment in high-risk countries. The distinct mechanisms that form foreign direct investment protection are complex and multi-faceted and host states have chosen to implement numerous mechanisms into their institutional investment framework such as a national investment law, Bilateral Investment Treaties (BITs), and contractual agreements. (Driemeier, 2003)

Foreign direct investment is imperative for developing countries in order to facilitate the economic growth and development in key industries. However, if the host state is in a state of instability, it poses a risk to investors. There are always risks involved for investors such as changes in market prices and unforeseeable fluctuations or opportunities. Investment in a high risk country is an extraordinary market risk and its creditability as a reliable investment is paramount for investors. Host states also take a risk with international investors because an investor could reap most of the profits of an investment and not abide with its terms of agreement if domestic issues arise. Investment is directly affected by domestic conditions. There are some negative externalities attributed to foreign direct investment for host states such as: decreasing domestic competition, stalling indigenous entrepreneurship, and increasing income inequality. However, impacts to investors and host states are completely dependent on the

contractual terms of agreement between the investor and host country. FDI has the potential to produce a plethora of positive or negative outcomes in the host country. Due to the need to develop potential profitable extractive industry, FDI is essential. As such, the majority of host countries implement various types of FDI protection to incentivize investors.

The type of instability that has become a high risk for investors is the potential threat of resource nationalism. During the 21st century, many developing countries have taken the route to nationalize many of their extractive industries because of unfavorable contractual agreements with foreign investors. There are different models of resource nationalism; it has become a popular option for developing countries with large oil and gas reserves. Resource nationalism is a term that incorporates a series of actions on behalf of a host state such as, expropriate or change the terms on which resources are extracted, and monetized, in order to obtain greater benefits for the host state. (Clarke and Cummins, 2014) The 1962 United Nations resolution on the permanent sovereignty of natural resources is based on “the inalienable right of all State freely to dispose of their natural wealth and resources in accordance with their national interest” (Clarke and Cummins, 2014). While the International Energy Forum defined resource nationalism as “nations wanting to make the most of their endowment” (Clarke and Cummins, 2014). Resource nationalism has a variety of forms and its implementation depends on host state’s history and citizens’ needs. Forms of implementation range from nationalization that includes expropriation to regulatory and fiscal measures that prevent an investor from receiving the value of the resources they are exploiting as well as the increase of the host state’s national control.

There is a clear distinction between resource nationalism during the 20th and 21st centuries. Resource nationalism during the 20th century was based more on an ideological stands. During the 21st century, it is more about pragmatic considerations of national gain. (Soo-Ho, 2011) Industries that have nationalized serve as a symbol of national pride for many countries. Bolivia’s 2006 resource nationalism in its hydrocarbon sector is categorized as revolutionary because its roots are formed from domestic political and social upheavals. One of the main goals within Bolivia’s revolutionary resource nationalism was to reclaim control of their nature resources that were primarily controlled by foreign investors after the 1990s neo-liberal reforms. (Soo-Ho, 2011)

In the 21st century, there has been a wave of resource nationalism in South America especially within the hydrocarbon industries. Resource nationalism is a live issue because forty-four per cent of global hydrocarbon production is taking place in countries that pose a “high” or “extreme” risk of resource nationalism. (Clarke and Cummins, 2014) Many developing economies are in need of investment due to inefficient state assets. The developing economies need private investment to develop infrastructure for the exploration, production, and transport of oil and gas reserves. A key feature within the context of resource nationalism is its cyclicity, within a globalized world, no one actor is in full control including the state. Usually, resource nationalism is the option for many developing countries because host states want more control over their national resources rather than oil companies having the majority of the control.

The cycle of resource nationalism in hydrocarbon industries begins with some form of implementation of nationalist policies onto the industry which eventually leads to host states seeking FDI. A host state eventually start seeking FDI because the state is usually ill equipped and has inefficient state assets to develop the industry themselves. This is how the cycle perpetuates itself. FDI brings technology and expertise for the exploration, extraction, transport and production of oil and gas reserves. Foreign investment is essential for the growth of an industry in developing countries. FDI within hydrocarbon industries of developing countries have usually resulted in unfair bargaining deals that greatly favor foreign investor’s interest. The unfair contractual agreements between host states and foreign investors have been the underlying reason as to why developing countries opt for resource nationalism.

Ultimately, the unfair terms of agreement between host states and foreign investors are the main cause for host state’s initial domestic political dispute that initiate the motives for this type of governmental control over domestic industries. This is how the cycle of resource nationalism begins and continues until foreign investment is needed once again to fuel the growth of an underdeveloped industry in a developing country. Host states are more willing to allow foreign investment if the investment has the potential to enhance the host nation’s economy beyond just receiving tax receipts and royalty payments on the investment. This would include: importing new technology, business opportunities for local businesses and transport infrastructure development.

In essence, host states implement resource nationalism in an effort to counter the unfavorable protection mechanisms utilized by investors in BITs (Bilateral Investment Treaties) or in contractual agreements. Investors use various approaches to protect their FDI, especially in case of a threat of resource nationalism and expropriation. Host states and foreign investors want to attract each other for distinct self-serving reasons and want the investment to occur.

1.2) Mechanisms used by foreign investors for FDI protection

The structure of a contractual agreement is what the entire investment is based on in regards to its legal, financial, and chain of production process. In many contractual agreements, investors establish a stabilization clause which preserves the legal and economic bargain agreed upon by the investor and the host state when the investment was finalized. Stabilization clauses have a long history within extractive industries. There are two different types of stabilization clauses. The first type of stabilization clause imposes an obligation on the host state not to make any changes to the contract even if a new national law is implemented which is better known as a “freezing clause”. This also would include no changes in the amount of payment in taxes or royalties once the contract has been finalized. The second type of stabilization clause provides the ability to adjust contractual terms to reflect the changes in the host state’s law. This clause does not prohibit the host state from contractual changes; rather it prescribes negotiation adjustments for the consequences of actions taken by the host state. (Clarke and Cummins, 2014)

In recent decades, investors have opted for adjustment clauses rather than “freezing clauses” because within the adjustment clauses a formula is usually provided for automatic adjustment to any specific changes. In addition, any changes from resource nationalism are usually included in the makeup of the formula as well as other specified changes such as an increase or imposition of a new tax. However, if the adjustment clause does not have a formula within the contractual agreement, then the adjustments are completely dependent upon the investors and host states’ re-negotiation terms. This may be difficult in practice due to the fact that resource nationalism has many forms and any actions taken by the host state are unforeseeable, in turn this creates uncertainty in many aspects of the contractual terms. (Soo-Ho,2011)

Investors have a series of options when confronted by a host state's decision to implement resource nationalism. An investor can decide to remain in the host state and accept the new economic policies in order to have access to the hydrocarbon extraction. A drastic option for investors is to take their case to the International Centre for Settlement of Investment Disputes (ICSID). This approach is aggressive, public and troublesome which could cause long-term and irreparable damage to the relationship between the investor and the host state. Most significantly, it could cause foreign investors to lose access to oil and gas reserves for exploration and production.

International arbitration provides a sophisticated tribunal without the use of litigation in foreign courts. The International Centre for Settlement of Investment Disputes (ICSID) is dedicated to the resolution of international investment disputes with the support of the World Bank. The role of arbitration is not confined to contractual disputes, it also relies on the status of a host states' consent to arbitration in either an investment statute such as a national investment law or an investment treaty. Since 2000, disputes reported to ICSID have increased in the energy industries; this reflects the changes in the international investment environment. (Clarke and Cummins, 2014) As such there has been an increase in foreign direct investment in energy sectors as well as in the implementation of resource nationalism. A strategy used in foreign direct investment is the Bilateral Investment Treaties (BITs). These treaties depend on the terms of agreement between the investors and host states.

A provision within BITs monitors the level of expropriation and typically provides an entitled level of compensation to investors. Expropriations are often permissible within bilateral investment treaties; however, it must be justifiable and non-discriminatory between local and foreign investors while at the same time providing adequate compensation to the investor. Considering the varying forms of resource nationalism, expropriation is a common term associated with it. The use of expropriation differs from the type of resource nationalism that actually takes place. Expropriation can be direct; this would transfer the title of an asset from the investor to the host state. An indirect expropriation is where the title is retained and the investor is deprived of the value of its investment. In the context of indirect expropriation, "creeping expropriation" is a term used to define the act of incremental deprivation of the investor's investment. This involves a series of measures including: increases in taxes, regulatory measures

on profit or increased mandatory level of state involvement in an investor's project. Host states and investors have agreed to implement various protectionist clauses into BITs, mostly for the protection of the investor. Such clauses include: the most-favored nation clause, national treatment clause, umbrella clauses, and survival clauses. (Dolzer and Stevens, 2014)

1.3) Bolivia's denunciation of the ICSID:

Bolivia submitted its notice of denunciation of the ICSID Convention to the World Bank on May 2, 2007. The Bolivian government justified this decision in stating: "ICSID's alleged bias towards corporations, the lack of substantive appeals mechanism for arbitration rulings, and the confidentiality of arbitration hearing charged with resolving matters of public interest" these are the primary reasons as to why Bolivia renounced ICSID (Tietje, Nowrot, and Wackernage, 2014). Legally, according to Article 71 of the ICSID Convention, Bolivia's denunciation of the ICSID Convention became effective on November 3, 2007. Bolivia ratified the ICSID Convention on June 23, 1995.

Six companies have entered into legal arbitration in international courts to obtain compensation from the Bolivian government. These companies include: Pan American Energy, EuroTelecom International NV, Oil Tanking GMBH, Graña y Montero SA, Rurelec PCL, GDF Suez and Quiborax. However, only one legal arbitration case in the ICSID international forum was related to Bolivia's hydrocarbon industry; it was registered on April 12, 2010 and this is not related to Bolivia's 2006 nationalization. This case is still pending and has been suspended until April 2014. (Tietje, Nowrot and Wackernagel, 2014)

As a result of the denunciation of the ICSID, Bolivia's twenty-three BITs will be revised or terminated. However, the crucial provision within the Bolivia's BITs is its "survival clause". This clause allows any of Bolivia's BITs to remain effective for an extended period of twenty years from the date of termination with regards to investments made prior to that date. (Tietje, Nowrot, and Wackernage, 2014) It is still possible for private investors within Bolivia's BITs to initiate dispute settlement within ICSID arbitration beyond the date of Bolivia's denunciation of the ICSID Convention. Foreign investors that are protected by a BIT with Bolivia prior to Bolivia's withdrawal of the ICSID still have the ability to access arbitration. Bolivia's consent to ICSID arbitration is based on the relevant bilateral investment treaties and investors have the

capacity to take advantage of that consent although Bolivia withdrew from the ICSID Convention.

Since the denunciation, disputes are taken to local rather than international courts for arbitration. Bolivia's reform efforts are the result of unfavorable experiences with foreign investors. The neo-liberal policies of the 1990s in Bolivia's hydrocarbon industry, allowed the state to accept numerous unfavorable contractual agreements with foreign investors. Bolivia's BIT's are either in the process of renegotiation, have already been terminated, or are still active until it reaches its expiration date. All agreements must align with the new 2009 Constitution and the National Development Plan (NDP). Bolivia's petroleum fiscal regime is based on contractual agreements but it lacks a strong legal institutional framework to support it. However, investors are not necessarily attracted to a country by the number of privileges it provides; rather, the attraction is a result the amount of potential profit that could be generated by an investment. (McGuigan, 2014)

Prior to Bolivia's withdrawal from the ICSID in 2007, Bolivia was in the midst of nationalizing its hydrocarbon industry since 2005 with its new Hydrocarbon Law No. 3058. Bolivia's strategy to enforce resource nationalization upon its hydrocarbon sector and to renegotiate contractual agreements with private foreign companies before its withdrawal from the ICSID in 2007 was instrumental for the Bolivian state in order to avoid arbitrations in international courts. Private foreign energy companies were inclined to renegotiate new contractual agreements with the Bolivian state rather than take their cases to arbitration because Bolivia's nationalization did not include expropriation of private assets. Instead, Bolivia's resource nationalization resulted in the purchase of the majority shares from the multinational firms as well as an increase in taxes and royalties in 2006. (Donaldson, 2007)

1.4) The Petroleum Fiscal Regime

The petroleum fiscal regime is a set of laws, regulations and agreements which govern the economic benefits derived from petroleum exploration and production. The regime regulates transactions between the political entity and the legal entities involved. In this context, a commercial entity is the legal entity which is usually oil companies.

1.5) Petroleum Contracts

A Petroleum Contract is the legal instrument used by a State to grant rights and obligations to each party for the exploration and/or exploitation of oil or natural gas. The Petroleum Contracts respond to a legal framework within a state. Bolivia's legal investment framework is regulated by the 2005 Hydrocarbon Law No. 3058 and the 2009 State Constitution. A Petroleum Contract covers extractive activities for oil and gas.

Types of Petroleum Fiscal Systems:

There are two types of petroleum fiscal systems for foreign direct investment in Bolivia:

1) The Concession system

2) The Contractual system which is divided into two categories:

- Production Sharing Contract

- Service Contract- it may be pure, risk or a third party combination.

(Fundacion Jubileo, 2012)

- Concession Contracts:

Concession Contracts are an agreement that grant exclusive rights to explore develop and export petroleum on a specific territory, for a certain time period. The State transfers ownership of resources (hydrocarbon) to individual or private institutions. In return, the state receives royalties and income taxes. The foreign company must secure financing and technological capabilities and they bare all exploration and production risks. (Aghion and Quesada, 2011)

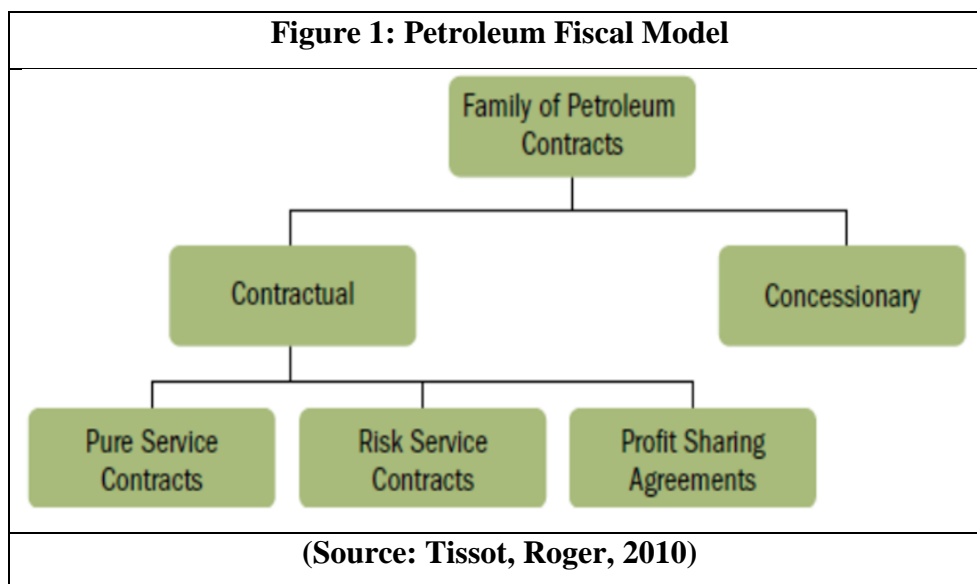
- Production Sharing Contract:

A Production Sharing contract is an agreement that the state owns the resources and all the installations and plants while the foreign company is hired to explore, exploit and develop resources in exchange for a share of production. However, the foreign company assumes the risk of exploration and if reserves are discovered, the foreign company must pay a royalty. The foreign company keeps a percentage of production to recover costs and the remaining production is shared between country and company. (Aghion and Quesada, 2011)

- A Service Contract at Risk:

A Service contract at risk is based on the fact that the foreign company assumes all the technical/financial risks of exploration, development and production. If the scan is not successful, the contract ends without reimbursement for the company. If the scan is successful, the capital invested by the contracted company is reimbursed with interest, together with a cash payment by the volume produced. The production management may be performed by the private sector or the national oil company.

In recent years, some of the oil and natural gas producing countries have shown an increasing interest in adopting variations of service-type contracts instead of the pre-dominant use of production sharing contracts or concessions within their oil and natural gas development and exploration projects. A service contract is, “a long-term contractual framework that governs the relation between a host government and international oil companies (IOCs) in which the IOCs develop or explore oil or natural gas fields on behalf of the host government in return for pre-determined fees in which most cases the host government does not hand over the control of the extracted or subsoil or sub-surface resources to ICOs” (Ghandi, and Lin, 2014).



