Government versus Governance as a Framework to analyze Mexico's Energy Reform Initiative and Key World Referents

by

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Abstract

Mexico's new administration of Pres. Enrique Peña Nieto has actively passed Reform Proposals for at least six key policy aspects of the country's economic life, with a basic argument of moving towards efficient government and a new enhanced social orientation dearly needed in that society. Using the theoretical framework of the definition of government versus governance in political economy and organization, the strengths and potential weaknesses of the proposed reforms are put into perspective with emphasis on the energy reform passed in August 2013, and under discussion in Mexico's Congress until the end of the year. The theoretical framework is also useful to make a comparison of the proposal with governance structures in oil companies that have been mentioned as paradigms for Mexico by the Peña Nieto administration: Petrobras, Ecopetrol, and Statoil. With this framework, one can finally delineate true economic efficiency incentives and welfare sharing under Mexico's proposal.

Key words: Government Policy (energy); Market Design; Positive Analysis of Policy

JEL Classification: Q48, D47, D78

I. Introduction

In the middle of August, 2013, the office of the Mexican President Enrique Peña Nieto, sent its Initiative for Energy Reform (ER) to the Senate. From the origins of the motivations that gave a base to the proposed reform, there are a) the need for increasing economic efficiency to the three subsectors of energy: petroleum, gas and gas distribution, and electricity; b) restructure the role of the executive from high government involvement, to increasing governance of the sector while keeping the "strength of the State;" c) increasing competitiveness of all the mentioned subsectors, a long-held cry from other parts of the Mexican productive forces, mainly enterprises; d) inclusive development and "productivity democratization," meaning dealing with strong parastatal unions; and e) attend the demands of energy security and promotion of renewable sources.

The so-called pillars of the ER, even if they seemed adequate and politically neutral, showed a rather defuse political position by the Mexican administration, so that the originating Senate has to deal with all the intricacies and details of the proposal, so that the political benefits or else costs would be accrued for by the Legislative and not the Executive, where the left political groups have been against the ER from ideology rather than analysis. Taking the politicking aside, the ER is suggested here to be analyzed from a governance perspective, or a change in the roles of government, stakeholders of the private sector and civil society, and even others in the international community (Krahmann 2003). Even if the proposal does not mention a shift in the role of an increasing centralized government in other phenomena of the Mexican recent past, or a paradigm shift with an inadvertent impulse from the Mexican politicians, the change from centralized "government" to decentralized, horizontal, shared "governance" structure, it is proposed here that the governance of the proposed ER consequences is a sound theoretical framework. Moreover, in the exposition of the beneficial aspects of the ER, international referents have been increasingly used to convince the Legislative branch, the oil company PEMEX' union, other critics of the reform among a part of the left party Partido de la Revolución Democrática (Party of the Democratic Revolution or PRD), and the former candidate López Obrador and his political platform MORENA. These referents have been Petrobras in Brazil, Ecopetrol of Colombia, and Statoil in Norway (Thurber, Hults, and Heller, 2011).

All the arguments, pro and con, if placed under the political economy framework of government to governance, could add to the understanding of the ER. After reviewing the key source in the government versus governance literature in section two, the following part analyzes the elements of the Mexican proposal for ER, and the present role and position of the Mexican PEMEX national oil company. Section four uses the governance framework to compare and extract specific characteristics of the mentioned oil companies in Brazil, Colombia, and Norway. Section five concludes with elements to consider to evaluate the results of the Congressional decision on Mexico's Energy Reform.

II. From Government to Governance: Theoretical Foundations.

According to Krahmann (2003), the concept of governance has increasingly been used to describe a change in policymaking at the international, national, regional (various groups of countries, notably in the European Union analysis), and domestic levels. The main argument is that governance entails a shift from centralized, or vertically integrated decision making processes, towards a coordinated, horizontal, and multi-player setting, where the leadership is shared rather than omnipresent, mainly in talking about central governments. Furthermore, the concept of governance not only applies to a government "framer" but also to shifts applied in organization among national oil companies or NOCs, and is also applicable to private enterprises (POCs), multinationals and international oil companies or IOCs. Additionally, governance is also applied to a firm's finances or fiscal regime, and transparency of an organization's decisions by the directorate and other stakeholders (Shleifer and Vishny, 1997; Tissot, 2010).

