China's energy policy in Mexico: Opportunities and Challenges

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Introduction

The expansion of commercial and political relations between China and Mexico is a phenomenon that has reshaped the South-South relations. The main purpose of this research paper is to analyze the energy opportunities that China has in Mexico, due to the openness of the sector to foreign direct investment. Energy cooperation between China and Mexico can be seen as a Greenfield sector, and as chance to deepen the flows of trade and investments between both countries. Mexico opened its energy sector to foreign direct investment and China may have the chance to participate as an investor in the field. There are five parts in this research paper; the first part is an introduction providing an overview of the Chinese need for energy resources. Afterwards, the paper covers the methods of energy cooperation used by Chinese oil companies in Latin America, especially in Brazil and Venezuela. Thirdly, it is explained how the Mexican oil sector operates and the reforms that might allow inflows of foreign direct investment. Fourthly, there are shown some policies that China might apply to get into the Mexican oil field. Finally, we give some recommendations to Mexican policymakers in order to have successful interactions with Chinese oil companies.

I. China's need for energy resources

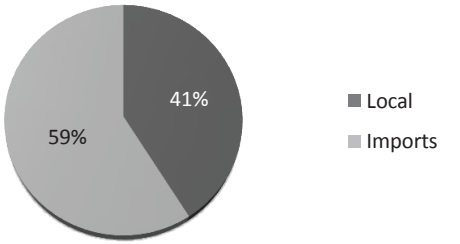
Since its economic reform from central planning to markets in 1978, China´s economic performance has been remarkable, and industry is the biggest growth-driven sector. The industrial development strategy used by the Chinese government characterizes by the enormous need of energy (Chen, 2013).

China is the second largest world economy in the world, and has been growing extremely fast in the last two decades. Its economic growth has been accompanied by energy consumption growth (Cole, 2003), and since 1993, China became dependent on international sources of oil, a trend that continues to increase. Though the People´s Republic of China is the world's fourth largest petroleum producer, it also is, the second largest net oil importer (US Energy Information Administration, 2014), due to the fact that petroleum is the second largest energy source.

According to the Oil Medium Market Report published in 2014 (International Energy Agency, 2014) Peoples Republic of China is the second largest oil consumer in the world after the United States. China´s oil demand grew in 2013 to 10.1 million barrels per day, a 3% increase over 2012, and it is forecast to reach 10,8 million barrels per day in 2015. China is expected to overtake the United States as the largest oil consumer by around 2030.

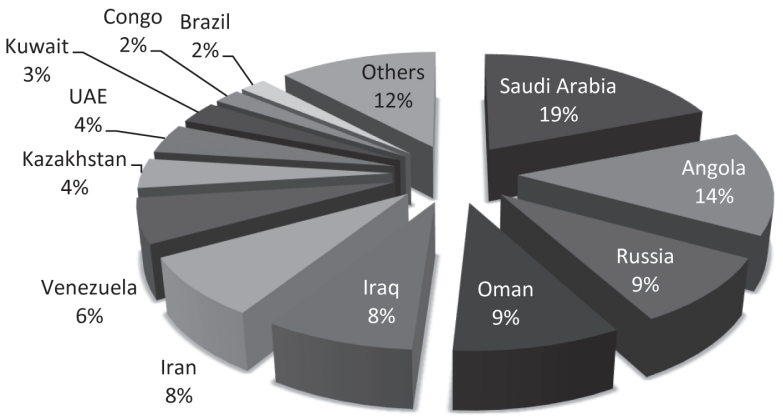
China´s oil demand increased dramatically over this decade, reaching record highs in 2013. The necessity of China to get fuels abroad is so enormous that the US Energy Information Administration (US Energy Information Administration, 2014) expects China to import over 66% of its total oil consumption by 2020 and 72% by 2040 because inner demand is expected to grow faster than domestic crude supply. In 2013, 59% of Chinese total demand was met by imports (International Energy Agency, 2014). China´s top ten crude oil suppliers are: Saudi Arabia, Angola, Oman, Russia, Iraq, Iran, Venezuela, Kazakhstan, United Arab Emirates and Kuwait.