The recent transition from production sharing contracts to service contracts is similar to the transition from concession contracts to production sharing contracts that occurred in the 1990s. Service-type of contractual frameworks began to appear in Venezuela in 1991, Kuwait

1992, and Iran 1995. In recent years, Iraq, Mexico, Bolivia, Ecuador and Turkmenistan have established and signed a variation of service –type contracts. (Ghandi and Lin, 2014) In the case of Bolivia, after its hydrocarbon industry nationalization in 2006, Bolivia enforced production sharing contracts with foreign companies. Foreign oil companies were required to pay higher royalties and taxes. Many oil and natural gas producing countries are opting to use a variation of service contracts based on their interest in maintaining sovereignty over their natural resources. In a service contract, host-states maintain field ownership and they are not required to allocate ownership rights of oil and natural gas fields to foreign companies. The most important aspect for adopting a service contract for host states is the ability to maintain control over natural resources while still using the expertise of foreign investors. Since 2009, Bolivia has opted to use service-type contracts rather than use production sharing contracts in their oil and natural gas exploration projects.

1.6) Description of Bolivia’s hydrocarbon industry:

Evo Morales was elected president of Bolivia in 2006 and remains so as of 2014. Bolivia has undergone tremendous political, economically and legal changes. President Morales shifted away from free-market policies that were implemented by his predecessors and has continually sought to increase state involvement in the economy. He announced the nationalization of Bolivia’s hydrocarbon sector in May 2006; this required fifteen multinational companies to sign new contractual agreements which are production sharing contracts with the Bolivian government. The key aspect of the contracts was the return of hydrocarbon resources to the Bolivian state. Following Bolivia’s “nationalization” in 2006, President Morales implemented a constitutional reform in 2007 which was approved by referendum in January 2009. In the 2009 Constitution, all foreign investments fall under national legislation; preferential treatment as compared towards local investors is no longer possible. Additionally, Bolivia’s national petroleum company YPFB (Yacimientos Petrolíferos Fiscales de Bolivia) re-signed contractual agreements which are now service contracts with thirteen oil companies operating in Bolivia after 2009. The use of service contracts is new for Bolivia and such contracts dominant its petroleum fiscal regime since 2009. (Fundacion Jubileo, 2012)

1.7) History of Bolivia's hydrocarbon industry:

The history of Bolivia's hydrocarbon industry has been dominated by the overlapping power structures of privatization and nationalization. Petroleum has been known to exist in Bolivia since the colonial period; however, serious exploration did not begin until the 20th century. Since then, foreign oil companies have probed for hydrocarbon resources; it has been along and sometimes bitter relationship between foreign oil companies and the Bolivian government.

Additionally, Bolivia has always designed its petroleum fiscal regime around contractual agreements during both privatization and nationalization phases. It has been a turbulent journey for Bolivia since its first petition for an oil concession which was made by the former Bolivian government under President Jose Maria Acha in the year 1865. Ten years after the first oil petition was made, the first oil discovery took place in Santa Cruz, Bolivia in 1875. This oil discovery was the first in all Latin America yet Bolivia is the poorest country in South America. (Ochoa and Renzema, 2009) Shortly after the first oil discovery, Bolivian oil companies were created and the Bolivian government established its first law concerning its oil, the "Ley Organica de Petroleo" (Organic Law of Oil) in 1921. This law allowed the North American company, Richmond Levering to receive a large concession to oil fields in the South of Bolivia. The Richmond Levering company later sold these concessions to another North America company, the Standard Oil of New Jersey.

This led to the entrance of Standard Oil of New Jersey Company into Bolivia and they began their first extractive activities in 1924 in the Pozo Bj-2 in Bermejo, the region of el Chaco. (Ochoa and Renzema, 2009) Between the years 1927 - 1937, the Standard Oil of New Jersey Company conducted exploration and operations in Bolivia with contracts under the concession system. Subsequently, in 1937, the first hydrocarbon nationalization occurred as a result of the Chaco War (1932-1935) with Paraguay as well as the discovery of Standard Oil of New Jersey disloyalty towards Bolivia during the war. This resulted in the creation of Bolivia's state-own oil company, Yacimientos Petroliferos Fiscales Bolivianos (YPFB) in 1936. One year later, the Bolivian state nationalized the Standard Oil Company of New Jersey and its concessions were given back to YPFB. Between the years 1937 - 1956, YPFB was the only company operating in Bolivia's hydrocarbon sector and there were only minor advances made in regards to exploration

or production. As a result, the Bolivian government approved a new petroleum code that encouraged private foreign investment in order to foster exploration and production in 1952. Consequently, Gulf Oil which is a U.S. oil company entered Bolivia's hydrocarbon industry and began its exploration and production operations in 1955. Soon after, nine other U.S. petroleum companies eventually entered into Bolivia's hydrocarbon industry and put YPFB in a diminishing position within its own industry.

This new petroleum code put YPFB at a competitive disadvantage because the U.S. petroleum companies became the dominant players within Bolivia's hydrocarbon industry. The goal of the new petroleum code was to increase foreign direct investment. (Morales, 2010) In 1970, the second nationalization occurred due to contract operation disputes with Gulf Oil over the exploitation of Bolivia's natural resources that created negative effects to the Bolivian economy. This nationalization of the Bolivian Gulf Oil Company led to the new hydrocarbon law in 1972 that created a semi-state monopoly which limited foreign companies to exploration and production activity. Additionally, in 1972, Bolivia change its petroleum fiscal regime and instead of the use of contracts under the concession system, Bolivia put into effect a contract system in the form of contracts operation. During the 1970s and 1980s, Bolivia experienced a disastrous economic crisis which was fueled by a lack of foreign investment. This was a major catalyst in Bolivia's decision to implement neoliberal policies in the 1990s in an effort to increase private investment.

During the 1980s, Bolivia's hydrocarbon sector experienced a diminishing output of oil due to the fact that YPFB was the dominant company in the sector's productive chain. In addition, the industry had low levels of investment. The declining output of hydrocarbons in the 1980s barely covered domestic demand. In 1990, under the government of Jamie Paz Zamora, a new hydrocarbon law was implemented, the Law No. 1194. This law allowed more flexibility in the regulation of Bolivia's hydrocarbon sector. It also introduced another form of petroleum contracts such as operating and association contracts. These contracts allowed investors to perform with YPFB in different stages of exploration and production along with other companies, a contractor could declare any field as a commercial discovery. The Capitalization Law was implemented in 1994; this changed the internal framework of privatization for state-owned companies, especially YPFB. In 1996, a new hydrocarbon law was implemented, the

Hydrocarbons Law No. 1689. This law allowed foreign firms into all areas of the industry, from exploration to the retailing of gasoline and oil products. Law No. 1689 established and enacted unique joint venture contracts.

The legal changes in Bolivia's hydrocarbon industry during the 1990s allowed foreign private investment to dominate the industry. A favorable aspect of the increased foreign presence in Bolivia's hydrocarbon industry in the 1990s was its investment outcomes. Due to the increased foreign investment in exploration activities, an abundant amount of natural gas reserves were discovered. This made Bolivia the second country in South America with the largest proven natural gas reserves. These legal changes in Bolivia's hydrocarbon sector during the 1990s directly altered the relationship between the Bolivian state and foreign petroleum companies from the 1990s - 2000s. Foreign petroleum companies received a disproportionate level of wealth from Bolivia's hydrocarbon resources while the Bolivian state received the bare minimum of wealth from its natural resources. This was a result of unfair bargaining in their contractual agreements; however, Bolivia allowed this in order to increase foreign direct investment within the hydrocarbon industry. The changes within Bolivia's investment climate in the 1990s brought about detrimental social consequences in the 21st century. (Siotos, 2014)

The period between the years 2003-2005, Bolivia was characterized as politically unstable because of the numerous violent protests that emerged in response to Bolivia's unfair investment climate. In 2003, a pipeline construction to export Bolivia's newly discovered natural gas reserves to the Northern Hemisphere through a LNG pipeline from Bolivia through Chile began. This venture was highly protested against; it caused the protest climate in Bolivia to reach its climax. As a result of the protests, this business venture was abandoned. The changes within Bolivia's investment climate along with the emergence of countless violent protests were the catalyst for the 2006 nationalization. The primary demand of the protesters was for the government to nationalize its hydrocarbon industry. (Siotos, 2014)

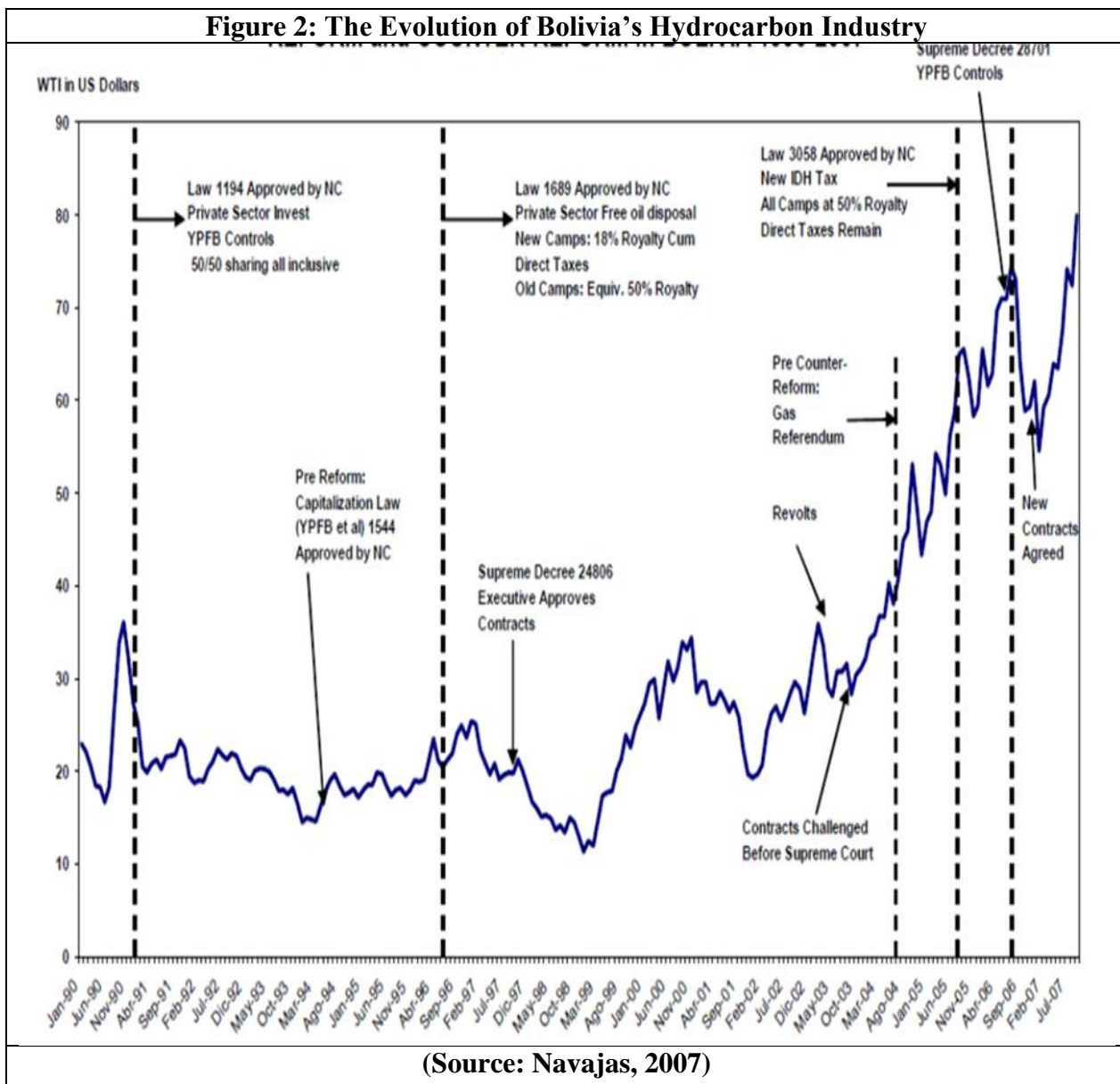
As a result, in 2005 the government passed the Hydrocarbon Law No. 3058 which "nationalized" Bolivia's hydrocarbon industry. The nationalization that occurred was resource nationalism and it did not involve expropriation of foreign investment. However, it did impose higher royalties and required foreign firms, then operating under risk-sharing contracts, to transfer all production to the YPFB in exchange for a predetermined service fee. However, this

“nationalization” did not occur until 2006 when Evo Morales became president and mandated the Hydrocarbon Law No. 3058 with his 2006 Nationalization Decree. Bolivia’s third nationalization phase changed its contractual agreements in order for the State to receive higher revenues and more control over its hydrocarbon sector. The Hydrocarbons Law No. 3058 established three arrangements for oil contracts:

- Production Sharing
- Operation
- Association

In 2009, President Evo Morales changed the Bolivian Constitution. Various articles within the Constitution were modified in regards to investment and contract procedures. The new Constitution supports Hydrocarbon Law No. 3058 and it changed foreign investment jurisdiction treatment. In the 2009 Constitution, all foreign investments are monitored by national legislation; by law, preferential treatment towards local investors is no longer possible. In addition, the new Constitution adopted Article 362 which established Service Contracts as the only form of petroleum contract in Bolivia’s hydrocarbon industry.

Figure 2: The Evolution of Bolivia's Hydrocarbon Industry



(Source: Navajas, 2007)

CHAPTER TWO: BOLIVIA'S HYDROCARBON INDUSTRY IN 1990s:

During the 1990s, Bolivia experienced an influx of policy changes in its petroleum fiscal regime that encouraged privatization. Each new law during this time period was designed to increase foreign direct investment. There are three major laws that contributed to the high levels of foreign direct investment in Bolivia during the 1990s:

- Hydrocarbon Law No. 1194 (1990)
- Capitalization Law 1994
- Hydrocarbons Law No. 1689 (1996)

2.1) Hydrocarbon Law No. 1194 (1990):

The implementation of the Hydrocarbon Law No. 1194 in 1990 under the government of Jamie Paz Zamora was directly linked to the decreasing output of hydrocarbons in the 1980s which barely covered domestic demand. During the 1980s, Bolivia's hydrocarbon sector had a diminishing output of oil due to low levels of investment in the industry and the Bolivia's state oil company, YPFB being the dominant company in the sector's productive chain. This resulted in Bolivia's decision to implement neoliberal policies in the 1990s in an effort to increase foreign private investment. In the 1990s, Bolivia's petroleum fiscal regime was dominated by neo-liberal policies that encouraged privatization in all areas of Bolivia's contractual agreements. These neo-liberal policies created an investment climate that produced higher production levels, particularly in natural gas. Law No. 1194 opened Bolivia's hydrocarbon industry to the private sector while retaining state control under the state-owned YPFB. It also presented more flexibility in the regulation of Bolivia's hydrocarbon sector. (Navajas, 2007)

Law No. 1194 introduced another form of oil contracts, the contract association, through which an investor could perform with YPFB in the stages of exploration and development with other companies and the contractor could also declare any commercial discovery field. This law introduced the possibility for YPFB to establish joint ventures with foreign companies in both upstream and downstream operations. This law also implemented the principle of national treatment as well as the free movement of capital which places no restrictions on capital flowing

into or out of the country. Law No. 1194 changed YPFB's vertically integrated state controlled monopoly and implemented operation as well as association contracts with foreign investors.