Changes in governance practices can emerge as a result of various implications, the first one being the economic control change. The second is related to a shift in the competition structure, at both the product, fiscal, and financial markets, and also on technological changes. The third implication is due to changes in law and regulation faced by the firm and the extended players in the ecosystem. Additionally, changes in governance can be studied as internal or external control mechanisms, as shown by Denis (2001), or García-Núñez (2006). Strong evidence exists on the interlinkages between external and internal control, and operative and financial performance. Now the case in point, is the passage of the ER proposal to the Mexican Senate, for discussion and change in the

Constitutional, legal, and regulatory framework to the oil, gas, and electricity sectors in Mexico, as mentioned in the introductory paragraphs in this research. The depth of the initiative seems to be critical for the modernization, efficiency, financial, fiscal, and operative performance of the players in the energy sector, but emphasis of the ER is on the NOC PEMEX, and how it could be analyzed in this framework. All details are part of the legislative negotiations that could include all aspects of a new organization of the NOC, and other IOCs, regulators such as the Federal Hydrocarbon Commission (Comisión Federal de Hidrocarburos), other government agencies such as the Energy Regulatory Commission (Comisión Reguladora de Energía or CRE in its Spanish acronym regulating the private sector licenses), and secretaries such as the Treasury and Energy, and others such as suppliers, subcontractors, and outsourcing activities in the sector (see Presidencia Iniciativa de Reforma Energética, 2013)

In a review of the literature, Krahmann (2003) argues that governance across levels of analysis can be defined as the fragmentation of political authority in seven dimensions: geographical, functions, resources, interests, norms (legal and implicit), decision-making and organization, and policy implementation. The implications of this framework are that the Mexican ER and the reaching out by the Executive branch to integrate best practice among three international referents in Brazil, Colombia, and Norway, should be put in perspective using the mentioned dimensions of the transition from government towards governance. Extending from the mentioned seven dimensions by Krahman, and given the special case of the Mexican ER proposal, an extension into thirteen characteristics to contrast before and after the ER, have emerged. The spelling out into dimensions, also implies that the NOCs, other private participants including IOCs, union, suppliers, other players in finance and contracts, are to be evaluated in how deeply they are reorganized under these dimensions.

Also, there has been a relevant discussion of how the national resources (oil) remain to be owned by the State, because oil reserves have been clearly defined as a basic resource, "under the exclusive ownership by the State," but subcontracting exploration, exploitation, and commerce are able to be licensed (not given out by concessions) to private participants in all parts of the petroleum productive chain. Table 1 spells out the critical thirteen dimensions, as extended from Krahmann (2003), and Tordo et al (2011).

Table 1 Dimensions of the Framework between Government and Governance for Mexico's ER

Dimension	Government	Governance
Efficiency Aims	Subject to various levels of central objectives, non-economic	Economic converging objectives on costs, output, technology, final prices
International Competitiveness	No reference necessary, but social or political objectives for NOCs	International referents among institutions, governments, and paradigmatic NOCs
Security	Guaranteed by the State as national priority in protecting state-owned enterprises	Shared by international, regional, national policies, guaranteed by the market mechanism
Referents in the government and governance	State and NOC PEMEX only (self reference)	Petrobras, Ecopetrol, Statoil have been proposed, from various levels of liberalization and democratization, and shared state involvement
Competition structure, fiscal, and financial regimes	No competition, centralized fiscal and financial regimes	Transitional to market driven, including fiscal and financial regimes
Geographical context	National	National, international, subnational
Distribution of resources	Centralized	Dispersed or shared among participants

Interests	National Constitutional interest driven by history or political tradition	Differentiated, subject to regulatory oversight, international oversight
Norms (legal and implicit)	Mainly sovereignty, with strong central control, strong legal stance, and distributive aim	Limited sovereignty, with distributed/ market control, strategic subnational and national stance, and efficiency (see above in this table)
Decisionmaking and organization	Central, hierarchical, obligatory consensus, not organizational	Decentralized by strategic objectives, horizontal, self-government, market driven financial, fiscal and labor regimes
Policy implementation	Centralized, shared only to directorate and unions of the enterprises, coercive	Fragmented, various levels of government involvement, shared with enterprise, unions, civil society
International scope	Not important	Very important
Transparency issues		Very important