Figure 1. China´s oil consumption: Local production v. Imports



Source: (International Energy Agency, 2014)

Figure 2. China´s crude oil imports by source 2013

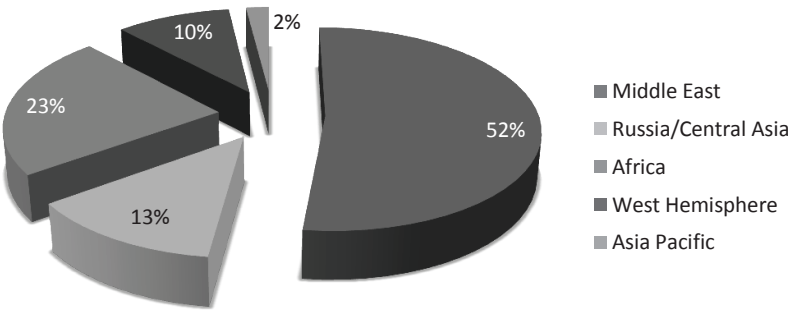


Source: (International Energy Agency, 2014)

China relies heavily on supplies from the Middle East, with 52% of its 5.64 million barrels per day crude oil imports. Africa is the second supplier of oil, and America as a continent only provides 10% of the Chinese petroleum imports.

Beijing is concerned with oil security, defined as sufficient and normally priced oil supply to the market. As energy self-reliance is not an option, China is expanding its share in the international oil sector (Eder, 2014).

Figure 3. Source of Chinese crude oil imports in 2013 by region



Source: (International Energy Agency, 2014)

The Chinese government is aware of this dangerous situation that is why to ensure adequate oil supply and mitigate geopolitical uncertainties, it has established three leading public enterprises to participate in the international energetic sector: China Petrochemical Corporation (Sinopec Group), China National Petroleum Corporation (CNPC), and China National Offshore Oil Corporation (CNOOC), each of which has a distinctive role to play towards the materialization of assuring China´s energy security (International Energy Agency, 2014). Those three companies own oil entitlements in 42 countries, of which half are located in the Middle East and Africa.

China´s 12th Five-Year Plan for Energy Industry (China National Energy Administration, 2013), which covers the period 2011 to 2015, called for the capping of China´s oil import dependency rate at 61% by 2015. However, that limit will depend on the growth rate of Chinese oil demand, which is mostly driven by transport and petrochemical sectors, and which will be very difficult to stop.

Due to the fact that China will continue increasing its foreign reliance on oil, the government is executing its global resource

strategy with considerable aplomb, doing seemingly everything it can to make certain that oil deals benefit all parties (Moyo, 2012).

Chinese National Oil Companies first ventures overseas in 1993, investing in oil and gas production in Thailand, Canada, Peru, followed by Sudan in 1995. China has emerged to become an international operator, with activities spreading across more than 40 countries, between 2011 and 2013, Chinese National Oil Companies invested all around the world record amounts of capital totaling USD 73 billion in upstream[1] mergers and acquisitions, and USD 29 billion in long-term loan-for-oil deals to bring additional oil supplies to China. The increase level of Chinese Direct Investment in diverse countries serve to calm growing concerns within China about the country´s inevitable increasing import dependency, and to diminish the exposure to global oil market volatility.

However, despite the success in upstream and downstream investments around the world, the Chinese state-owned enterprises have faced difficult challenges in parts of the world where political instability is increasing. Security concerns have heightened in the Middle East and Central Asia, and the protection of the Chinese oil and gas pipelines across those regions requires a lot of effort (International Energy Agency, 2014).

A. Chinese search for oil markets and diversification of suppliers

More than half of the Chinese overseas oil production is located in Africa and the Middle East, positioning the oil companies in unprecedented political unrest and security threats. The unstable political situation in the Middle East poses great challenges to Chinese firms; a destabilized Middle East could have serious consequences for China´s energy security, as the region supplied 52% of China´s oil imports in 2013. The Chinese government´s position in that region is to exercise its traditional non-interference policy, encourage dialogue, oppose unilateral sanctions and seek

[1] Upstream sector commonly refers to exploration and production activities that include searching for potential underground or underwater crude oil and natural gas fuels, and drilling of exploratory wells.

for peaceful solutions, but it is inevitable that social or political risks on Iran, Syria or any other country in the region would seriously threaten China´s National Oil Companies (International Energy Agency, 2014).

The primary objective of China´s active involvement in the Middle East is oil. However, scholars advise China to reduce its over reliance on Middle Eastern oil, and even if this trend continues, China must identify substitute suppliers (Olimat, 2013). China seeks energy security, and its foreign policy is geared towards utilizing its political power to serve its economic growth, and the government is aware that guaranteeing and securing oil supplies from abroad is essential to China in order to achieve its economic growth.