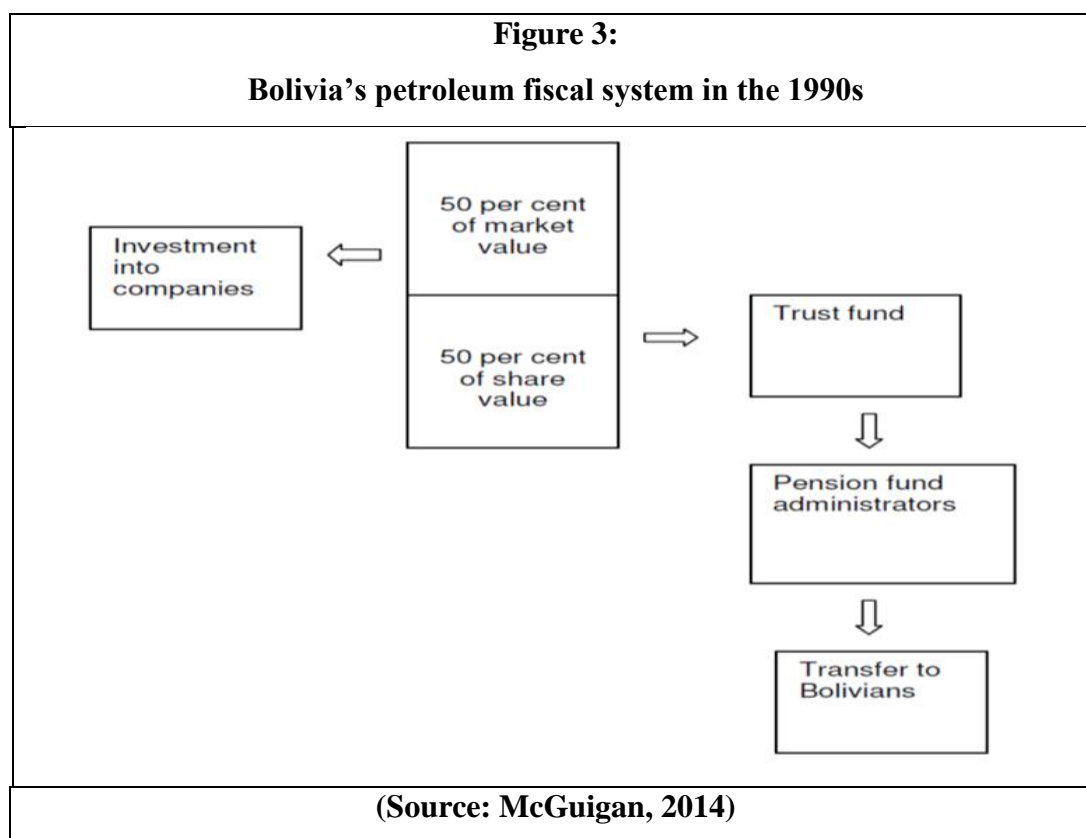
In these operation and association contracts, private companies performed the exploration and production activities with a 50/50 share of gross production agreement with the Bolivian state and foreign investors assumed all costs and had no additional taxes. (Navajas, 2007) Private firms would receive 50 percent of the production value of prices for export or domestic markets. In essence, Bolivia's privatization strategy divided the hydrocarbon industry into two. The Bolivian state owned 50 percent of shares and sold the remaining 50 percent to foreign investors. The 50 percent ownership given to foreign investors was sold to foreign companies that placed the highest bid. The 50 percent kept by state would be used to create Bolivia's first universal pension plan in its history. By 1995, there were 15 operation contracts and 3 associated contracts. (Navajas, 2007) Ultimately, this law increased Bolivia's level of foreign direct investment within its hydrocarbon industry.

After the general elections of 1993, the new administration under Gonzalo Sanchez de Lozada (during his first term as president) made deep structural reforms within Bolivia's petroleum fiscal regime. These reforms were comprised of three main goals: to implement a new hydrocarbon law, the capitalization (partial privatization) of YPFB, and to develop a contract to export natural gas to Brazil which involved the construction of an export pipeline between the two countries.

2.2) 1994 Capitalization Law:

The Capitalization Law was implemented in 1994 and it changed the internal framework of the privatization process within Bolivia's state-owned oil companies especially the structure of YPFB. This Capitalization Law allowed the sale of 50 percent of the state company's shares. The Bolivian state's 50 percent share was sold to multiply foreign oil companies. As a result of the privatization/capitalization program under the new Capitalization Law, YPFB was split up in three branches: two exploration units and one transportation unit. The exploration units were transferred to Empresa Petrolera Andina and Empresa Petrolera Chaco. The transportation unit was transferred to Transredes and Compañía Logística de Hidrocarburos Boliviana. The privatization/capitalization program under the new Capitalization Law allowed for effective

transfer of management and gave shareholding stakes to private companies in exchange for investment commitments. (Cerutti and Mansilla, 2008) All remaining shares from the 50 percent of shares within the capitalized companies was distributed between former workers of each of the companies and Bolivian citizens over the age of twenty-one. (Frerichs, 2014) The capitalization fund was used to provide dividends to Bolivians on retirement which was part of Bolivia's original plan under Law No. 1194. These dividends were invested and administered as pension funds. As a result of the privatization/capitalization process, most activities and ventures in Bolivia's hydrocarbon industry were controlled by foreign energy companies.



2.3) Hydrocarbons Law No. 1689 (1996):

Law No. 1194 and the Capitalization Law provided the building blocks for Bolivia's new Hydrocarbon Law No. 1689 which was enacted in 1996. As a result of these three laws, Bolivia's investment climate was completely vulnerable to foreign investors. Under the Law No. 1689, the Bolivian State abolished the petroleum fiscal regime of operation and association agreements and established a regime of joint venture contracts within the contractual system.

Under these joint venture contracts, YPFB participated in joint venture projects with other parties, national or foreign in all stages of hydrocarbon production. Foreign firms were allowed into all areas of the industry, from exploration to the retailing of gasoline and oil products.

As a result of Law No.1689, YPFB became a regulator of the sector rather than an active participant in the industry's production and commercialization process. YPFB was no longer an operator and was limited to the supervision and administration of contracts with investors. Under the Law No. 1689, new tax incentives were established for investment in both upstream and downstream activities. In regards to upstream activities within Bolivia's hydrocarbon sector, new hydrocarbon projects that included fields not in production at the time Law. No 1689 was implemented, would have to pay royalties of only 18 percent of the value of gross production. This was in great contrast to what existing fields were required to pay; which remained 50 percent. (Frerichs, 2014) Additionally, Law No. 1689 also reduced net income tax for investors, the tax rate was reduced from 40 percent to 25 percent, while new taxes of 12.5 percent on dividend repatriation and extraordinary net income were introduced. Law No.1689 also included other provisions such as profit repatriation guarantees and acceptance of international arbitration.

Economically, the most important aspect of Law No. 1689 was its allocation of hydrocarbon revenue. A large portion of the hydrocarbon revenues was given to foreign oil companies, a total of 82 percent, and the remaining 18 percent was distributed to the Bolivian government. Law No. 1689 drastically decreased the Bolivian government's share of revenues and gave foreign investors the majority of hydrocarbon revenues. This unfavorable allocation of hydrocarbon revenues in Bolivia's hydrocarbon industry was the principle reason as to why Bolivia experienced its Gas Wars in 2003 and 2005. In addition, this new legislation did not encourage industrialization of natural gas which continually made Bolivia more dependent on raw material exports.

2.4) Foreign companies investments in the 1990s:

The neoliberal reforms of the 1990s heavily encouraged foreign direct investment in Bolivia's hydrocarbon industry. These reforms included a revenue distribution framework that completely altered Bolivia's petroleum fiscal regime. These reforms highly favored foreign oil companies because it increased the amount of profit they would receive from revenues. As a

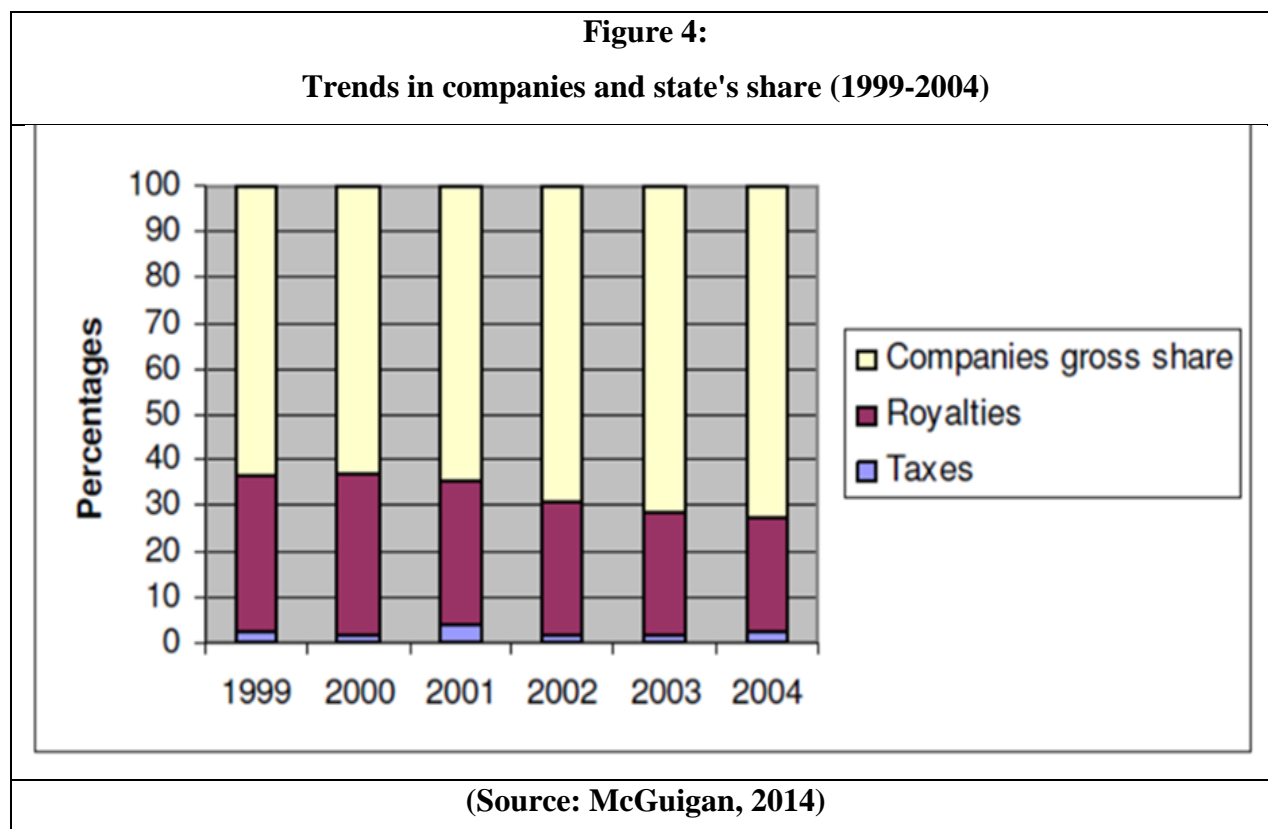
result, many foreign oil companies entered Bolivia for the first time in the 1990s and they also made vital investments that advanced Bolivia's hydrocarbon industry.

The discovery of large natural gas reserves in the 1990s positioned Bolivia to be the second country in Latin America with the largest natural gas reserves outside of Venezuela. Prompted by the 1996 Law No. 1689, several oil firms decided to invest in Bolivia's hydrocarbon industry such as: Petrobras Bolivia S.A. (Brazil), Total E&P Bolivie (France), Petrobras Energia S.A. (Brazil), Repsol YPF (Spanish-Argentina), BG-Bolivia S.A. (British Gas/England), Andina S.A. (local subsidiary), Chaco S.A. (BP-Amoco's subsidiary), Vintage Petroleum (United States), Pluspetrol (Argentina), Matpetrol (Bolivia-Miami base), Petrolex (Ireland PanAndean Resources-local subsidiary), Orca (Canada), Dong Won Corporation (North Korea), Canadian Energy Enterprises (Canada), Tecpetrol (Argentina). The foreign oil companies that made the most discoveries of large natural gas reserves in Bolivia during the 1990s were Petrobras of Brazil and Repol-YPF of Spain/Argentina. (Bolivia Information Forum, 2014).

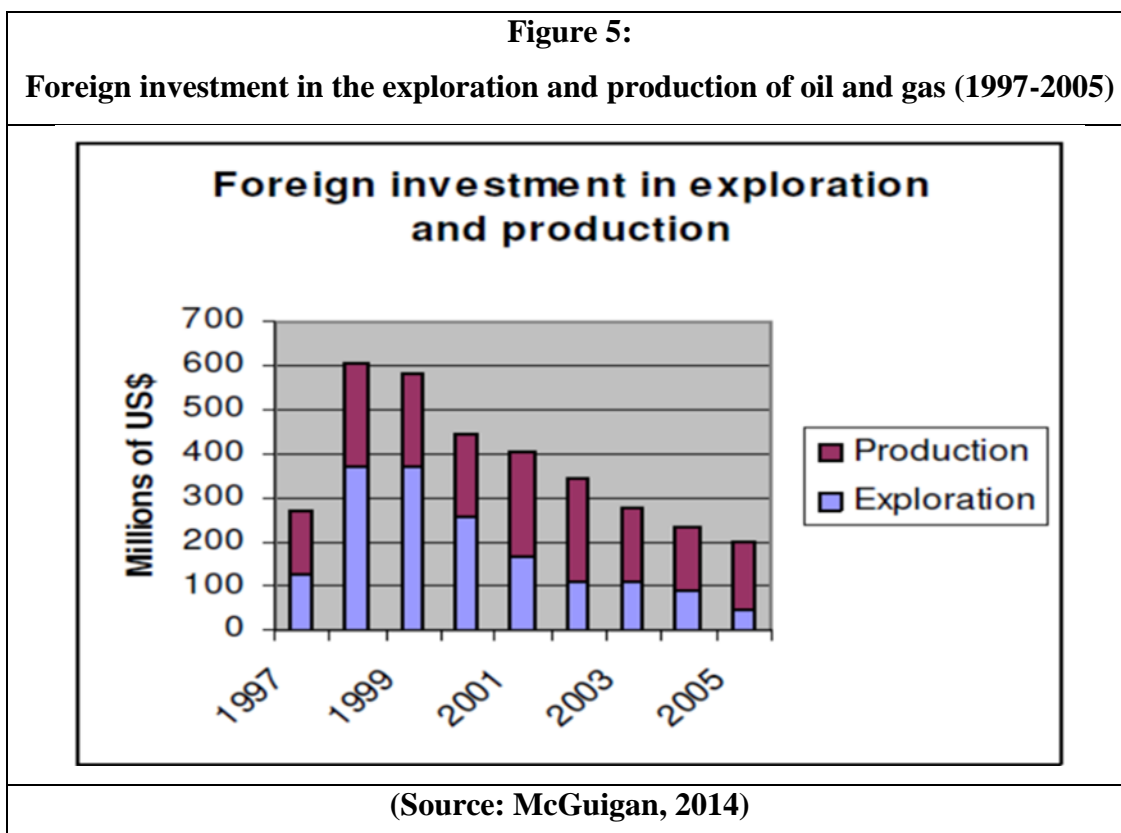
A major investment made by foreign investors during the 1990s, was the construction of the Gasbol pipeline. In 1994, YPFB and PETROBRAS (semi-public Brazilian multinational energy corporation) developed a Bolivia-Brazil pipeline, Gasbol, which was completed in 1999. Partners in the Gasbol project were the ENRON Corporation on the Bolivian side and the BTB group (including BHP, TENNECO Gas and BRITISH GAS) on the Brazilian side. The construction of Gasbol was established because Brazil has been the primary consumer of Bolivia's natural gas since the 1980s. The construction of a pipeline was logical since both countries are neighbors. The construction of Gasbol has helped Bolivia position itself as one of the dominant exporters of natural gas in the region.(Correa and Sanchez, 2014)

2.5) The outcome of FDI in the 1990s:

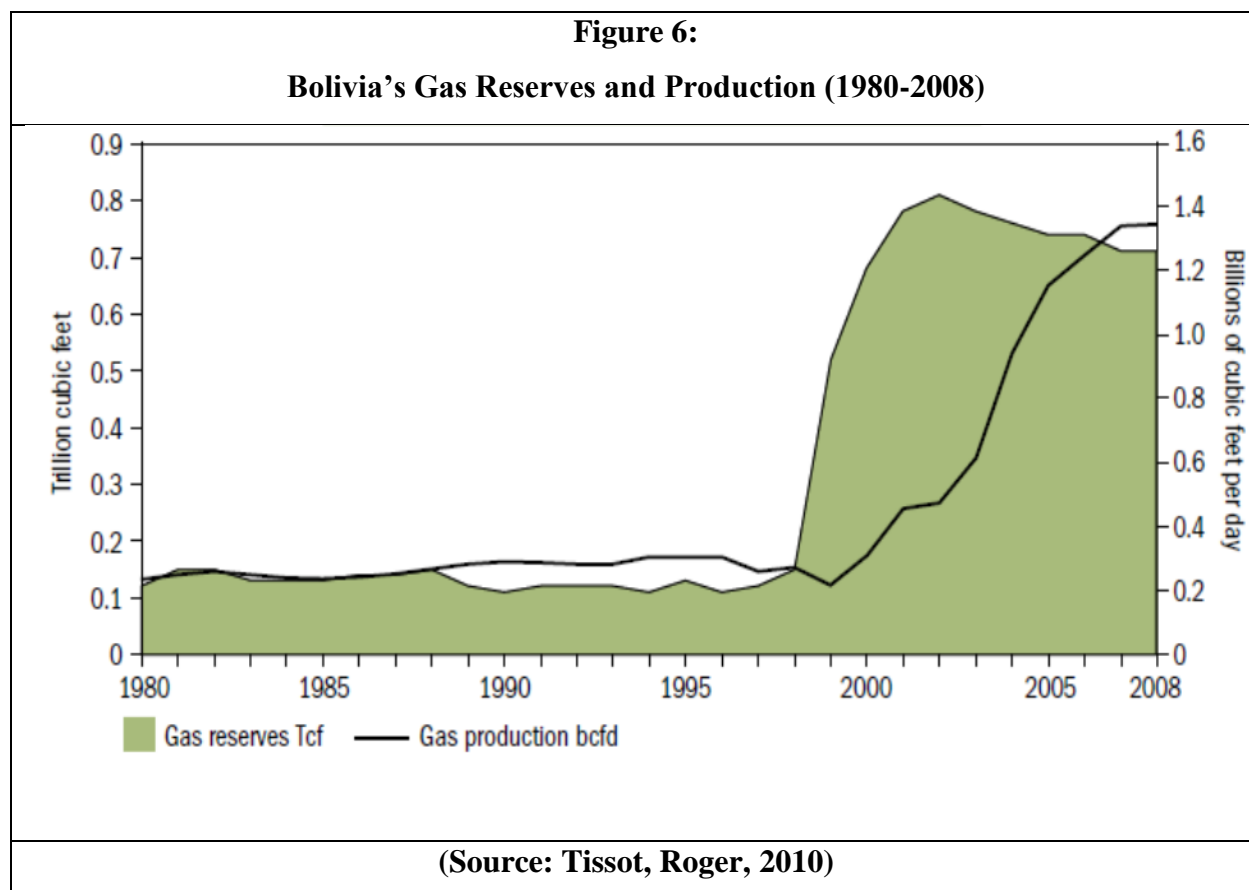
Bolivia's petroleum fiscal regime during the 1990s was designed strictly to increase foreign direct investment, even at the cost of Bolivia losing much potential wealth from its natural resources. The Bolivian state legally supported this unfavorable design of revenue allocation with its Law No. 1689.