The critical discussion is how performance is rated in sharing contracts of only profits, production, commerce, or other, or as argued in the congressional discussion in the recent past, the use of the “oil rent.” Congress members from the incumbent presidential party (PRI) and the conservative PAN lean towards more production sharing contracts with controls in royalty payments, quotas, and fiscal treatment, and tending towards various types or private contracts. In contrast, the left PRD in some of its members, aim at only profit risk sharing contracts, while still others in PRD and the Labor party PT would aim at keeping the status quo in service contracts, and so called performance contracts, for ideological rather than technical reasons, so that opportunities for private interests are maintained at a minimum.

The tensions seem to reflect opposing viewpoints on the role of the state as a new public management player, where competition, investment in private hands, procurement practices, performance incentives, information disclosure, and control under a decentralized, horizontal management is granted. A special situation in Mexico is the role of the PEMEX union that shows many contractual conditionality issues to the NOC and IOCs (Tissot, 2010). A final argument in this section is that transitions towards governance among NOCs and other energy incumbents in the world, have to follow globally accepted norms and practices, but take time. This gives credence to the role that OECD has played in evaluating this transition applied to many formerly state-owned enterprises and markets where concentration in markets or sole buyers or suppliers, is to be controlled and moved towards more competition (see OECD on the Mexican telecommunications, or OECD Government at a Glance 2013).

III. The Mexican ER Initiative

On August 13, 2013, the office of President Peña Nieto in Mexico, released the ER initiative that encompasses oil, gas, and electricity (Presidencia Iniciativa de Reforma Energética, 2013). From the three parts of the energy sector, touching on oil, and specially the incumbent state-owned PEMEX raises many comments, since the oil company has been considered a Mexican symbol of sovereignty and State control over basic resources, at the same time that it represents Mexican government independence from external powers and a symbol, even if residual, of Mexican government omnipresent control of the early twentieth century. Other governments elsewhere, however, have moved via reforms of various levels of depth (touching on much more than exploration and production contracts, and into all aspects of the governance and organization) and width (extended stakeholders both upstream and also downstream, domestic and international), in the restructuring of their own NOCs.

In the Mexican proposal, three cases have been mentioned as relevant in their transitions towards more market orientation: Petrobras, mainly for the deep reforms in its fiscal regime and promotion of the company as a world-class technological leader in deep water exploration and the original use of its revenues for technological growth; the Colombian Ecopetrol, for the clever pragmatic shift from a sole state monopoly with a strong union, towards an international oil company, keeping its union strength (something implicit in Mexico’s proposal); and Norway’s Statoil, for its reform and fiscal treatment and leadership as an IOC and organizational structure after the nineties with a leading fiscal regime and reserve fund. In short, the reaching out to review other experiences can be framed under different elements of governance, where one or more of the thirteen described pillars have been key for the sectoral shift of governance (See Pirog, 2012 for a comparative analysis of financial performance of NOCs; Tordo, Tracy, and Arfaa, 2011 on other aspects of NOCs).

Motivations of the Written Initiative of Mexico's Presidency

The Proposal consists of 29 pages, where 26 are dedicated to justify the ER, while the last three, are dedicated to suggest legal and regulatory changes as guidelines for Congress, mainly the Constitutional changes to Arts. 27 and 28. Minimizing the language of the proposal and concentrating on substantive aspects, the following are the main arguments and assumptions for the ER sent to the Mexican Senate, that can be summarized in the following ten headings:

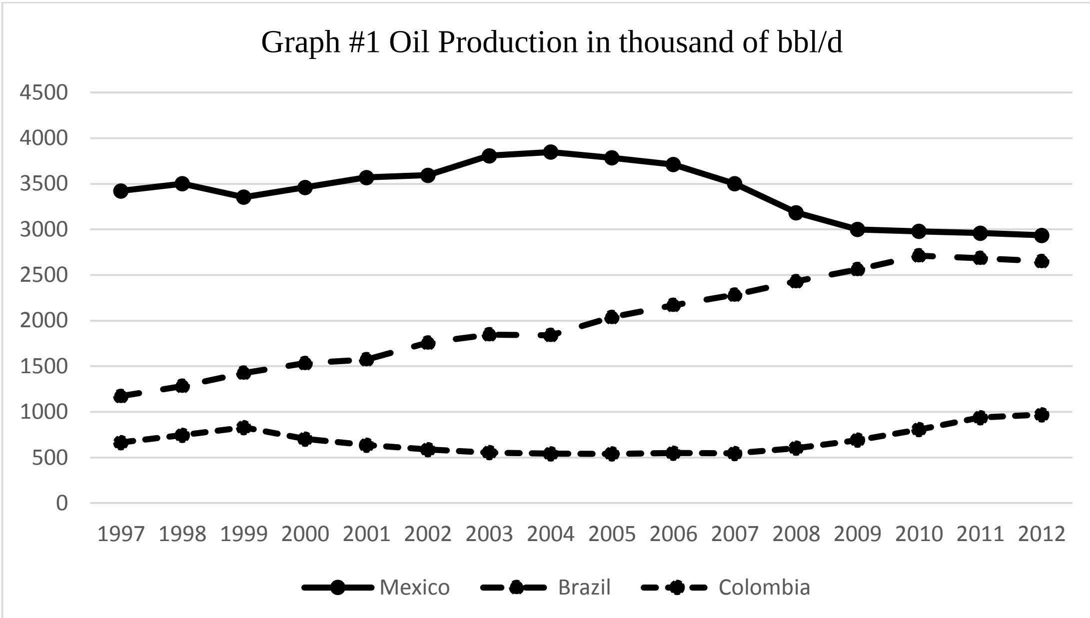
1) Reform does not entail privatization but leading role of the State as manager of national resources and oversight, enhancing the State (strengthen PEMEX and electrical utility CFE)
2) Restructure state-owned enterprises PEMEX and CFE along economic lines, including competition, and regulated segments that face externalities and where the State would lead, such as the national electricity grid, as well as underground oil reserves.
3) Give PEMEX and CFE the capacity to make strategic decisions, while they will stay fully Mexican owned, and state firms. However…

4) They will be able to celebrate contracts, licenses, sharing risk agreements (profits, production, services, other in a liberalized way), for which the ER initiative changes Constitutional Articles 25, 27, to allow the firms to be free to contract out, and Art. 28, where oil and gas will cease to be considered strategic (beforehand not subject to competition policy regulations), and be free for subcontracting in areas of exploration, and upstream production, first in exclusivity for PEMEX (grandfathering), but also between PEMEX and private companies, or by private interests only, subject to regulatory oversight.
5) A change in fiscal regime will spell out royalties, risk-sharing contract types, and income tax treatment.
6) PEMEX continues to be a state-owned enterprise but with market driven governance, allowing it to strengthen its finances and organization decisions, and share projects and decisions with private interests, both POCs and IOCs (Constitutional change of Art. 27 frees PEMEX from being the only allowed enterprise to do exploration with stressed finances and no expertise). The proposed ER emphasizes technology transfer, and expertise in exploration both in deep waters and shale deposits (Shale oil and shale gas).
7) In the downstream segment, the ER initiative frees the market for private participation both in oil, petrochemicals, gasoline, and also gas, and infrastructure projects, increasing control channels both internally to enterprises, and externally.
8) The initiative emphasizes a new fiscal regime to PEMEX, similar to international referents, without assessing the convenience of increasing

governance in international financial markets for its equity. However, the proposal mentions Petrobras, Ecopetrol, and Statoil that face smaller taxes, their equity is listed in main financial markets (mainly the USA), and are free to use proceeds for reinvestment, or fund creation (dividends can also be reinvested instead of becoming obligatory payments to the federal government under the Funding Law called Ley de Derechos).