Since the last century, events in the Middle East have made the oil business environment even more challenging. Most recently, the Arab Spring, the Syrian Civil War, and the ongoing Iran nuclear negotiations, have placed the Chinese companies in the middle of geopolitical crises (International Energy Agency, 2014). These events have imposed new dilemmas upon Chinese leaders and policy makers, who are considering new places to invest and diminish the risk.

For example, the three-year long civil war in Syria put Chinese Oil Companies investments in jeopardy. In 2011, Chinese enterprises owned a total production in Syria of 53 thousand barrels per day; by the end of 2013 they only maintained a small output of 2.5 thousand barrels per day. Because the Chinese operations in Syria were not substantial and for safety reason most Chinese personnel and investments were evacuated from that region (International Energy Agency, 2014).

About one third of the world´s known petroleum reserves lie in politically unstable or contested areas[2]. That is why the more difficult the political environment of the country or region where oil is located, the more difficult it is to access global oil supplies in a sustained and reliable way, leading to higher prices and, in the worst

[2] Considering the oil proven reserves available in Iran, Iraq, Venezuela, Algeria, Angola and Libya.

case, conflict (Moyo, 2012). China is aware that oil has greater interstate conflict-causing potential across the Middle East region. The Iraq conflict is a fantastic example: the risk of terrorist acts and risk of weapons of mass destruction were sold as the ostensible reason for the 2003 US-led ally intervention, yet the war in Iraq can also be viewed as an attempt to control natural resources, especially proven oil reserves.

Concerning to Iran, Chinese companies have a large participation in that country since 2002. Sinopec and CNPC reached and agreement with Iran to commit at least US $14 billion to explore and develop four oil and gas fields. Iran used to be the third largest crude oil supplier to China, but due to the international sanctions targeted for its nuclear ambitions, the Iranian exports dropped to sixth place. In 2013, Iran exported 429 thousand barrel per day, representing 8% of China crude oil imports (International Energy Agency, 2014). Chinese oil firms don't recognize that the drop in imports was caused by the economic ban imposed by West countries, they claimed that the real reason was because of a price dispute with its Iranian suppliers. However, evidence suggests that shipping insurance firms didn't want to issue insurance policies to cover the Chinese oil shipments, and therefor China increased its imports from Russia and Iraq.

Saudi Arabia is China´s number one crude oil provider; it plays a crucial role in China´s energy security, by supplying 19% of Chinese crude oil imports. Both countries have committed to enhance bilateral cooperation under a strategic framework, which includes developing an all-around partnership in the energy sector, based on favorable political conditions. They have been able to achieve it by avoiding differences over regional issues and focusing in their growing commercial relationship (International Energy Agency, 2014).

Not only the political instability in the Middle East affects the Chinese incursion on the oil industry, but there is also another problem: the oil routes that China needs to control in order

to transport the oil. The Malacca Strait, which lies between Indonesia, Malaysia and Singapore, is the main route for China´s oil imports from the Middle East, the problem is that the Strait is close to its capacity in terms of traffic, and also, any tension with regional powers surrounding the Strait will jeopardize China´s stability and development. In a quest to reduce this reliance, China has begun the construction of pipelines, but in the long run China could face the same problems as with the Strait (Daniels, 2014).

Because China knows that resource endowments in Middle East are frequently at the center of conflict and civil unrest, it´s entirely reasonable to understand why the Chinese Government has turned its eyes into new regions, particularly to Africa, Central Asia and Russia.. That is why China has rapidly expanded as a buyer of oil over a diversified portfolio of countries, a strategy to minimize the risk of supply.

Chinese government is aware that the end of the oil age is not insight; however the government is clear that there have been petroleum supply disruptions that increased the price in a considerable way, during the past 50 years (Sergi, 2014) and that if it only relies on the Middle East, a new disruption can unbalance the Chinese economic equilibrium.