One of the most contentious issues in this new distribution of revenue design in the 1990s was the structure of the classification of oil and gas fields in Bolivia which were defined as either “existing” or “new”. Law No. 1689 stipulated that for fields to be classified as “existing” the reserves had to be officially certified and the certification process could only be carried out by three specialist firms in the world. This certification process was a major cost for the Bolivian government and the classification structure was unique in the technical terminology used within the hydrocarbon industries. The classification process was implemented to incentivize investors in the exploration and development of new reserves. However, this classification process drastically lowered the payment of royalties that was required from foreign investors. The implementation of this new classification system directly affected Bolivia’s revenue because only three percent of Bolivian reserves were classified as “existing” and most production that occurred was more favorable to foreign companies. (McGuigan, 2014) However, exploration activities conducted by foreign oil companies significantly increased during this time.



The three hydrocarbon laws that were implemented in the 1990s were specifically designed to increase foreign direct investment and as a result, investment in Bolivia's hydrocarbon industry increased tremendously. These laws completely opened Bolivia's investment climate to foreign investors and foreign private investment dominated Bolivia's hydrocarbon industry. A positive aspect of the increased foreign presence in Bolivia's hydrocarbon industry in the 1990s was its investment outcomes. These legal changes in the 1990s allowed foreign oil companies to discover natural gas reserves that were 600 percent higher than previously known. (ENERPUB, 2008)



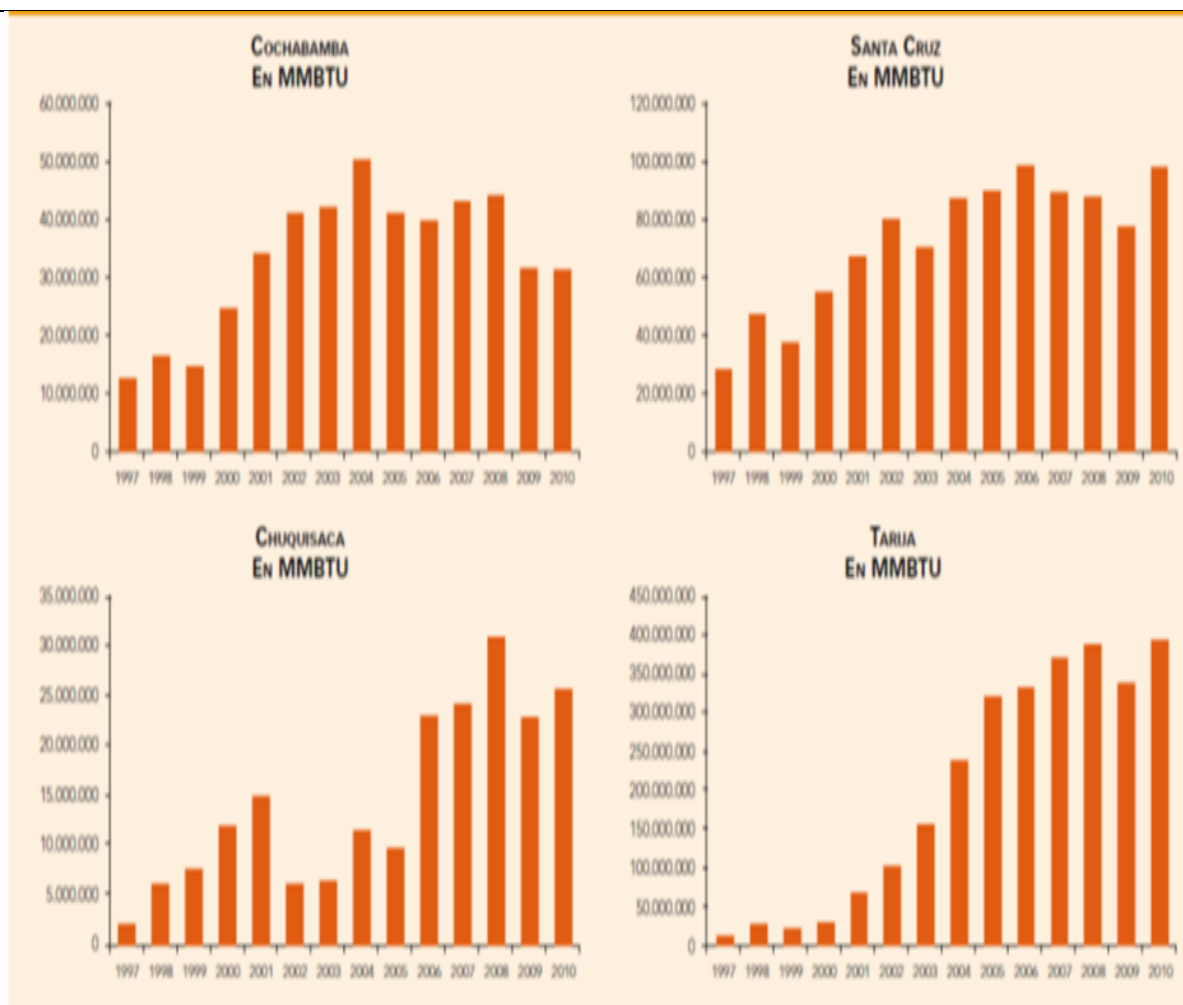
The newly discovered natural gas reserves provided Bolivia with enough natural gas to meet domestic and export demands for the next 20 years and this allowed Bolivia to have a substantial capacity for future exports. Some of the major oil companies that invested in Bolivia's hydrocarbon sector in the 1990s were the same foreign companies that agreed to Bolivia's new contractual agreements after its 2006 nationalization. In essence, many of the existing foreign oil companies that continue to operate in Bolivia's hydrocarbon industry after its 2006 nationalization are the same companies that discovered the new the natural gas reserves of the 1990s.

A major incentive for foreign oil companies to continue their operations in Bolivia after the 2006 nationalization is linked to the fact that these same companies led the exploration activities that discovered the 600 percent more natural gas reserves in the 1990s. (McGuigan, 2014) The existing foreign companies in 2006 were highly aware of Bolivia's profitable stock of

natural gas reserves that were discovered in the 1990s; this motivated foreign investors to continue operating in Bolivia. In addition, the existing foreign companies knew Bolivia needed foreign investment for exploration and production activities in the near future because the Bolivian state could not afford it.

These newly discovered natural gas fields were mainly located in the south-eastern Tarija, Santa Cruz, and Cochabamba. The most essential fields that were discovered include Margarita (13.4 Tcf), Ipat (12.0 TcF), San Alberto (11.8 TcF), and Sabalo (10.8 TcF), all are located in the Southern region of Tarija. (Jemio, 2008)

Figure 7:
Bolivia's natural gas production regions (1997-2010)



(Source: FundacionJubileo, 2012)

Additional, during the 1990s, Bolivia established twenty-three Bilateral Investment Treaties (BITs) with the following countries in order to guarantee protection for foreign investment:

Table 1:

Bolivia's Bilateral Investment Treaties

Country	Date
Argentina	March 17, 1994
Austria	April 4, 1997
Belgium-Luxemburg	April 25, 1990
Chile	September 22, 1994
Costa Rica	October 7, 2002
Cuba	May 6, 1995
Denmark	March 12, 1995
Ecuador	May 25, 1995
France	October 25, 1989
Germany	March 23, 1987
Italy	April 30, 1990
Korea	April 30, 1996
Netherland	March 10, 1992
Paraguay	May 3, 2001
Peru	July 30, 1993
Romania	October, 9 1995
Spain	October 29, 2001
Sweden	October 20, 1990
Switzerland	November 6, 1987
United Kingdom	May 24, 1988
United States	April 17, 1998
Uruguay	
Venezuela	

(Source: www.sice.oas.org, 2014)

2.6) Bolivia's Bilateral Investment Treaties (BITs):

The foundation of foreign investment protections are based on: a host state's national investment law, Bilateral Investment Treaties (BITs), or contractual agreements. In Article 38 of the Statute of the International Court of Justice (ICJ), states that treaty law is the most essential. Treaties on foreign investment have been established bilaterally, regionally, and multilaterally. A

comprehensive international multilateral investment treaty does not exist and there is limited customary law on the subject of investment. Internationally, Bilateral Investment Treaties (BITs) have become the most common form of treaties. According to customary law, the admission of FDI is subject to state sovereignty and its sovereignty gives the state total discretion in this regard. (Pollan, 2006)

Bilateral Investment Treaties (BITs):

International investment law has changed dramatically over the last decade; there has been an increase in disputes over foreign investments which are being resolved through international arbitration (as opposed to diplomatic intervention or domestic lawsuits). These changes within the international investment law are connected to the proliferation of bilateral investment treaties (BITs). A BIT, “is an agreement between two countries that manages the treatment of investments in their respective territories by individuals and corporations from the other country” (Wong, 2006). The development of BITs can be defined in two periods; from the 1960s to the 1980s mostly developed countries initiated BITs in order to protect their investment. Then in the late 1980s onward the context within BIT negotiations changed. BITs were initiated by developing countries, under the assumption that BITs would increase flows of investment into their country. (Pollan, 2006) In essence, BITs are formed for two reasons: the need to stimulate FDI for both developed and developing countries and the desire to have an optimal level of protection for FDI by investors. BITs set forth standards of conduct for governments in regards to their treatment towards investors. These are the standards of conduct:

- Fair and equitable treatment (often meaning national treatment or most favored nation treatment)
- Protection from expropriation
- Free transfer of means and full protection and security

In some cases, a BIT is a prerequisite for political risk insurance for investors from their home state because this proves that host states have offered adequate legal guarantee for the protection of their investments. A BIT is a legal agreement that provides stable international protection for investors in host states. There has been a dramatic increase in the use of BITs within developing countries in order to attract new foreign investment. A BIT serves to attract

foreign investment by granting investors broad investment rights as well as allowing flexibility in the resolution of investment disputes. The flexibility in the resolution for investment disputes allows for the dispute to be resolved by international arbitration rather than suing the host state in its own courts. The international arbitration is usually supported by: the International Centre for the Settlement of Investment of Disputes (ICSID), the United Nations Commission on International Trade Law (UNCITRAL) or other forms of arbitration is allowed as an alternative. A BIT differs across countries, but the general composition of the treaty defines foreign investment and provides the guidelines for the treatment of transfer of funds, expropriation and mechanism for dispute settlements between host state and investors. Jurisdiction is not uniform under BITS and details within the clauses of BITS are instrumental in how disputes are dealt with. Within many BITs, there are various clauses that have been controversial, such as the most-favored nation clause, national treatment, umbrella clause and survival clause.

- Most-Favored Nation clause:

In regards to international investment, the most-Favored Nation (MFN) clause takes place within borders and is the most common clause in BITs. MFN guarantees the investor the same preferential treatment as is bestowed to investors from other nations. (Pollan, 2006)

- National Treatment clause:

The national treatment clause requires foreign investors to receive treatment no less favorable than the treatment nationals receive within the host state. There is an advantage for investors to implement the national treatment standard into the pre-establishment period of the BIT. This standard opens sectors which are regularly only accessible by nationals of the host state. An important aspect of this clause if it is included within the pre-establishment period of the BIT, the investor's performance requirements standards or other conditions within host states will be the same as nationals. Host states' standards are impossible to impose on investors if they are not imposed on nationals in the same way. (Pollan, 2006) However, the implementation of the national treatment standard is quite different if it is included during the post-establishment period of a BIT. If the national treatment standard is included during the post-establishment period of a BIT, the investor has no certainty that they will be able to conduct business the same

way as nationals during the critical admission phase; FDI could be subjected to procedures and requirements that are exempted to nationals.

“The Bolivian Model BIT for example contains a classical NAFTA style national treatment clause, which covers “la fundacion, la adquisicion...de las inversiones” in Article 4. However, its Article 3 states that “Cada parte admitira tales inversiones conforme a susleyes y reglamentos, a phrasing often used to limit admission provisions” (Pollan, 2006).

- Umbrella clauses:

From an investor’s perspective, this ability to submit an investment dispute to international arbitration is one of the BIT’s main benefits. This feature is the cornerstone of the umbrella clause; its interpretation has significant implications for the investor. The umbrella clause is a, “provision found in many BITs that imposes a requirement on each Contracting State to observe all investment obligations entered into with investors from the Contracting State” (Wong, 2006). The purpose of the umbrella clause is to create an inter-state obligation to observe investment agreements in relation to the right to arbitration within an international forum if a dispute settlement arises between the contracting state and the investor. It is unclear within international law if a state breaking a contract is considered a violation and such an action may be treated as a domestic commercial matter. This would require the dispute to be resolved within host-states municipal courts and under its domestic laws; however, the umbrella clause within a BITs prevents such actions. An umbrella clause would allow investor-host-state contracts dispute resolution to be resolved as a matter of international law in an international forum. The umbrella clause provision within BITs was designed to allow for any breach of a relevant investment contract to be resolved under the treaty in an international forum.

- Survival clauses

Many BITS have a ‘survival clause’ which binds a country to its provisions for 10-20 years after it has given notice of exiting.

CHAPTER THREE: BOLIVIA'S HYDROCARBON INDUSTRY IN 2000s

In 2002, Gonzalo Sanchez de Lozada became president of Bolivia; this was his second term as president. His first term as president lasted from 1993 until 1997. During his first term as president, several of Bolivia's neo-liberal policy changes were implemented. Many Bolivians were heavily against Lozada's 1990s neo-liberal reforms and this directly affected his second term as president. Shortly after Lozada entered his presidency, he was forced to resign in 2003 as a result of Bolivia's Gas Wars that occurred in 2003 and 2005. Bolivia's Gas Wars consisted of non-stop protests against the neo-liberal policy changes that occurred in the 1990s in Bolivia's hydrocarbon industry under the government of Gonzalo Sanchez de Lozada and were heavily protested against in the early 2000s by Bolivian citizens. These protests occurred because Bolivia's hydrocarbon sector is a vital component in its economy. Bolivia's hydrocarbon sector represents 7 percent of its GDP in terms of production and more than 30% of total government income. In addition, "its hydrocarbon sector not only represents an important aspect of its economy but also a political and social instrument for negotiations, mobilization, and social participation" (Donaldson, 2007).