9) The proposal sends to the Senate the mandate to improve the overseeing capacities and rights to regulate licenses and contracts with other stakeholders, into the National Hydrocarbon Commission, for oil exploration and production deals, the Energy Regulatory Commission, for gas and electricity permits, the Secretary of Energy, for planning and policy-making, and defining blocks for oil exploration, and the Treasury for fiscal treatment and the launch of a new fiscal regime for PEMEX.

As can be deduced, a clear trend is from government to governance in the ER proposal. An explicit sense of urgency was also passed by the executive to the Senate in the Initiative, since PEMEX has seen its production declined since a peak in 2004, from exhaustion of shallow water reserves, and lack of maneuvering by the parastatal in financing new deep water projects and acquiring appropriate technologies. The following graph takes account of the comparative performance between Mexico and its referents.



Source: US EIA data base of oil production by country in thousands of bbl/d

<u>Congressional Discussion and Determinations by the Senate in early December 2013</u>

By the early days of December, 2013, the Senate joint commissions (energy, Constitutional affairs, first legislative affairs) finished the executive initiative evaluation and proposed an integral set of Constitutional and legal changes to the lower House for voting, and eventually enactment. A large document of 295 pages, included an analysis of the state of affairs, the justification for the ER, the specific proposals of sectoral changes, and scheduling of enactment of all expected issues for the change in the governance of the oil, gas, and electricity sectors (Senado … December 7, 2013).

The PAN, the Executive, the PRI, and the PRD motivations and substantive arguments are shown in the Determination, and each specific proposals are spelled out, along with the Decree proposals that entail all energy subsectors (in here concentrated in the oil industry). Aspects of energy security, competition and subcontracting structure, distribution or resources, revenues, and reserves, interests, norms, decision-making, policy implementation and scheduling, and transparency issues, are part of the document. Other critical governance aspects of transparency, use of proceeds and reserves, subsidies, roles of new commissions, financial and fiscal treatment, and role of the unions in both oil-gas and electricity, are less clear.

A decisive stance for making this the deepest and widest reform of all in the Peña Nieto administration beginnings, is shown by the rather detailed work presented by the Joint Commission of the Senate. Not all, however, is defined there. However, an assumption is clearly made that the transition towards a new governance in the sector, will need secondary laws and new regulations, that are to be presented by the executive in 120 days after enactment of the Constitutional changes, and 12 months for other aspects of the reform, and even anticipates that changes in fiscal regime, might take even years (see Senado… December 7, 2013; OECD 2013; Tordo et al 2011).

How to compare the depth and breadth of the Mexican initiative to the international proposed referents and why? In the following part those cases are presented and analyzed.

IV. Governance Changes in Petrobras, Ecopetrol, and Statoil from their Reforms

Let us review some of the main aspects of the referent firms selected by the Mexican initiative in its justification and follow up on the changes experienced by Brazil's Petrobras, Colombia's Ecopetrol, and Norways's Statoil. In the three cases, the NOCs have stayed partially in the hands of the state, but part of their assets have been put up for equity holdings in both domestic and international capital markets to subject themselves to international oversight and norms (the three referent companies are listed in New York and their own domestic capital markets). Additionally, the oil sector has been opened and vertically and horizontally unbundled to increase capitalization, technology transfer, and private investment by national POCs and IOCs. Moreover, risk sharing contracts are prevalent mainly as production sharing, and other licenses, with royalty payments and tax levels similar to private corporations. Main differences across the three cases have been: a) unionized political powers range from low in Norway to high in Colombia; b) regulations and regulatory agencies have been atomized in Brazil, centralized in Colombia, and medium in Norway; c) definition of the NOCs as productive and as international companies is rather strong in the case of Norway, middle in Brazil and Colombia; and d) informal but strong power games have occurred at various levels of maturity in country government agencies and the executive as opposed to the NOCs powers, ranging from a strong Statoil in Norway, to a strong central government in Brazil, with Colombia somewhat in the middle (see Paz, 2013; Tissot, 2010; Tordo et al, 2011).