Table 1. Recent petroleum supplies disruptions

Date	Event	Supply cut (Net global)	Price change
November 1973	OPEC Embargo	7 percent	51 percent
November 1978	Iran Revolution	4 percent	57 percent
October 1980	Iran-Iraq War	4 percent	45 percent
August 1990	Gulf War I	6 percent	93 percent
December 2002	Venezuela Gulf War II	2 percent	28 percent

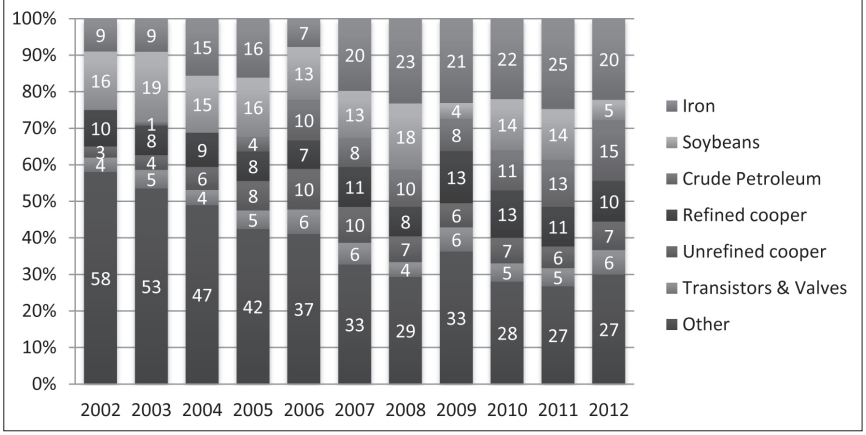
Source: (Sergi, 2014)

II. Chinese oil companies in Latin America

The Sino-Latin America relations have blossomed rapidly during the first half of the 21st century. Latin American countries see Beijing as an important destination for the diversification of their external political and economic relations. Latin America has abundant resources, that is why the exports to China are mainly basic commodities (Hongbo S. , 2012). According to scholar Jorge Dominguez, China has not turned to Latin America to address its energy needs, however China imports petroleum from the region (Dominguez, 2009).

China´s incursion into international petroleum markets involves three approaches, especially to developing countries (Moyo, 2012): via financial aids, through trade, and by means of investment.

Figure 4. Distribution of LA-China exports among major commodities 2002-2012



Source: (Ray & Gallagher, 2013)

In regard to financial aids, China makes transfers or lends money to the countries in order to secure long-term supplies from a range of resource-rich countries. In Latin America, they have used those

loans for oil in many countries, but in the past years two major loans were given to Venezuela

Table 2. China´s loans for long-term oil supply signed with Venezuela

Lender	Borrower	Amount USD billion	Purpose
China Development Bank	Venezuela	4	Reached in 2013 to increase production level of the Orinoco oil fields. The loan is to be paid back with 310 kb/d of oil for four years.
China Development Bank	Venezuela	10	Reached in 2012. One part of it was used to develop the Orinoco oil fields and part for agriculture and industry projects. This part of the loan is to be paid back with 230 kb/d of oil for three years.

Source: (International Energy Agency, 2014)

In 2009, China lent around US $10 billion to Petrobras, Brazil´s government-controlled oil company, in exchange of providing two hundred thousand barrels of oil a day to Sinopec, China´s state-owned company, for the subsequent ten years (Moyo, 2012).

From the Chinese point of view its relationship with developing countries is a part of china´s peaceful rise in economic trade (Chow, 2012). However, the value of oil trade between China and Latin America is really low, because rather than trading, China obtains petroleum by loans-for-oil contracts.

China´s investment strategy has been transformational for the international landscape because it is capable of funding inputs, infrastructure and logistics to explode natural endowments. In the 21st century, China National Oil Companies have made significant achievements in both upstream and downstream investment in Latin America, assuring more oil and gas supplies to China and building strong partnerships with resource-rich countries (Moyo, 2012).

Upstream investments by Chinese companies have contributed to the increase in global oil supplies. But not just that, the three main oil companies from China have expanded their supply chains by

investing in pipelines, storage facilities and refineries all abroad. Chinese oil companies have dramatically increased their overseas production entitlement in recent years, mainly through mergers and acquisitions (International Energy Agency, 2014).

Since 2010, China became Brazil´s largest investor, among many portfolio of field investment, China will help Brazil explore and extract the country´s rich offshore oil resources, designating US $250 billion to achieve that goal (Moyo, 2012).

New acquisitions made by Chinese Oil Enterprises in Latin America demonstrate that they are moving away from investing in risky parts of the world in favor of a more politically stable investment climate. It comes at a time when China´s state-owned enterprises are facing increasingly complicated geopolitical situations in the Middle East and Africa (International Energy Agency, 2014).