In 2002, these protests became extremely violent after the Bolivian government announced a possible agreement with the Pacific LNG Consortium which was comprised of three companies, Repsol YPF (Spain, 37.5%), BG Group (United Kingdom, 37.5%), and Pan-American Energy, a unit of BP (United Kingdom, 25.0%). This agreement was to develop and export the Bolivian natural gas to the markets of Mexico and the United States via a pipeline through Chile in order to have access to the Pacific coast. The idea was to liquefy the gas and ship it, however; this idea encountered much protest due to the fact many Bolivians still hold a strong resentment toward Chile since the War of the Pacific (1879-1883). Chile took Bolivia's coastal province in the war and Bolivia became a landlocked country. As a result of these protests, the Pacific LNG project was abandoned. Consequently, this led to the resignation of Gonzalo Sanchez de Lozada as Bolivia's president in 2003 because of his continuous support for the pipeline despite the popular protest among the citizens of Bolivia. In addition, the motives for the Gas Wars are rooted in the fact that foreign oil companies received the majority of revenues from Bolivia's hydrocarbon resources while the Bolivian government received less than a quarter of it. The Gas Wars advocated for the nationalization of Bolivia's hydrocarbon industry as well

as the implementation of a new hydrocarbon law that would guarantee a level of no less than 50 percent of hydrocarbon revenues to the Bolivian state. (Gonzales, 2004)

Lozada's resignation led to Vice President Carlos Mesa becoming the president of Bolivia in 2003. He instituted a national referendum on the citizens of Bolivia. He did this in order to suppress the political unrest amongst the Bolivian population from the Gas Wars. In addition, he wanted to get votes from citizens to decide on future requirements within Bolivia's petroleum fiscal regime. Subsequently, on May 6, 2005, the Bolivian Congress passed the 2005 Hydrocarbon Law No. 3058. This law raised taxes from 18 percent to 32 percent on profits made by foreign companies on the extraction of oil and gas. The 2005 Hydrocarbons Law No. 3058 repealed the 1996 Hydrocarbons Law No.1689, which reclaimed ownership over all hydrocarbon resources to the Bolivian State. However, Carlos Mesa did not mandate this law because he was not fully convinced that nationalization of Bolivia's hydrocarbon industry was necessary. However, many protestors, including Evo Morales felt that this new law was inadequate and demanded full nationalization of the gas and oil industry. As a result, civilian protest continued with intensity and protestors demanded Bolivia's hydrocarbon industry to be fully nationalized. (Donaldson, 2007)

As a result, Carlos Mesa was forced to resign as president of Bolivia in 2005 which led Bolivia into a phase of political instability. This political instability allowed Evo Morales to become the following president of Bolivia. Evo Morales was one of the most prominent leaders of the civilian protests and he was the leader of the Movimiento al Socialismo (Movement towards Socialism, MAS) which was the main political party that supported many of the protests behind the Gas Wars in 2003 and 2005. As a result of his position as well as the rising internal social conflicts in Bolivia, Evo Morales entrance into Bolivia's presidency was expected. In 2006, Evo Morales became the president of Bolivia and he implemented the 2006 Nationalization Decree which mandated the 2005 Hydrocarbon Law No. 3058. (Donaldson, 2007)

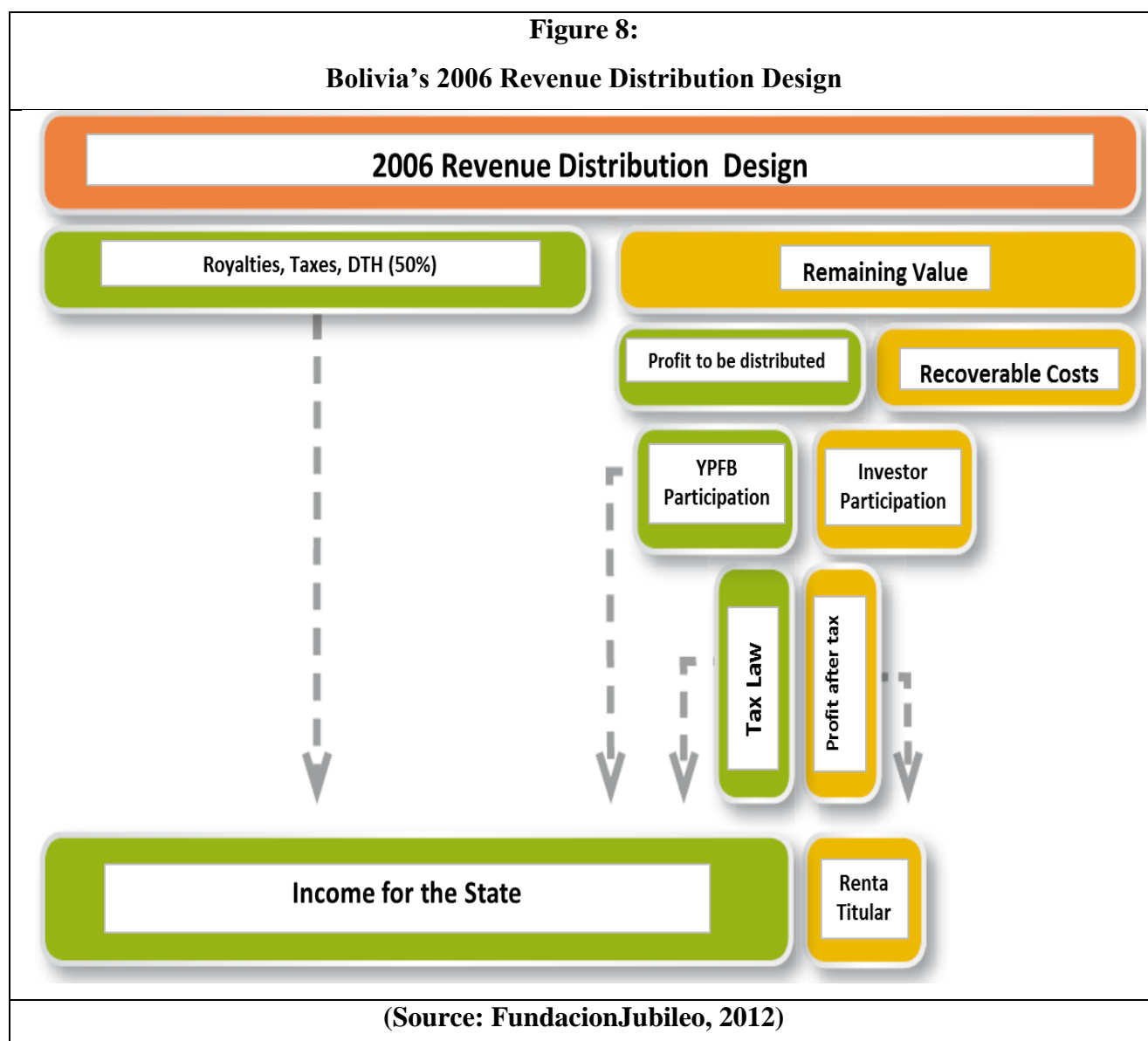
3.1) Hydrocarbons Law No. 3058 (2005):

In May 2005, the government passed the Hydrocarbon Law No. 3058 which imposed significantly higher royalties onto foreign investors and required foreign firms then operating under risk-sharing contracts to convert to production sharing contracts. Under these contracts, all reserves and production belong to the state enterprise, YPFB in exchange for a predetermined service fee. However, Law No. 3058 was not mandated until after Evo Morales implemented the 2006 Nationalization Decree when he became president. The 2006 Nationalization Decree implemented resource nationalism onto Bolivia's hydrocarbon industry. This resource nationalization consisted of an increase in state power within the hydrocarbon sector, regained control of some of its previously capitalized assets, and increased its share of revenues from the sale and transport of natural gas. The most important aspect of Law No. 3058 was the creation of the Direct Tax on Hydrocarbons (DTH), which guaranteed the State 32 percent of the value of production in all audited producing fields. Law No. 3058 further adds the summation of the total 18 percent royalties plus the 32 percent DTH which guaranteed a level of no less than 50 percent of hydrocarbon revenues to the Bolivian state.

3.2) 2006 Nationalization Decree:

The 2006 nationalization altered Bolivia's hydrocarbon industry in three significant ways. First, the state regained control over Bolivia's hydrocarbon resources by mandating the 2005 Hydrocarbon Law No. 3058. The 2006 Nationalization Decree fulfilled the Law No. 3058 which allowed the Bolivian state to reclaim its ownership over all hydrocarbon resources as well as control the entire chain of production within its hydrocarbon industry. Second, the state reconstructed YPFB to become the majority shareholder in its three capitalization agreements. The state accomplished this by negotiating with its foreign investors to buy back some of the companies. The Bolivian state sought to enter into joint ventures with their foreign investors but some refused and simply sold the state all of their shares. As a result, YPFB gain control of at least 50 percent plus 1 in Chaco SA, Andina SA, Transredes SA, Petrobras Refining Bolivia SA and Logistics Company Hydrocarbons of Bolivia SA. (Fundacion Jubileo, 2012) Third, the state increased the amount of rent it gain from its natural gas by increasing taxes on its sales and regaining control of commercialization within its hydrocarbon industry.

Prior to the 2006 nationalization, foreign investors were required to pay only an 18 percent royalty rate and minimal taxes. After the implementation of both the 2006 nationalization decree and Law No. 3058, Bolivia's revenue design plan was completely changed. The state maintained the 18 percent royalty rate and added a 32 percent Direct Tax on Hydrocarbons (DTH) on production and an additional 32 percent participation tax by the state-owned petroleum firm YPFB. As a result, the Bolivian state received a total of 82 percent of revenue while the remaining 18 percent went to foreign oil companies. This is the complete opposite of what Law No. 1689 established in 1996.



These changes within Bolivia's petroleum fiscal regime in 2006 dramatically altered the amount of profit foreign investors would receive; however, the industry still remained to be profitable and beneficial for foreign investors. Mauricio Medinaceli, the former Minister of Hydrocarbons in Bolivia from 2005 - 2006, claims that, "the high prices of gas exports during this time allowed a reasonable rate of return which kept foreign investments profitable which explains why foreign oil companies remained in Bolivia after its 2006 nationalization." He also argues that Bolivia's nationalization was not a vital factor in the decision making process for foreign oil companies to remain in Bolivia. It was not a vital factor in foreign investor's decision making process because this nationalization did not include the expropriation of private assets. Rather it meant simply signing new contracts where the Bolivian state increased its share of revenue marginally; the bulk of the revenue comes from the Direct Tax on Hydrocarbons (DTH).

These changes in Bolivia's petroleum fiscal regime occurred in 2006 because foreign oil companies were forced to re-negotiate their contracts with the Bolivian state and were required to transfer the production chain of hydrocarbon resources to the state-owned firm Yacimientos Petroliferos Fiscales Bolivianos (YPFB) within a six month period. Bolivia enforced production sharing contracts with foreign companies. Within these production sharing contracts, the Bolivian state reclaimed ownership of all hydrocarbon resources as well as the installations and plants; while foreign companies bare the risk to explore, exploit and develop the hydrocarbon resources in exchange for a share of the production. Under these contracts, foreign oil companies were still required to pay royalties and taxes. During this re-negotiation phase, President Evo Morales guaranteed that this nationalization process would not take on the form of expropriation or confiscation of facilities. (Donaldson, 2007)

Bolivia's strategy consisted of a change on percentage of payments on volume of production which gave Bolivia an improved position within the new operating contracts. The actions taken by the Bolivian government since 2006 have prompted an overall negative sentiment in the international community, especially from Northern OECD countries. Their arguments are that Bolivia has become too risky and unprofitable for foreign investment. Though, much of the international rhetoric surrounding Bolivia's 2006 nationalization was far more radical than the evidence in the content of the decree and the actions taken by the government.

3.3) Resource Nationalization:

In 2006, Evo Morales nationalized Bolivia's hydrocarbon industry but the changes that proceeded were far from traditional perceptions of nationalization. The 2006 nationalization of Bolivia's hydrocarbon industry is defined as resource nationalism. Resource nationalism is a term that incorporates a series of actions on behalf of a host state such as, expropriate or change the terms on which resources are extracted, and monetized, in order to obtain greater benefits for the host state. (Clarke and Cummins, 2014) In 1962, the United Nations resolution on the permanent sovereignty of natural resources is based on "the inalienable right of all State freely to dispose of their natural wealth and resources in accordance with their national interest" (Clarke and Cummins, 2014). While the International Energy Forum defined resource nationalism as "nations wanting to make the most of their endowment" (Clarke and Cummins, 2014).

Resource nationalism has a variety of forms and its implementation depends on the host state's desires. Its forms of implementation range from nationalization that includes expropriation to regulatory and fiscal measures that prevent an investor of the value of the resources it is exploiting and the increase of the host state's national interest. However, the type of resource nationalism that occurred in Bolivia is categorized as revolutionary because its roots are formed from domestic political and social upheavals. One of the main goals within Bolivia's revolutionary resource nationalism was to reclaim control of their natural resources that were obtained by foreign investors after the 1990s neo-liberal reforms. (Soo-Ho, 2011) Bolivia's resource nationalism consisted of an increase state power in its hydrocarbon sector, regained control of some of its previously capitalized assets, and increased its share of revenues from the sale and transport of its natural gas. These actions of resource nationalization in 2006 resemble more of a free-market buy-out than what "nationalization" typical implies.

3.4) Presidential Decree No. 29541 (2008):

The process of renegotiations within the contracts with foreign companies took time after the 2006 Nationalization Decree was implemented. In order to facilitate the Decree, Bolivia enacted a new Presidential Decree (No. 29541) in May 2008. This decree mandated the acquisition by the Bolivian state of at least 50 percent plus 1 share of nationalized package

shareholder in the Oil Company Chaco Society Anonymous and Transredes (Transportation of Gas SA) and sets the conditions of this transfer. This decree provided the complete control and direction of both companies. As of April 2008, the negotiations for signing the transfer of control to the Bolivian state from foreign companies officially occurred. This decree also stipulated that shareholders of Oil Company Chaco, Andina, and Transredes CLHB must align themselves with YPFB.

3.5) Change in Constitution (2009):

To further support the 2006 Nationalization Decree, Bolivia changed its Constitution in 2009. Bolivia passed a national referendum for the establishment of a new constitution which was established on January 25th, 2009. The new constitution solidified government control of the country's vast natural resources and it denounced the jurisdiction of international tribunals as a mechanism for dispute settlements over investments in its hydrocarbon industry. Various articles in the Constitution have been modified in regards to investment and contract procedures. Two key articles within the new constitution that support these new reforms are:

- Article 351 declares that the State will “assume the control and direction over the exploration, exploitation, industrialization, transport and commercialization of natural resources.” (Diaz, 2009)
- Article 366 states that Bolivia will not recognize any foreign jurisdiction and foreign companies will not be allowed to international arbitration. (Diaz, 2009)

Article 366 is directly linked to Bolivia's strategy of their denunciation of the ICSID which became effective in 2007. The new 2009 Constitution was strongly influenced by the Gas Wars in 2003 and 2005 as well as by organizations that favored national over foreign investments. The 2009 Bolivian Constitution:

“Orders that all hydrocarbon deposits, whatever their state or form, belong to the Bolivian government. No concessions or contracts may transfer ownership of hydrocarbon deposits to private or other interest. The Bolivian government exercises its right to explore and exploit hydrocarbon reserves and trade related products through the state-own firm Yacimientos Petroliferos Fiscales Bolivianos (YPFB). The law allows YPFB to enter into joint venture contracts for limited periods of time with

national or foreign individuals or companies that want to exploit or trade hydrocarbon or their derivatives” (Sice, 2014).

The Constitution gives legal support to the:

- 2005 Hydrocarbon Law No. 3058
- 2006 Nationalization Decree
- Denunciation of the ICSID Convention in May 2007 which requires national legislation over all foreign investments

Article 362 implemented Service Contracts as the only form of hydrocarbon contracts in Bolivia’s petroleum fiscal regime since 2009. Bolivia has opted to use only service-type of contracts since 2009, rather than production sharing contracts in their oil and natural gas development and exploration projects. A driving force behind the use of service-contracts is partially explained by the need for Bolivia to control their sovereignty and the need for foreign oil companies’ capital and know-how in developing natural gas fields. Sovereignty concerns are reflected in Bolivia’s constant change of petroleum laws and regulations as well as in their constitution.

On May 12, 2009, YPFB re-signs contracts with the thirteen oil companies operating in Bolivia. These contractual agreements were service contracts instead of production sharing contracts. The companies signing these service contracts were: Petrobras Bolivia, Repsol YPF, YPFB- Andina, YPFB - Chaco, BG Bolivia, Total E&P, Petrobras Energía, Mapetrol, Orca, Canadian, Plus Petrol, Vintage and Don Wong.

3.6) Bolivia’s expansion of protected oil and gas areas:

The government under Evo Morales was the first administration in Bolivia to make indigenous rights a priority in the country’s agenda. It promoted the protection for indigenous rights in the political, economic and environmental realms. During the initial years as president, Evo Morales provided protection to the country’s 22 national parks and territories that are home to the 38 ethnic groups, this is supported by the 2009 Constitution. However, throughout his presidency, he has gradually supported policies that overlook the rights of indigenous communities in order to remove obstacles in the expansion of hydrocarbon activities. The

government is seeking to expand its hydrocarbon frontier to encourage investment from foreign oil companies for exploration in protected areas and community lands. This is due to Bolivia's lack of hydrocarbon resources in the near future. Bolivia's traditional natural gas reserves areas are expected to be depleted in 2012. (El Diario, 2013) As a result, YPFB is in search of new hydrocarbon resources in non-traditional protected national parks and protected natural areas. Non-traditional protected areas are considered new locations for hydrocarbon extractions while traditional areas are defined as Bolivia's customary accessible reserves for hydrocarbon extractions. Expanding Bolivia's hydrocarbon frontier into nontraditional protected areas is deemed necessary for the country in order to guarantee its energy security and sovereignty in the future.