Petrobras Review and Performance

Petrobras began operations in 1953 as a state NOC. In 1968 it started exploring in offshore platforms and then expanded downstream to Petrochemicals in 1967 via its Petroquisa subsidiary, staying as a state-owned enterprise. In 1968 Petrobras opened the largest research center in Latin America dedicated to petroleum engineering (named Cenpes). Vertical integration continued to distribution of oil products and gas stations throughout Brazil (Petrobras annual reports). In its beginnings, Brazil was not self-sufficient in oil and faced the OPEC oil shock of 1973. It was not until 1984 that this NOC discovered the Albacora oilfield in deep waters that triggered the company as a major world player. In 1997 the state monopoly was terminated via a Constitutional reform in November of that year, and the Petroleum Act and regulatory framework, naming the company a mixed enterprise with foreign investment.

Given the above historical record, investment guarantees and licenses in production sharing gave private contracts investment security with the government. As a result, special treatment was offered to all subcontractors in a non-discriminatory way, for which investment increased, and production substantially expanded from a little less than 850 thousand bblpd in 1997, to close to 2 million bpd in 2011 (Agencia Nacional de Petróleo, 2012), reaching self-sufficiency in 2006, at 1.9 million bblpd. However in September, 2009, President Lula presented a package to Congress with objectives aimed at the named pre-salt development in deeper than 7,000 meters offshore of: a) most of the income generated by Petrobras activities would remain in Brazil; b) the country would not become a mere exporter of crude oil, but would promote strong industry equipment and downstream service suppliers for the oil sector; and c) proceeds would be used to promote technological development and social programs, with a strong intervention by the state. As a result of these elements of the congressional decree, Petrobras suffered, and POCs and IOCs reduced their stance and exploration and development turned out to show production to be flat between 2010 and 2013.

Since the Petroleum Act of 1997, institutions were created to govern the exploration, production, transport, and refining. The first is the new role of Ministry of Energy and Mines, to increase its national strategy and in charge overall of energy policy, for self-sufficiency, security, and diversification (Paz 2013). Then two other institutions were created by the Act: The National Council for Energy Policy, directly related to the President, and the National Petroleum Agency (NPA or Agencia Nacional do Petróleo, Gás Natural e Biocombustíveis ANP) in charge of promoting, regulating, contracting under various types of licenses, and supervision. It also is in charge of bidding rounds for exploration and engineering services in blocks with POCs and IOCs, as a main competitive mechanism.

According to Paz (2013) however, information asymmetries and inside information by Petrobras has tilted contracts and raised questions on the transparency of the adjudication of contracts. This point is critical to apply to the new governance in Mexico's path of energy reform, in one of the apparent weak points (at least during the last voting in Congress), namely the creation of government agencies that could create sources of conflict, tensions, or lack of transparency. They will wait for their internal organization and secondary laws to be decided in the future, during 2014 (see Senado … December 7, 2013; Rodrigues, Slaibe, and De Abreu, 2008).

Further analyzing the development of governance in Petrobras, it stayed as a NOC with heavy involvement of the public sector. Perhaps the role of a strong, centralized state, has been key by Mexican authorities to look at the Brazilian NOC as a referent. Also, a relevant issue is that Petrobras moved from a national company, towards a world player in exploration and successful international technology contractor under more market-oriented objectives (Chang 2007).

However, both the Lula and Ruseff administrations have intervened investment plans, mainly committing Petrobras to heavily invest in downstream petrochemicals, refining, and develop the domestic industry, where profit margins are rather small. At the same time, informal norms and interests have made governments intervene in setting final prices for final products and gasoline that have financially affected the company (see, for example, Petrobras annual reports 2010, 2011, and 2012). With high financial leverage, Petrobras foreign currency position was downgraded by the agency Moody's, from A3 to Baa1 in October 2013. Additionally, subsidized retail prices in the local market to reach the government's objectives, at the same time that Brazil began to import oil at higher prices, have put a pressure on the NOC, as a lesson for Mexico's government versus governance situation and where fuel policy could derail or severely weaken reforms.