China´s largest energy trading partner in Latin America is Venezuela, though Venezuela´s share of China´s oil imports was only 6 percent in 2013. For Venezuela, this makes China a significant trading partner but the comparison underscores the asymmetry in leverage in Sino-Venezuelan relations (Dominguez, 2009).

China considers Venezuela a key strategic country in which to gain share market in oil that is why in 2010, when the Chinese oil company CNPC was faced with nationalization of two oil blocks in Venezuela, China reacted mildly. CNPC remained in the country and China kept providing the Venezuelan government with loans (International Energy Agency, 2014).

III. What is the Mexican energy reform about?

A. Mexican oil sector in the XXI century

Mexico is one of the 10 largest oil producers in the world, the third largest in the Americas after the United States and Canada, and an important partner in the US energy trade. However, Mexico´s oil

production has steadily decreased since 2005 as a result of natural production declines from Cantarell, the biggest oil dwell in the country. Notably, crude oil production in 2013 was at its lowest since 1995. According to the Energy Information Administration Mexico had 10 billion of proved oil reserves as of the end of 2013, nevertheless most reserves consist of heavy crude oil varieties, with the largest concentration occurring offshore of the southern part of the country (US Energy Information Administration, 2014).

Pemex does not count with the ability to make capital investments and take advantage of the oil located in deep water, due to the fact that the company pays a substantial amount of taxes and duties to the Mexican government, these special taxes, duties and dividends constitute a substantial portion of the Mexican Government´s revenues. This situation is a major problem for the Mexican government because Pemex lacks capital and expertise necessary to develop deep offshore fields. Another difficulty that Mexico faces is the lack of refineries, so the country is a net importer of refined petroleum products (Petroleos Mexicanos, 2012).

The exploitation of oil is a crucial component of Mexico´s economy. The oil sector generated 13% of the country´s export earnings in 2013, more significantly, earnings from the oil industry accounted for about 32% of total government revenues in 2013. Declines in oil production have a direct impact on the country´s economy output on the government´s fiscal health; particularly as refined product consumption and import needs grow.

B. Mexican oil reform

Mexico nationalized its oil sector in 1938, according to the instructions given by former President Lázaro Cárdenas, and State-Owned Company Petroleos Mexicanos “Pemex” was created as the sole oil operator in the country. Pemex is the largest public company in Mexico and one of the largest oil companies in the world, it is advised by the Ministry of Energy and the National Commission

of Hydrocarbons (Lopez Obrador, 2008). Petroleos Mexicanos has three subsidiary entities: a) Pemex Exploration and Production; b) Pemex Refining; and c) Pemex Gas and Basic Petrochemicals.

After many years of confrontation, in December 2013, the Mexican government enacted constitutional reforms that allow foreign direct investment in the energy industry, and admit the participation of other oil companies. The reform allows four new exploration and production contract models: licenses, production sharing, profit sharing and service contracts. Previously, only service contracts were allowed for foreign firms. The reform involves amending Articles 25. 27 and 28 of the Mexican Constitution and adding 21 transitional articles that will outline regulations to be implemented (Dittrick, 2014).

Pemex will remain state-owned but will have to compete for bids with other firms on new projects. The reforms also call expanding regulatory authorities and for creating a new National Agency of Industrial Safety and Environmental Protection. In the present moment, Mexico is developing and approving secondary legislation detailing the fiscal regime and contract terms for the models. While reform proponents overcame the major obstacle of constitutional change, the remaining legislation still faces significant opposition. Thus, Mexico plans to offer acreage for bidding by 2016 (US Energy Information Administration, 2014).

C. The energy reforms create four oil exploration and production contract models that can be signed by foreign investors

The reform allows foreign companies to invest under four different models: Licenses, Production sharing, Profit sharing and Service contract. According to customary international law, all hydrocarbons produced under licenses belong to the oil company. Under both production sharing, profit sharing and service contracts, the state owns the hydrocarbons produced with a portion of them being allocated by the state to the oil company as a payment for

the risks taken and the service performed (Park, 2013). The type of regime chosen by the Mexican state has to be evaluated very carefully, in order to diminish risks and to get profits from the deals. To assure that the investment won't be expropriated, the Mexican Government must consider including a number of contractual and legal provisions intended at limiting its extent so the oil companies be sure they have certainty in the industry.