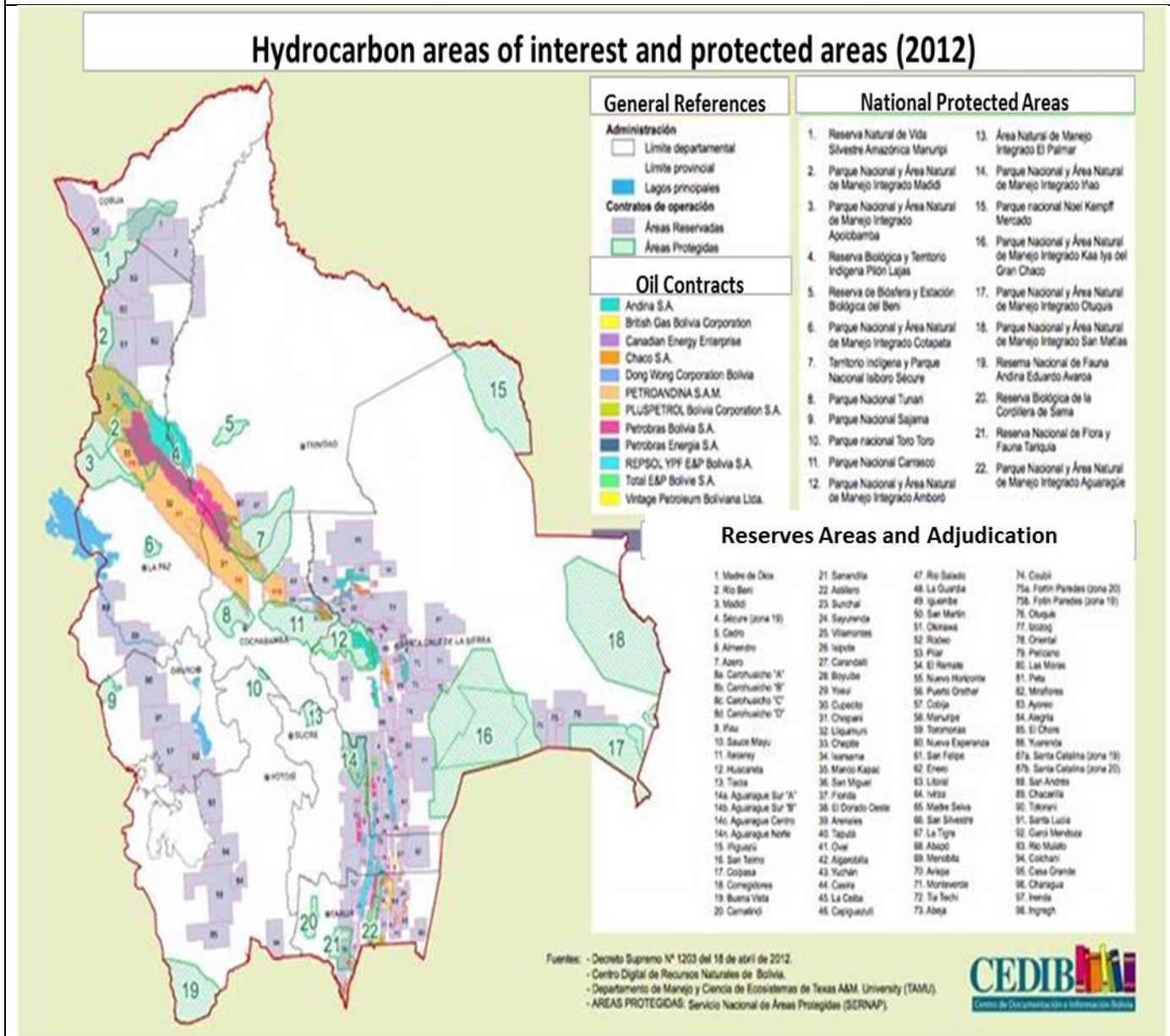
By expanding Bolivia's hydrocarbon frontier into nontraditional protected areas, the government under Evo Morales has contradicted some articles in the State's 2009 Constitution in regards to environmental protection. Paragraph 15 of article 30 in the Constitution establishes that indigenous people have the right:

“To be consulted by appropriate procedures, in particular through their institutions, each time legislative or administrative measures may be foreseen to affect them. In this framework, the right to prior obligatory consultation by the State with respect to the exploitation of non- renewable natural resources in the territory they inhabit shall be respected and guaranteed, in good faith and upon agreement” (D'Alencar, 2013).

In essence, the Constitution includes safeguards that protect the rights of indigenous people to participate in and be consulted on the use of the riches that are in the ground where they live. (D'Alencare, 2013) However, the government under Morales has progressively become more supportive of policies that remove barriers to search and exploit hydrocarbons in protected areas. The vice minister of Oil Exploration and Exploitation in Bolivia, Eduardo Alaron, has categorized Bolivia's need to increase access to nontraditional protected reserve areas as a top priority in securing the country's economy. Alarcon stated that the increase of reserve areas will give a, “strong impulse” to oil exploration because in the country we need reserves of gas and liquids to ensure the supply of our domestic market, industrialization, foreign markets and the search for new markets” (Larazon, 2014).

As a result, the Bolivian government has implemented several Supreme Decrees since 2007 in an effort to increase the number of protected reserve areas for YPFB. Once the government gives YPFB access to these protected reserves areas, YPFB will use service contracts with foreign oil companies to perform exploration in these areas with the potential to discover oil and gas reserves. The foreign oil companies include: Petrobras Bolivia, Repsol YPF, YPFB- Andina, YPFB - Chaco, BG Bolivia, Total E&P, Petrobras Energía, Mapetrol, Orca, Canadian, Plus Petrol, Vintage and Don Wong. They all signed service contracts with the state in 2009. In November 2007, the Supreme Decree 29226 issued 33 reserve areas to YPFB. In October 2010, the Supreme Decree No. 676 was implemented and this added 23 reserves areas to YPFB. In April 2012, Supreme Decree No. 1203, 42 more areas were added, totaling 98 areas reserved for YPFB for exploration and exploitation of hydrocarbons. (El Diario, 2013)

Figure 9:
Bolivia's Protected Hydrocarbon Reserve Areas (2012)



(Source: CEDIB: 2013)

Along with the supreme decrees that removes barriers for further exploration in protected areas, is the development of a new policy that includes incentives to provide a “rapid return on investment” for foreign oil companies but the government will need to expedite regulatory

approvals and mitigate environmental risk to fulfill the policy. Many indigenous groups that are directly affected by this policy demand the government have indigenous consultation in the expansion of Bolivia's hydrocarbon frontier into protected areas. As a result, hydrocarbon exploration from foreign oil companies in protected areas is in a stalemate due to conflicts with indigenous groups who claim they have not been adequately represented in the process.

3.7) Foreign companies exploration and production operations after 2006 in Bolivia:

All fifteen foreign oil companies that operated in Bolivia prior to its 2006 nationalization have continued to conduct exploration and production activities in Bolivia's hydrocarbon industry. In addition to staying in Bolivia, these companies have all expanded their operations as well. The following will provide a description of three foreign oil companies that dominate the majority of foreign investment within Bolivia's hydrocarbon industry. These three foreign oil companies include: Petrobras Bolivia S.A., Repsol YPF, and BG Group.

- Petrobras Bolivia S.A:

Petrobras, the Brazilian multinational energy corporation is the leading foreign oil company within Bolivia's hydrocarbon industry and its operations have been active in Bolivia since 1996. Initially, during the 2006 renegotiations of the contractual agreements, it was difficult for Petrobras to be in accord with Bolivia's new law. (Fuser, 2014) The president of Petrobras, Jose Sergio Gabrielli, strongly criticized Bolivia's 2006 nationalization and when the nationalization initially occurred, he publicly stated: "Petrobras will no longer invest in Bolivia" (Christensen, 2006). However, the Brazilian government under Luiz Inacio Lula de Silva was more concerned about maintaining good political relations with Bolivia because regional political harmony took precedence over commercial ventures.

Petrobras continued its operations instead of taking Bolivia to the ICSID because it would endanger strategic goals related to regional integration. Brazil adopted an accommodating stance with Bolivia because their presence there is based on both bilateral diplomatic agreements as well as commercial ventures. The Brazilian government's main goal under Lula was to foster regional integration. Opposing Bolivia's 2006 nationalization would only break the growing regional integration that had recently been developed. President Lula supported Bolivia's 2006 nationalization and urged Petrobras to do the same because Lula viewed Bolivia's nationalization

over its hydrocarbon industry as inevitable. In addition, the government of Brazil supported Bolivia's nationalization because Evo Morales was adamant about distributing the Bolivian government's increased revenue to social educational programs for the poor. This made the Brazilian government more inclined to support its neighbor. (Christensen, 2006)

The three main reasons as to why Petrobras accepted Bolivia's new contractual terms of agreement in 2006. First, the agreement ensured the production of the main natural gas fields of Bolivia to Petrobras. Second, Petrobras would maintain its strategic position within Bolivia because Bolivia's nationalization did not involve the confiscation of Petrobras property. Third, the Brazilian market depends heavily on Bolivian gas. (Christensen, 2006) After the renegotiations between Petrobras and the Bolivian government in 2006, Petrobras was satisfied with the new contractual agreements and believed that it was beneficial to both Petrobras and Bolivia. As such, Petrobras has continued its operations in Bolivia's hydrocarbon industry.

Petrobras' activities in Bolivia include natural gas exploration, production and transportation over pipelines. Petrobras has six onshore blocks and are the operators of three. In addition, Petrobras operates in the region of Tarija which is home to the largest natural gas reserves in Bolivia. In the Tarija's region, there are three main natural gas fields, San Alberto, San Antonio and Itau. Following the years after Bolivia's 2006 nationalization, Petrobras continued to import much natural gas from Bolivia. Within Petrobras 2010 Operational Summary, imports of natural gas from Bolivia were 29 million of m³¹ per day (2008), 22 million of m³ per day (2009), and 26 million m³ per day (2010). (PETROBRAS, 2010) Also, Petrobras has continued its exploration and production activities within the regions of Tarija and Chuquisaca of Bolivia. The fields in San Alberto, San Antonio and Itau remain important to Petrobras because: these fields produce gas and condensate blocks where production wells, gathering lines, and gas processing plants are located. Moreover, Petrobras has signed additional operation contracts in exploratory blocks located in Ingre (Chuquisaca), Rio Hondo (between La Paz, Beni and Cochabamba) and Monteagudo (Chuquisaca). In 1996, Petrobras and YFPB signed a Gas Supply Agreement (GSA) to supply natural gas to the Brazilian market until 2019. (PETROBRAS, 2014) This agreement may be extended until all contracted volume has been

¹The oil measurement, m³, is equivalent to cubic meters (Lundin Petroleum, 2014).

delivered. Within the GSA, Brazil imports natural gas from Bolivia to supply its domestic market. Despite Bolivia's 2006 nationalization, Petrobras continues to operate in Bolivia.

- Repsol YPF:

Repsol YPF is a Spanish-Argentinean multinational oil company. Repsol YPF has been active in Bolivia since its first oil concession in the Chapare region in 1994. (Vargas, 2006) In the same year as Bolivia's 2006 nationalization, Repsol YPF discovered new natural gas fields in Bolivia. Repsol YPF discovered 800,000 cubic meters of natural gas in Huacaya X-1 which is located in the northern part of the Caipipendi block. This natural gas discovery was a result of a 60 million dollar investment made by a consortium of existing foreign oil companies in Bolivia before its 2006 nationalization. Repsol YPF had 37.5% stake within the consortium which also involved British Gas with 37.5% and Panamerican Energy with 25%. (Repsol, 2007) After this discovery, Repsol YPF was inclined to agree with Bolivia's new contractual agreements in 2006 in order to reap the benefits from the newly discovery natural gas reserves. In addition, the renegotiation of new contracts with the Bolivian state did not directly affect Repsol YPF operations or their strategic position in Bolivia because the 2006 nationalization did not involve expropriation of private companies assets.

Repsol YPF operates in twenty-nine blocks in Bolivia; four are in the exploration stage and 25 in operation. Repsol YPF develops oil and natural gas in four departments in Bolivia: Tarija, Chuquisaca, Santa Cruz and Cochabamba, through Repsol YPF E&P Bolivia and Andina SA. After Bolivia's 2006 nationalization, Repsol YPF continues to have a significant presence in Bolivia due to the expansion of investments in the industry. In 2009, Repsol YPF produced 1.9 million barrels of oil and 31,500 billion cubic feet of gas. (Repsol, 2010). In order to increase the total production of natural gas, Repsol YPF has been developing Margarita and Huacaya areas which are located in the Caipipendi block. This project is a result of Repsol YPF's natural gas discovery in 2006. After the discovery, Repsol YPF made another investment with the Bolivian state for the production of the natural gas that was discovered in Huacaya. This investment includes Repsol YPF, BG Bolivia and PAE & P Bolivia. This investment is expected to total 1,298 million dollars by 2015 for the exploration and production development in Margarita and Huacaya. (Repsol, 2014)

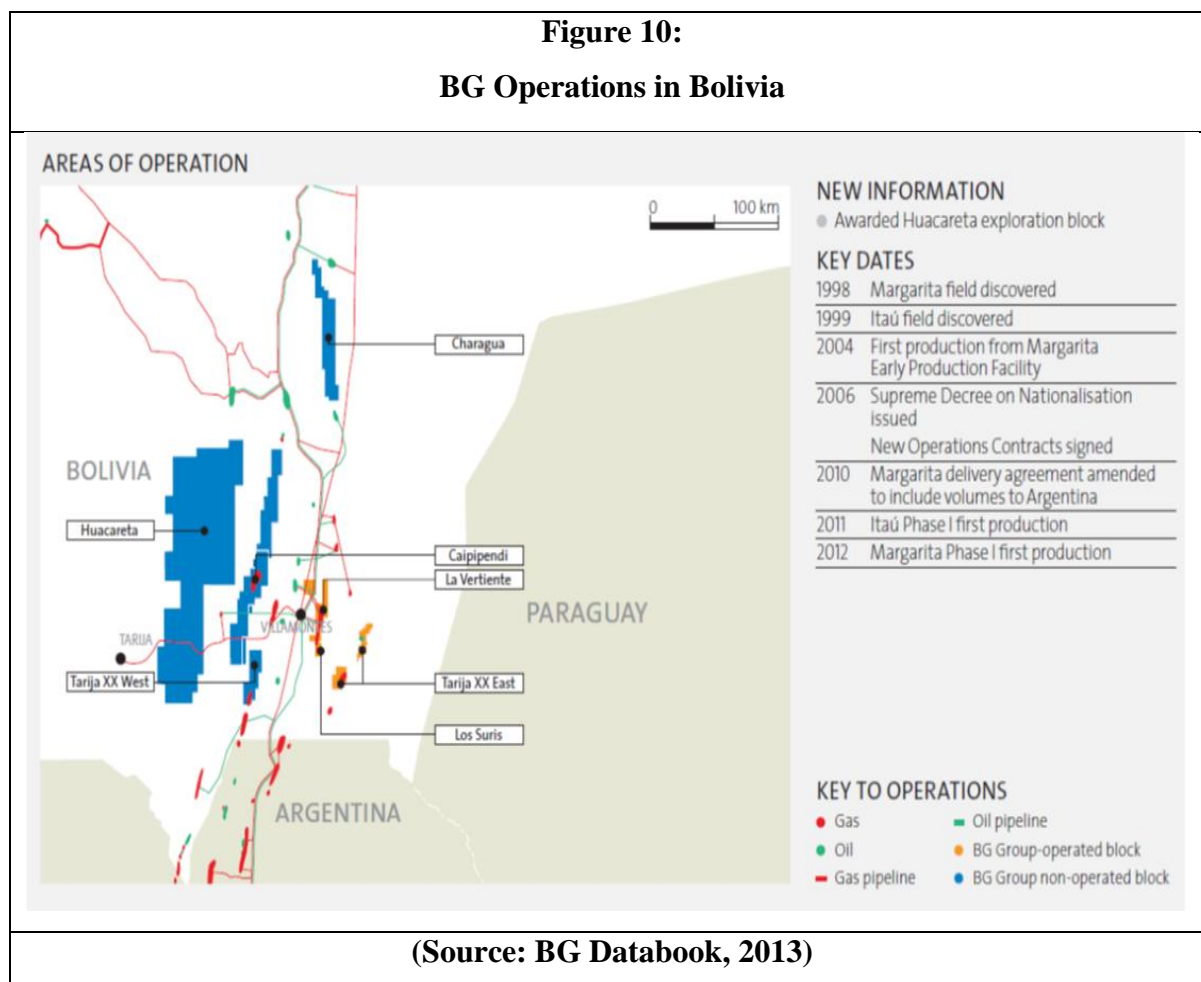
Respol YPF focuses on upstream activities in Bolivia's hydrocarbon industry and its principal business in Bolivia is dominated by natural gas exports to Argentina and Brazil. Respol YPF's exploration and production activities supplied Brazil's domestic market with the Gas Supply Agreement (GSA) signed between Petrobras and YPFB. In 2012, Respol YPF ended their participation as a supplier to the agreement. In addition, YPFB and Respol YPF are in the process of two new agreements in order for Respol YPF to conduct exploration activities in the areas of Carahuaicho and Casira. (Respol, 2014) Since Bolivia's 2006 nationalization, Repsol YPF's upstream operations within Bolivia's hydrocarbon industry have not decreased; rather, more investment has been made.

- BG-Bolivia S.A.:

BG Group is a British multinational oil and gas company and has been active in Bolivia since 1999. BG Group and Respol YPF have similar strategies in Bolivia in regards to investments. BG Group was part of the consortium of companies that discovered new natural gas fields in Huacaya X-1 in 2006. BG Group had a 37.5% stake in that investment which provided a major incentive for BG Group to remain in Bolivia after its 2006 nationalization. In order for BG Group to reap the benefits from the newly discovery natural gas reserves in Huacaya X-1, it was necessary for them to stay in Bolivia despite its nationalization in 2006. As a result, BG Group agreed to Bolivia's new contractual terms of agreement. BG Group has continued to be optimistic with their operations in Bolivia's hydrocarbon industry, even during Bolivia's 2006 nationalization. Five years after Bolivia's 2006 nationalization, BG Group's Vice President Bill Way stated: "Legal security is essential for investment, and we're confident that this is in place [in Bolivia]. We think there's a lot of potential. We've been here for 10 years and plan to be here much longer" (Dow Jones Newswires, 2011).

BG Group's main focus is on upstream petroleum activities and operates in six natural gas fields that are integrated into a single gas processing plant. These gas fields include: La Vertiente, Escondido, Taiguati, Los Suris, Palo Marcado, and Ibibobo. BG Group has recently claimed an interest in two of the largest natural gas fields discovered in Bolivia, Margarita and Itau. In addition, BG Group has expanded its operation contracts in Bolivia in order to explore and further develop the Huacareta block, which is the largest undeveloped area in Bolivia. (BG Group, 2014) This contract was approved in 2013 and exploration activities will begin in 2014.

This project is connected to BG Group's natural gas discovery made in Huacayain 2006. The gas and liquids from these regions are delivered to YPFB to supply the domestic markets of Brazil and Argentina.



The following table displays BG Group's increased level of exploration and production volumes in Bolivia's hydrocarbon industry from 2003- 2013.

Table 2:

BG GROUP's E&P Volumes in Bolivia

BG GROUP's E&P VOLUMES IN BOLIVIA											
Categories	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Gas production (net) bcf ²	64.3	51.0	34.4	31.7	23.4	28.4	27.1	26.5	30.7	21.6	14.2
Total production (net)mmboe ³	13.1	10.2	6.8	6.3	4.7	5.7	5.5	5.3	6.2	4.1	2.8
Total production (net) kboed ⁴	36	28	19	17	13	16	15	15	17	11	8
% of Group production	6%	4%	3%	3%	2%	3%	2%	2%	3%	2%	2%

(Source: BG Group E&P production volume: 2006-2013: http://www.bg-group.com/assets/files/cms/BG_Group_Production_By_Country_2014_Q1.xls)

²The oil measurement of bcf is equivalent to billion cubic feet (Lundin Petroleum, 2014).

³The oil measurement of mmboe is equivalent millions barrels of oil equivalent (Lundin Petroleum, 2014).

⁴The oil measurement of kboed is equivalent thousands of barrels of oil per day in kilometers (BG Data Book, 2013)

The following table is a comparison between Petrobras, BG Group and Repsol YPF in the areas of: E&P (Exploration and Production) operations blocks, gas production and the components of the petroleum industry in Bolivia's hydrocarbon industry before and after the 2006 nationalization.

Table 3:

Comparison between Petrobras, BG Group and Repsol YPF

Categories	Petrobras		BG Group		Repsol YPF	
	Pre-2006	After	Pre-2006	After	Pre- 2006	After
Number of E&P blocks	(2005) 3	(2013) 7	(2005) 3	(2013) 4	(2005) 32	(2013) 29
Gas production (net) bcf	(2005) 22	(2012) 27	(2005) 30,7	(2013) 64,3	(2004) 29	(2011) 35
Type of petroleum industry	Upstream, midstream and downstream		Upstream		Upstream	

(Sources: Petrobras Annual Report 2005 and 2013, Petrobras Sustainability Report 2010 and 2012, BG Group E&P production volume 2006-2013 and Repsol Annual Report 2004 and 2013)

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⁵Sources for Table 3:

PETROBRAS: Annual Report 2005:

<http://www.google.cl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDkQFjAC&url=http%3A%2F%2Fwww.petrobras.com.br%2Fflumis%2Fportal%2Ffile%2FfileDownload.jsp%3FfileId%3D8A15839842B3B5F60142D8C4D02822D1&ei=6zl6U8TLMearsQTzIG4DA&usg=AFQjCNFT5clqARzVW7DKTh2kcCYHNWvgQ>

Annual Report 2013:

<http://www.google.cl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCkQFjAA&url=http%3A%2F%2Fwww.investidorpetrobras.com.br%2Fflumis%2Fportal%2Ffile%2FfileDownload.jsp%3FfileId%3D8A78D6843E42B083013E55DA7904521F&ei=8VZ6U9vzA8u3sASZIYD4BA&usg=AFQjCNEIxzPYTjXFWfb9-TMrMkhdGdm-cQ>

Petrobras Sustainability Report 2010:

<http://www.google.cl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDEQFjAB&url=http%3A%2F%2Fwww.petrobras.com.br%2Fflumis%2Fportal%2Ffile%2FfileDownload.jsp%3FfileId%3D8A15839842B3B5F60142D8CF2B51>

CONCLUSION

Final Remarks about Bolivia's hydrocarbon industry:

“We don't want masters any more. We want partners” (Dillon, 2006).

This is a direct quote from President Evo Morales in one of his speeches to foreign investors in 2006. Bolivia's relationship with foreign investors before its 2006 nationalization was based on unfavorable contractual agreements that continually gave Bolivia only a portion of its share of revenue from its own hydrocarbon resources. However, Bolivia repeatedly legally supported those unfair contractual agreements in the 1990s because it was strictly focused on receiving foreign direct investment in order to develop its hydrocarbon industry. After more than a decade of receiving less than what Bolivia deserved, it became necessary for Bolivia to seek alternatives within its negotiation strategy in order to guarantee increased revenue from its hydrocarbon resources.

Bolivia's limited revenue income from the neoliberal reforms of the 1990s became Bolivia's ultimate motivation to pursue a different strategy within its petroleum fiscal regime in the 2000s. Prior to Bolivia's 2006 nationalization, Bolivia was heavily influenced by Norway's petroleum fiscal regime which was designed to favor the Norwegian state. Bolivia used Norway's petroleum fiscal regime as a model to form their petroleum fiscal regime in 2006. In Norway's petroleum fiscal regime, the state receives 90 percent of revenues generated by its hydrocarbon industry and the remaining 10 percent is for foreign investors. (Dillon, 2006) Bolivia's 2006 contractual agreements were based on two principle elements. First, the Bolivian government reclaimed its ownership over all hydrocarbon resources within its borders as well as the control over the entire chain of production within its hydrocarbon industry. Second, Bolivia

[34C5&ei=QIZ6U5LrMeaosASD3YGIg&usq=AFQjCNEXfNVXCFx_OnDoqZhO1METmhMQoA&bvm=bv.66917471,d.cWc](http://www.petrobras.com.br/2012/03/34C5&ei=QIZ6U5LrMeaosASD3YGIg&usq=AFQjCNEXfNVXCFx_OnDoqZhO1METmhMQoA&bvm=bv.66917471,d.cWc)

Petrobras Sustainability Report 2012:

<http://www.google.cl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.petrobras.com.br%2Fflumis%2Fportal%2Ffile%2FfileDownload.jsp%3FfileId%3D8A15839842B3B5F60142D8D09A7B391A&ei=eGN6U52cJozLsASHkIKgBQ&usq=AFQjCNHEPyArsHRJa4uPxFgz-nz71amqzA&bvm=bv.66917471,d.cWc>

Repsol Annual Report

2004:http://www.repsol.com/imagenes/es_eu/20F_2004_Definitvo_Repsol_YPF_111761_tcm9-13746.pdf

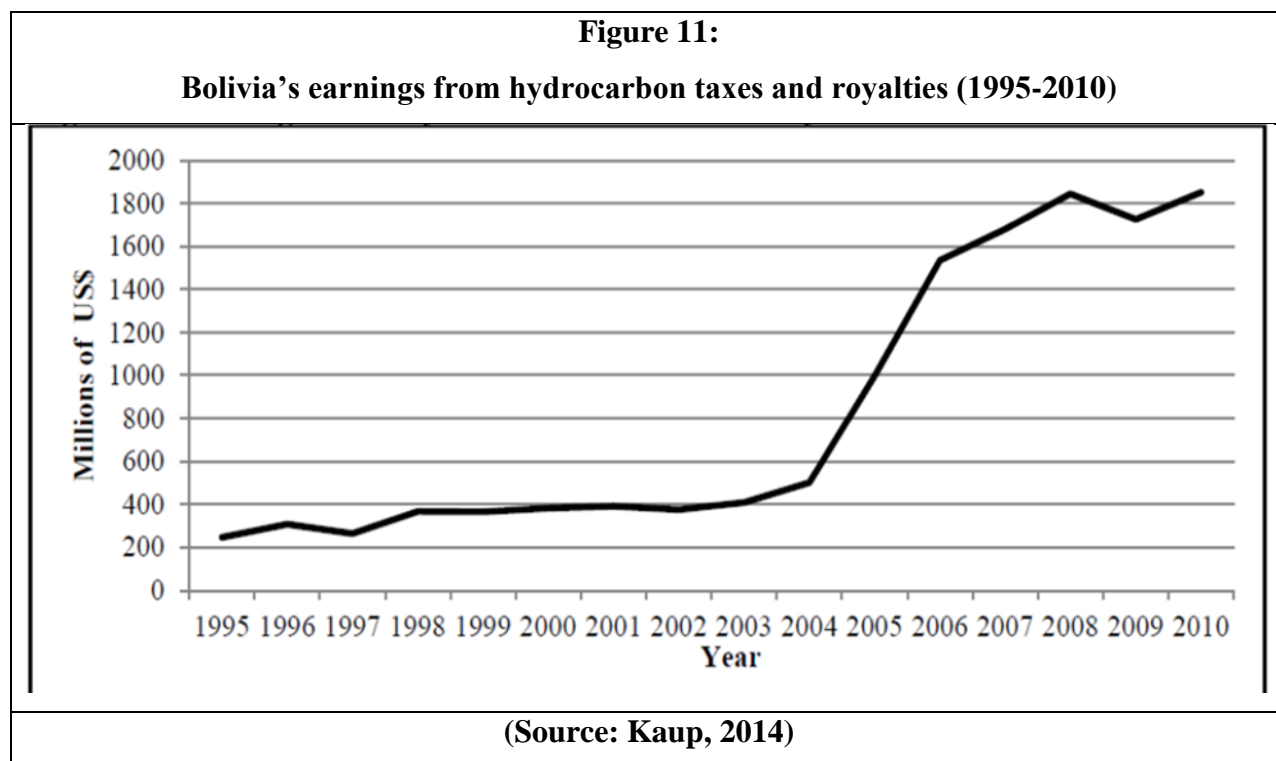
Repsol Annual Report 2013:

http://www.repsol.com/imagenes/es_en/Informe_anual_2013_tcm11-675774.pdf

BG Group E&P production volume 2006-2013:

http://www.bg-group.com/assets/files/cms/BG_Group_Production_By_Country_2014_Q1.xls

changed its revenue distribution design by maintaining an 18 percent royalty, adding a 32 percent direct tax on production (DTH) and an additional 32 percent participation tax by the state-owned petroleum company, YPF. As a result, a total of 82 percent of revenue is designed for the Bolivian state. The remaining 18 percent is for foreign investors.



Bolivia's 2006 nationalization was successfully implemented because President Evo Morales kept true to his promise, that the nationalization would not involve expropriation of foreign investor's property. Instead, Bolivia's nationalization was based on renegotiations between foreign oil companies and the Bolivian state. These renegotiations were centered on the Bolivian state's purchase of the majority of shares from foreign oil companies within its hydrocarbon industry as well as an increase in taxes and royalties. Bolivia's 2006 nationalization did not drive out foreign investors nor did it deter future foreign investment. All fifteen foreign oil companies that operated in Bolivia's hydrocarbon industry before its 2006 nationalization have agreed to Bolivia's 2006 contractual agreements. These fifteen foreign oil companies have not only stayed in Bolivia after its 2006 nationalization but each company has expanded their investments in Bolivia's hydrocarbon industry.

Since Bolivia's 2006 nationalization, Bolivia has been described as having a poor business environment and for being a country with a high political risk for investment. This is due to its nationalization of private firms and frequent social unrest which deters private investment. (Deutsche Bank Research, 2013) Despite the negative international rhetoric surrounding Bolivia's 2006 nationalization, Bolivia offers foreign investors something previous governments have not, social stability and legitimacy. Under previous governments, foreign companies were often the target of Bolivia's social movements and as a result of the nationalization any future criticism is redirected to the Bolivian government. However, since President Evo Morales' rise to power, the Bolivian state has utilized its hydrocarbon industry in order to encourage economic growth and to implement numerous social reforms. Bolivia remains heavily dependent on profits from its hydrocarbon sector. Bolivia has increased its revenues and has continued to be an attractive destination for its existing foreign investors.

Foreign oil companies continue to operate in exploration and production activities in Bolivia's hydrocarbon industry after its 2006 nationalization for the following reasons. Bolivia's 2006 nationalization required foreign oil companies to renegotiate their contractual agreements with the Bolivian state. The renegotiations consisted of obligating foreign oil companies to convert previous operating contracts to production sharing contracts within a six month period. This contract conversion did not include expropriation of foreign companies' private assets. Instead, Bolivia's resource nationalization meant the purchase of the majority of shares from foreign oil companies in Bolivia's hydrocarbon industry as well as an increase in taxes and royalties.

Although Bolivia withdrew from the ICSID in 2007, foreign energy companies continue to conduct business in Bolivia's hydrocarbon industry because it is still beneficial. This nationalization did not deter investment nor did it motivate existing foreign companies to sue the Bolivian government. Existing foreign companies in Bolivia before the 2006 nationalization accepted and agreed to the new terms and conditions in Bolivia's Hydrocarbon Law No. 3058. Javier Pardo, who is the Senior Business Developer in the Business Development Department of ConocoPhillips (the U.S. multinational oil company), shared his insights on the topic: "foreign energy companies decided to stay in Bolivia after its 2006 nationalization because of an opportunity cost / value of the option. An output through international arbitration would be very

costly, time consuming, and results vary. Selling assets is not an option in today's market. Politically, it would be expensive in the region because the vast majority of these companies have investments in ally governments like Argentina, Venezuela, Brazil and Ecuador. In short, the only viable option for most of these companies is to remain in Bolivia.”

The 2006 nationalization increased rents placed on foreign oil companies that operated in Bolivia. This lower their profit margins but such changes did not drive out foreign investors nor did it deter future foreign investments. Prior to the 2006 nationalization, existing foreign oil companies discovered new natural gas reserves that were 600 percent higher than previously known during the wave of privatization in the 1990s. This discovery also incentivized foreign investors to remain in Bolivia after its 2006 nationalization because foreign investors were aware of the potential profit that could be made from Bolivia’s newly discovered natural gas reserves. The Bolivian state needed foreign direct investment for the development of its production.