The license regime is the grant or a permission by the state to an international oil company to explore for and exploit a particular geographical are for a fee. Ownership of the hydrocarbons will remains with the Mexican state, if found on land or in the sea. The license grants a proprietary right over the hydrocarbons and any profits made by the oil company will be taxed by the state. The production sharing and profit sharing contracts are relationships between and international oil company and a state-owned company. The agreement authorizes the oil company to explore for and exploit oil in a defined area and for a defined period of time. The state-owned company hires the foreign enterprise in exchange for the entitlement to a defined share of revenues or hydrocarbons. Under the production sharing and profit sharing the State remains the owner of the resources. These agreements establish the amount of compensation that oil companies will receive for services rendered. This compensation will, either be in kind or money. Both contracts include the following (Park, 2013):

- Definition of the geographical area that the agreement covers and the length of the agreement.
- Specification of the operator who is in charge of the upstream activities.
- Prescription of minimum work and expenditure commitments.
- The state´s option to participate in the venture.
- The division of the hydrocarbons produced or the revenues.

- Any obligation on the foreign company to sell hydrocarbons domestically.
- A stabilization clause.
- Ownership of assets.

The service contract allows the host state to retain full ownership of all hydrocarbons being produced within its jurisdiction and the international oil company performs the exploration and production operations as a service to the host state. (Park, 2013) This regime has been adopted in Mexico before the reforms, because the Mexican Constitution used to prohibit foreign control of natural resources. It was convenient for Mexico due to the fact that the state oil company lacked the technical expertise of the foreign enterprises.

D. Adverse opinions regarding the energy reform

The Mexican sentiment against foreign oil companies is heavily ingrained in the culture, and past governors that have considered opening the sector to foreign direct investment have failed. The story behind the nationalization of the Mexican oil industry inspires great national pride and liberation sentiments among the citizens. Mexico became the first country in the world to nationalize its oil industry and create a national oil company, the action was taken by the President when foreign oil companies operating in Mexico chose to defy the Mexican Supreme Court decision that obliged the companies to increase the low wages paid to Mexican oil field workers. The decision of the corporations provoked that the Government expropriated the industry, but in April 1942, an agreement was settled in which Mexico paid the ousted companies $23.9 million as a compensation for their seized assets. With the expropriation of foreign oil properties, a wave of enthusiasm swept over Mexico, Mexicans felts that a day of deliverance had come, many thousands of students and professors from all the country organized parades and funding

to pay the debt to foreign companies, the Catholics, which represents 80% of the population, were enthusiastic about donating money to the expropriation move, the Archbishop of Mexico advised from the pulpit that it was a "patriotic duty to contribute to this national fund". Women in Mexico took off wedding rings, bracelets, and earrings and gave them to paid the compensation. Even the poorest people donated their animals to be sold, so the Mexican government could gather enough money to pay (Lopez Obrador, 2008).

Source: (Sin Embargo, 2013)

Source: (Sin Embargo, 2013)

In addition of the nationalist sentiment, which can be compared to the nationalization of the energy sector by President Putin, and its idea of national champion companies, in 1962, the UN General Assembly adopted a resolution on "Permanent Sovereignty over Natural Resources", under this legal instrument, the oil-producing states are given the right to participate in the production of the oil and the right to nationalization or transfer of ownership to its nationals, emphasizing that no Stare may be subjected to economic, political, or any other type of coercion to prevent the free and full exercise of this inalienable right (United Nations General Assembly, 1962).

Acording to a survey taken in 2012 by Centro de Investigaciones y Docencia Economicas, found that 65 percent of those polled opposed opening up Mexico´s oil and natural gas fields to foreign investment (Blackmont, 2013). The people and leftist party Partido de la Revolución Democrática consider that energy industry must be regulated more than others because it has linkages with other industries and therefore energy reforms can affect a wide range of people and industries. They argue that in Mexico, there are several cases in which are demonstrated that lobbyists pursue market reforms for personal rent seeking rather than to increase the industry efficacy (Ma & Les, 2012).

IV. Which policies will China apply to get into the Mexican energy field?

A. Memorandum of Understanding to Enhance Cooperation on the Energy Field

In June 4th of 2013, the Mexican Ministry of Energy, Pedro Joaquin Coldwell, and the Chinese Director of the National Committee of Development, signed a high-level governmental agreement, promoting Sino-Mexican relations in the energy

field. According to that agreement, Mexico and China will deep the interchange of discussions, information, experts, programs and investigations related to petroleum. Even it is a very general document; it was the first step to build a strong relationship between both countries (Mexican Ministry of Energy, 2013).

But Mexico has signed collaboration agreements not only with the Chinese government, but also with private institutions. Pemex exploration and production entered into non-commercial scientific and technology agreements with SINOPEC International Petroleum Service, and Nexen, which became a wholly owned subsidiary of Beijing based CNOOC Limited (Petroleos Mexicanos, 2012).

B.Interest of China in Mexican oil

Mexico is one of the four nations in Latin America recognized by China as a strategic partner, with Brazil, Argentina and Venezuela. By contrast to the other three countries, Mexican commercial dealings with China in the petroleum sector have been very limited (Ellis, 2009). It is convenient for China to invest in Mexican oil because the upstream petroleum sector presents low political, commercial and physical risk. If the Chinese companies invest in the exploration and production of oil in Mexico they can be certain that the costs can be recovered in the short run.

The interest of gaining market position in the Mexican energy field has been increasing the last decade. In 2007, the Chinese National Offshore Oil Company (CNOOC) signed a service contract with Pemex, offering engineering services for oil projects and the operation of drilling machines (Hongbo S., 2012).

Table 3. China´s cooperation programs with selected Latin American countries

Country	Exploration	Development	Service contracts	Credit for oil	Crude oil trade
Argentina	*	*			*
Brazil	*		*	*	*
Colombia	*	*	*		*
Costa Rica			*		
Cuba	*				
Ecuador	*	*	*	*	*
Mexico			*		
Peru	*	*	*		*
Venezuela	*	*	*	*	*

Source: (Hongbo S. , 2012)

China can exploit the oil and gas shale reserves that Mexico has. The Mexican Ministry of Energy estimated a $100 billion in investment is needed over the next ten years to develop Mexican shale resources. The prolific Eagle Ford shale formation in Texas extends south across the border into Mexico´s Burgos Basin and accounts for two-thirds of Mexico´s shale oil and gas resources. The country estimated to have 13 billion barrels of recoverable shale oil resources and ranks 8th largest in the world (ProMexico, 2014).

C. Mexican interest in obtaining China as a solid investor

A natural consequence of being a large economy is the necessity of finding opportunities to invest abroad (Chow, 2012), and Mexico can take advantage of that by inviting China to invest in the energy sector. Mexican governors are eager to attract Chinese investors to create a positive effect in the balance of payments. Since the entrance of China into the World Trade Organization, Mexico has consistently had a deficit balance of trade with China, and the inflow investments would help to equilibrate it.

In recent years, China National Oil Companies have succeeded in executing oil projects worldwide, especially in OECD member countries where investment opportunities are favorable and safe. China´s investments can have a largely positive impact when they help raise per capita income and reduce poverty in the host nation (Moyo, 2012). If Mexico follows the guidelines of the International Monetary Fund, by opening the energy sector to foreign direct investment, Pemex will get new technology, particularly in the form of new varieties of capital inputs, and the Mexican employees will be trained to operate the new machinery, which contributes to human capital development in Mexico. (Loungani, 2001)

Mexico is aware of its economic, political and social dependency with the United States, so in order to reduce its economic reliance with the Americans, the Mexican Government can start negotiations with China. Mexico wants to get Chinese FDI because the country is remarkably dependent as a provider of FDI and as market for export production (Hogenboom, 2010). Latin American countries that used to be strongly attached to the US are changing the way they manage their foreign economic relations, nowadays Latin countries do not just wait for China to come calling; they actively court and seek out Chinese investments (Moyo, 2012) so they can diversify their portfolio of investors.

The motivations for Mexico, as a host country are easy to understand: The need of infrastructure, and the need to finance projects that can unlock economic growth. To achieve this, Mexico has to accept Chinas expansion strategy. China, of course, will gain access to oil, but Mexico, will get money to finance infrastructure developmental programs, and will get the investments that can support much-needed job creation (Moyo, 2012).