Bolivia’s 2006 nationalization was a success and it was an historic moment for Bolivia. This nationalization was necessary because it enabled Bolivia to finally get a fair share of revenue from its own natural wealth. In regards to the design and lack of transparency in Bolivia’s contractual agreements with foreign investors there has been a deficiency in economic growth. However, Bolivia’s new petroleum fiscal regime was designed to favor the state; this is relatively a new concept for Bolivia especially since foreign investors have always had advantageous contractual terms of agreement. Considering this history, Bolivia’s trajectory since 2006 proves it is a country with a strategic plan to develop its economy by using its natural wealth as the foundation.

Bibliography

- “BG Group Databook” (2013).
- “Bolivia Frontier country report” Deutsche Bank Research: (2013).
- “Bolivia govt hydrocarbon royalties collection to hit USD bn in 2014” SeeNews Energy: (2014).
- “Bolivia: Government confirms that will prevent exploration in protected areas” Larazon: (2014)
- “Bolivia” BG Databook: (2013).
- “BOLIVIA” Sice. (2014)
- “CEDID: ampliacion de áreas hidrocarburíferas pone en riesgo Sistema de áreas protegidas de Bolivia (Hidrocarburos Bolivia, 31.5.13)” CEDIB: (2013).
- “Environment and National Parks under peril due to intended oil exploration!” El Diario: (2013).
- “Invesion extranjera crece 34% en Bolivia hasta septiembre” (Americaeconomia)
- “Lundin Petroleum” (2014).
- “Oil and gas nationalization” Bolivia Information Forum: (2014).
- “Plurinational State of Bolivia” Preliminary Overview of the Economies of Latin America and theCaribbean: (2013).
- “Reporte de Saldo Y Flujos del Capital Privado en Bolivia” Banco Central de Bolivia: (2012).
- “Respol descubre un nuevo yacimiento de gas en Bolivia” (2010).
- “Respol YPF se interesa en nuevas áreas de exploración en Bolivia” (2014).
- “The Leading Source for News, Articles, Reports, Videos, and Much More on Indigenous Issues around the World” Indigenous People Issues & Resources: (2010).
- Agazzi, Isolda. “Bolivia: Guidelines for foreign investment” Alliance Sud New: (2012).
- Aghion, Philippe and Quesada, Lucia. “Petroleum Contracts: What does Contract Theory Tell Us? Harvard University: (2011).
- Andersen, E. Lykke and Faris, Robert. “Natural Gas and Inequality in Bolivia” (2014).

Berrios, Ruben, Marka, Andrae and Morgenstern, Scott. "Explaining hydrocarbon nationalization in Latin America: Economics and political ideology" Routledge Taylor & Francis Group: (2010).

BG Group E&P production volume 2006-2013.

BG Group "Sustainability Report 2010" (2010).

Brohman, John, Hernandez, Gretchen, Saric, Drina, and Gallegos, Francisco. "Debates over restrictions on foreign investment in Bolivia: Do they serve the interests of socio-economic transformation?" (SFU/UBC): (2012).

Cerutti, Eugenio and Mansilla, Mario. "Bolivia: The Hydrocarbons Boom and the Risk of Dutch Disease" IMF Working Paper Western Hemisphere Department: (2008).

Chavez, Franz. "Bolivia Boosts Incentives for Foreign Oil Companies" Global Issues: (2012).

Christensen, Fryba, Steen. "La Política Energetica de Bolivia y las Relaciones entre Bolivia y Brasil" Sociedad y discurso: (2006).

Clarke, Mark and Cummins, Tom. "Resource Nationalism: A Gathering Storm?" International Energy Law Review: (2014).

Correa, Andre and Sanchez, Ratton, Michelle. "Property Regulation in the Natural Gas Sector in Bolivia impacts for development?" San Paulo Law School, Brazil (2014).

D'Alencar, Ruy. "Indigenous peoples recede into the background" ALAI, America Latina en Movimiento: (2013).

Diaz, Cabrera, Fernando. "Bolivian voters approve new constitution as government continues to nationalize oil assets" Investment Treaty News: (2009).

Dillon, John. "Bolivia Emulates Norway; Why Doesn't Canada?" Policy Briefing Paper, KAIROS: (2006).

Dolzer, Rudolf and Stevens, Margrete. "Bilateral Investment Treaties" International Centre for Settlement of Investment Disputes: (2014).

Donaldson, Velasquez, Christian. "Analysis of the Hydrocarbon Sector in Bolivia: How are the Gas and Oil Revenues Distributed" Institute for Advanced Development Studies: (2007).

- Dow Jones Newswires, “Bolivia: BG Group plans to invest \$500 million in Bolivian gas fields” (2011).
- Driemeier, Hallward, Mary. “Do Bilateral Investment Treaties Attract FDI? Only a bit...and they could bite” World Bank, DEGRG: (2003).
- ENERPUB, “Bolivia: Energy Profile” Spero News: (2008).
- Faris, Robert and Andersen, E. Lykke. “Natural Gas and Inequality in Bolivia” (2014).
- Forero, Juan. “History Helps Explain Bolivia’s New Boldness” The New York Times: (2006).
- Forero, Juan. “The New York Times” (2003).
- Frerichs, P.H. “The Nationalization of the Hydrocarbon Industry in Bolivia Legality under International Law with Respect to the Investment of Royal Dutch Shell” Master Thesis Globalization and Law: (2014).
- Fundacion Jubileo, “Capitalization y Nacionalizacion Sector Hidrocarburos en Bolivia”:(2012).
- Fundacion Jubileo, “Contractos de Exploracion y Explotacion de Hidrocarburos” :(2012).
- Fuser, Igor. “Petrobras and the conflicts for resources in South America” (2014).
- Gamarra, A., Eduardo. “Interpreting Bolivia’s Political Transformation Bolivia on the Brink” Council on Foreign Relations Cochabamba, Bolivia (2007).
- Ghandi, Abbas and Lin, Cynthia. “Oil and Gas Service Contracts around the World: A Review” University of California (2014).
- Gonzales, D. Angela. “Social Movement Mobilization and Hydrocarbon Policy in Bolivia and Ecuador” United States Naval Academy: (2004)
- Gutierrez, Moreno Andres and Haderspock, Brian. “The Arbitration Review of the Americas 2014” Moreno Baldivieso Estudio de Abogados: (2014).
- Inchauste, Luis, Jorge. “Implications of the Nationalization Supreme Decree on Bolivia’s corporate finance legislation” Guevara & Gutierrez Servicios Legales (2014).
- Jemio, Carlos, Luis. “Booms and Collapses of the Hydro Carbons Industry in Bolivia” Institute for Advanced Development Studies (INESAD): (2008).

Kaup, Brent Z. "A Neoliberal Nationalization?: The Constraints on Natural-Gas-Led Development in Bolivia." *Latin American Perspectives* (2010): 37-123

Kaup, Brent Z. "Bolivia's Nationalised Natural Gas: Social and Economic Stability under Morales" (2014).

Kaup, Z. Brent. "In Spaces of Marginalization: Dispossession, Incorporation, and Resistance in Bolivia" *American Sociological Association*: (2013).

Larson, Brooke, Madrid, Raul, Mayorga, Antonio, Rene, and Varat, Jessica. "Bolivia: Social Movements, Populism, and Democracy" *Woodrow Wilson Center Update on the Americas*: (2008).

Marjosola, Heikki. "Public/Private Conflict in Investment Treaty Arbitration-A Study On Umbrella Clauses" *Helsinki Law Review*: (2009).

McGuigan, Claire. "The benefits of FDI: is foreign investment in Bolivia's oil and gas delivering?" (2014).

Milner, V. Helen. "Introduction: The Global Economy, FDI, and the Regime for Investment" *World Politics*, Volume 6: (2014).

Monroy, Medinaceli, Mauricio. "El sector hidrocarburos en Bolivia" *FRIEDRICH EBERT STIFTUNG*: (2012).

Montanes, Tulio, Marco. "Introductory note of Bolivia's denunciation of the convention on the settlement of investment disputes between states and nationals of other states" *American Society of International Law*: (2007).

Morales, Q. Waltraud. "A Brief History of Bolivia" *Lexington Associates*: (2010).

Navajas, H. Fernando. "Hydrocarbons Policy, Shocks and Collective Imagination: What Went Wrong in Bolivia?" *Harvard Education*: (2007).

Ochoa, M. Contreras, Alexandra, Diemal, Alice, Jose, Fokkelman, Emilie, Hylkema, Jetske, Maaddering, M, Jose, McCall, Julia, Renzema, Marijke, T, Strijdonck, Janine, Verbeek, Bart-Jaap. "Revolutionary Politics: Bolivia's New Natural Resource Policy" *Reuters* (2009).

Petrobras, "Operaciones":(2014).

Petrobras, "SustainabilityReport 2010" (2010).

- Petrobras, "Sustainability Report 2012" (2012).
- Petrobras. "Annual Report 2005" (2005).
- Pollan, Thomas. "Legal Framework for the admission of fdi" Eleven International Publishing: (2006).
- Radon, Jenik. "How to Negotiate an Oil Agreement" (2014).
- Repsol YPF. "Annual Report 2004" (2004).
- Repsol YPF. "Annual Report 2013" (2013).
- Respol, "Respol YPF descubre un Nuevo yacimiento de gas en Bolivia" (2007).
- Robinson, A., James. "The Political Economy of Decentralization in Bolivia" Harvard University (2014).
- Ruchti, Jay, Jefri. "World Constitutions Illustrated" Bolivia Political Constitution of the State (2009).
- Simarro, Molero, Ricardo, Antolin, Jose Paz, Maria, and Cendrero, Ramirez, Juan Manuel. "La inversión extranjera directa en el sector hidrocarburifero Boliviano: Comparacion entre marcos regulatorios (1999-2009)" Revista de Economia Mundial: (2012).
- Siotos, Modesto. "Social Movements and Development in Bolivia" Interdisciplinary Journal of Social Sciences: Volume 1, Issue 1: 51-60: (2014).
- Small, Yannaca, Katia. "Interpretation of the Umbrella Clause in Investment Agreements" OECD OCDE Working Papers on International Investment: (2006).
- Soo-Ho, LIM. "The New Resource Nationalism and Oil Security" Samsung Economic Research Institute: (2011).
- Stiglitz, E. Joseph. "Who Owns Bolivia" Project Syndicate: (2006).
- Tietje, Christian and Nowrot, Karsten and Wackernagel, Clemens. "Once and Forever? The Legal Effects of a Denunciation of ICSID" Transnational Economic Law Research Center: (2014).
- Tissot, Roger. "Challenges of Designing an Optimal Petroleum Fiscal Model in Latin America" Inter-American Dialogue: (2010).

Tobin, Jennifer, Rose-Ackerman, Susan. "Foreign Direct Investment and the Business Environment in Developing Countries: the Impact of Bilateral Investment Treaties" William Davidson Institute: (2003).

Vargas, Mónica. "BOLIVA EN EL FOCO DE LA ACTUALIDAD" Observatorio de la Deuda en la Globalización: (2006).

Velasquez-Donaldson, Christian. "Analysis of the Hydrocarbon Sector in Bolivia: How are the Gas and Oil Revenues Distributed?" Development Research Working Paper Series: (2007).

Viera, Urioste, Antonio, Marco. "Gas Politics and Economics in Bolivia: How would it affect the development of the potential gas market in Chile and Brazil?" (2014).

Weintraub, Sidney. "Bolivia's Natural Gas Nationalization" Issues in International Political Economy: (2006).

Wong, Jarrod. "Umbrella Clauses in Bilateral Investment Treaties: Of Breaches of Contract, Treaty Violations, and the Divide between Developing and Developed Countries in Foreign Investment Disputes" (2006).

ANNEX

I. List of foreign oil companies in Bolivia before and after the 2006 nationalization:

- 1) Petrobras Bolivia S.A. (Brazil)
- 2) Total E&P Bolivie(France)
- 3) Petrobras Energia S.A. (Brazil)
- 4) Repsol YPF (Spanish-Argentina)
- 5) BG-Bolivia S.A. (British Gas/ England)
- 6) Andina S.A. (local subsidiary)
- 7) Chaco S.A. (BP-Amoco's subsidiary)
- 8) Vintage Petroleum (United States)
- 9) Pluspetrol (Argentina)
- 10) Matpetrol(Bolivia-Miami base)
- 11) Petrolex (IrelandPanAndeanResources-local subsidiary)
- 12) Orca (Canada)
- 13) Dong Won Corporation (North Korea)
- 14) Canadian EnergyEnterprises (Canada)
- 15) Tecpetrol(Argentina)

II.) Petroleum Industry:

The petroleum industry is divided into three major components: upstream, midstream, and downstream.

- Upstream: The upstream component is more commonly known as the exploration and production sector (E&P). The upstream sector includes searching for potential underground or underwater crude oil and natural gas fields, drilling of exploratory wells, and subsequently drilling and operating the wells that recover and bring the crude oil and/or raw natural gas to the surface.

- Midstream: The midstream sector involves the transportation aspect of petroleum such as a pipeline, rail, barge, or truck or the storage, and wholesale marketing of crude or refined petroleum products.
- Downstream: The downstream sector commonly refers to the refining of petroleum crude oil and the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas. The downstream sector reaches consumers through products such as: gasoline or petrol, kerosene, jet fuel, diesel oil, heating oil, fuel oils, lubricants, waxes, asphalt, natural gas, and liquefied petroleum gas (LPG) as well as hundreds of petrochemicals.

Although Bolivia's hydrocarbon industry has more upstream endeavors, it is actively working on developing both midstream and downstream activities.

III.) Interviews:

Two interviews were conducted. The first interview was conducted with Mauricio Medinaceli, who is the former Minister of Hydrocarbons (2005-2006) in Bolivia as well as the Hydrocarbons Coordinator in the Latin American Multi-Government Energy Organization (OLADE) in Quito, Ecuador (2008-2010), economic advisor of the National Oil Company in Bolivia (YPFB), and an Economist at UDAPE (Bolivia's Government Think Thank).

Veronica Rodriguez: Why do you think foreign energy companies continue to operate in Bolivia after its 2006 nationalization?

Mauricio Medinaceli: I believe that the high prices of gas exports closed equation and allowed a reasonable rate of return. However, it was not nationalization and expropriation of assets expulsion of companies, but simply signing new contracts where the Bolivian state increased its share very marginally since the bulk of the revenue comes from the Direct Tax on Hydrocarbons (DTH).

VR: Since Brazil and Argentina are becoming increasingly more self-sufficient with supplying their domestic market within their own natural gas reserves, how will this affect Bolivia's hydrocarbon industry in the future? Will a LNG pipeline become constructed through Chile in order for Bolivia to continue its development in its hydrocarbon industry?

MM: I doubt a pipeline through Chile will be constructed because the bilateral relationship between Bolivia and Chile will prevent it. It is a major conflict for Bolivia not to have access to the sea and it is still a very live issue among Bolivians.

The second interview was conducted with Javier Pardo who is from Venezuela and works for the oil company, ConocoPhillips. He works in the Business Development Department as a Senior Business Developer for Asia Pacific which is based in Singapore. ConocoPhillips was not one of the multinational companies in Bolivia's hydrocarbon sector; however, Indonesia had a similar situation to Bolivia in regards to contractual changes within its petroleum fiscal regime. He is an expert in this field and has much experience with the industries in Indonesia and Bolivia. He was able to provide his expertise in the Bolivia's hydrocarbon industry.

Veronica Rodriguez: Why do you think foreign energy companies continue to operate in Bolivia after its 2006 nationalization?

Javier Pardo: In summary, Bolivia is a country with great potential but its political history has not allowed it to grow the way it deserves. The political risk is the main but not the only reason why there are no companies in Bolivia. Other reasons include: (1) primarily gas, (2) very limited domestic market, (3) regulated prices, (4) is the only export to Argentina or Brazil and pipelines are currently at maximum capacity, (5) production is mainly concentrated in 3 areas: Margarita, and San Antonio Sabalo, (6) high costs for not having access to the sea and the many nationalist requirements.

Foreign energy companies decided to stay in Bolivia after its 2006 nationalization because of the opportunity cost / value of the option. An output through international arbitration would be very costly, time consuming and results vary. Selling assets is not an option in today's market. Politically, it would be quite expensive in the region because the vast majority of these companies have investments in ally governments like Argentina, Venezuela, Brazil and Ecuador. In short, it is the only viable option for most of these companies.

VR: Do foreign energy companies in Bolivia's hydrocarbon sector plan on staying after the expiration date of their current contractual agreements?

JP: Time will tell. I think if you ask any of these companies the politically correct answer, would be: "we are here for the long -haul because we believe in Bolivia and we've been here for over 100 years" but the reality is that if they have attractive opportunities elsewhere, they would be more likely to invest in safe and profitable places.