Before the 2013 reform, Mexican Constitution, as well as international customary law, established that all hydrocarbon resources in the soil and subsoil, in internal waters and in the territorial sea, on the continental shelf and in the exclusive economic zone came under the jurisdiction of the State (Park, 2013). However, after

the reform proposed and approved by the Mexican government, the ownership of petroleum can be translated to private corporations, this change was made so the private companies would be appeal to make development investments, and its final consequence would be that Pemex might have access to technical expertise in the task of finding and extracting hydrocarbons.

V. Conclusions and recommendations

A. China will face some challenges by investing in Mexican Oil Sector

Domestic legal instruments will allow and regulate the relationship between Mexico and Chinese Oil Enterprises. Sino companies will have the chance to sign contracts that will let them acquire licenses, concessions, production-sharing agreements and service contracts in the energy sector. Despite the promise of cooperation in the future, there are some challenges to Sino-Mexican energy cooperation. Firstly, Chinese oil companies must cope with the costs of long distance oil shipments. Unlike the relation China-Russia-Central Asia, which is characterized by the traffic of oil and gas through massive pipelines that satisfy the Chinese demand of energy resources, the geographical location of Mexico and China prevents the possibility of transporting the oil in a way different from oil tankers.

Secondly, there are some rightist political groups that might not be inclined to regard China as a business partner. In addition, at the popular level, Mexico is one of the countries in Latin America in which distrust toward Chinese businessmen is deeply rooted. Nowadays, common Mexicans refer in disparaging terms to low quality Chinese products, presumed to be contraband, which allegedly undercut the position of Mexican producers and take jobs away from nationals.

Thirdly, the bids to obtain contracts in Mexico might not be completely transparent and could be adjudicated to some specific

companies who previously lobbied the tenders. Regarding to this challenge, Mexico has a long story in privatizing state-owned companies. Since the mid 1980, Mexican and foreign economic groups have started to take control over a large number of privatized companies. When banks, telecommunication companies and electric enterprises were privatized, most of them were bought by economic groups that already owned stock markets. The result was a major concentration of power and resources into the hands of 27 investors (Hogenboom, 2010), such as in telecommunication (Slim´s Telmex) and cooper (Grupo Mexico).

Fourthly, European and American companies are very interested in the Mexican oil sector, so China will face fierce commercial competition. In terms of energy issues, there are heavy suspicious that China´s gradual entry into Latin American field, will challenge the existing oil trade movements and investment flows dominated by US and European companies (Hongbo S. , 2012).

Finally, although Sino-Mexican relations are strong, it is true that Mexico has an old trend of exporting crude oil to USA; almost 80 percent of the Mexican petroleum exports go to the northern neighbor (Instituto Nacional de Estadística y Geografía, 2014). Latin American countries, especially Mexico, are under the US influence, so the Government is careful in every move in economic relation with China for fear of criticisms or even adverse actions by the US. Mexico is eager to strengthen its relationship with China, but is careful not to endanger its relationship with US (Chow, 2012). And it must be cleared that the only tights that Mexico wants to build are commercial ones, excluding the political affairs.

Taking into consideration that China might use in Mexico some tactics that have been previously used in other countries from Latin America: Offering powerful economic investments; Acquiring stakes of companies already settled in the industry; Signing service contracts and Proposing production sharing agreements (Brown, 2012) some recommendations to the Mexican government must be done, in order to generate positive effects for both parties.

According to members of the China Institutes of Contemporary International Relations, 中国现代国际关系研究院, one of the main objectives of China´s government in Mexico is to maximize energy security by optimizing its oil imports and to make investment for oil sharing. Allowing Chinese FDI in the oil field must create trigger technology spillovers. Mexico needs to strengthen the currently weak link between the scientific-educational sector and the petroleum industry. Otherwise, the country will not be able to benefit from the potential of technological industry to create knowledge. Chinese enterprises have to agree that some of them revenues are reinvested in research and development, innovation and production of oil technologies involving Mexican educational institutions, such as the Instituto Politecnico Nacional, Instituto Nacional del Petroleo y Universidad Nacional Autónoma de Mexico.

The Mexican government must take into consideration that by opening its energy sector and allowing FDI and joint ventures local business need to be included as suppliers of goods and services that are needed to extract or refine petroleum. Another main issue is that the Mexican government assures that Chinese companies will offer employment to Mexicans so the unemployment rate and the flow of migrant workers to the US can be diminished. Finally, Mexico must enforce the environmental law and regulations so the foreign companies make their activities with ecological consciences, and in case those rules are not complied, some penalties have to be imposed.

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