In the system of licenses, Petrobras shares operation stakes of 30% in all fields, and royalties are levied to participants, to create a Fund for states and municipal government expenses. This implies that Petrobras has an asymmetric preference in all bidding processes with POCs and IOCs (Paz, 2013; Senado… 2013). It is not clear of whether such fund is spent in productive or unproductive activities at these levels of government. Regarding the role of IOCs in Brazil new panorama, and according with the NPA, in 2003 4 percent of oil fields were exploited in the hands of IOCs and POCs, while the figure was 12% in 2011. For exploration, from 36% in 2003 in the hands of POCs and IOCs, the figure came to around 43% in 2011 (Paz, 2013).

Finally, as a matter of comparison with other referents, Petrobras employs 77,000 individuals, has proven reserves of 14 mbbl, 14,000 active wells and 113 oil platforms, and holds international contracts in more than 20 countries, according to the NPA (2013)

Ecopetrol Review and Performance

Ecopetrol was founded on 1951, but a company named Tropical Oil Co. existed since 1921. Ecopetrol was a NOC in government's hands until 2003, when the so-called Capitalization Law, or Decree 1760 opened the firm to become listed in NASDAQ, then he NYSE, and democratized 20% of its capital in 2006. Additionally, in 2003 by the mentioned decree, oil reserves in the hands of the nation were separated from Ecopetrol, and a National Hydrocarbon Agency (Agencia Nacional de Hidrocarburos or ANH) was created to define Colombia's oil policy. On its part, the Promotion Energy Society (Sociedad Promotora de Energía de Colombia, S.A.) operated to receive all non-strategic assets from Ecopetrol. By 2007, Ecopetrol became a Mixed Economy Entity of a

Commercial Nature, at the national level, related to the Ministry of Mines and Energy (Ecopetrol 2011).

The NOC held salaries below the private markets at the end of 2007, for which labor contracts were adjusted to be similar to private firms, subject to all private corporate and labor laws. This step freed the onerous strong union's conditions and moved the company to become a typical market-driven company in organization, contracting, labor, international capital attraction, and listing in international financial markets. The union named OSU holds strong opposition to subcontracting by Ecopetrol, but strained labor relations in 2007 were reduced after the wage adjustments. However, the main OSU union in Ecopetrol has maintained its strong position (Ecopetrol, February 28, 2012).

Deregulation allows for competition in exploration, production, and oil commercialization. Ecopetrol then created CENIT as a transportation subsidiary. All dividends are shared up to 70% of net income of the NOC. The ANH is in charge of bidding rounds and oversight of exploration contracts with POCs and IOCs. Colombia's reserves and production, have seen growth rates after 2003, and 2006, not only from higher world prices, but by increasing involvement of IOCs via concessions, mainly since 2006, Colombia has instrumented a strong promotion activity with an attraction fiscal regime with lowered royalties, and optimistic oil reserves (Tissot, 2010; Wood 2010). IOCs in this case, are not required to associate with Ecopetrol, and have full control of their operations (Wood 2010). Now Ecopetrol has increased its activities as an international company, with projects in Perú, Brazil, and the US Gulf of Mexico, partnering with companies such as BP and Shell, being them long term partners. Special treatment is offered for non-conventional energy (Senado… 2013). As a result of all this, Colombia has attracted substantial flows of foreign direct investment, in the range of USD$15.8 billion in 2012 (ibid).

Regarding other elements of governance, Colombia faces a concentrated oil market (upstream and downstream) with a small number of POCs participating in the deregulated market, mainly due to a strong power of the NOC and also its union. Also, environmental and safety/security concerns are challenges. On the part of decision-making and organization, Ecopetrol operates as a company under a private fiscal and financial regimes, where ANH regulates and oversees all bidding processes and performance. Finally, the fiscal regime seems to excessively subsidize POCs and IOCs where the central government plays a minimalist role, although the ANH has tightened the rules to capture profits if high oil prices occur. Additional to concessions, Colombia issues risk sharing contracts in production. It is not totally settled how proceeds are spent in social development, or corruption acts against the good market governance results.

Finally, as a matter of comparison, Ecopetrol employs 6,700 with various types of labor contracts, and more than 20,000 subcontractor workers. Its output reached around 672 thousand bblpd and more than 426 associated contracts. Ecopetrol has control over 100 wells for exploration and production. Its reserves doubled between 2007 and 2012 (ANH 2013).

Statoil Review and Performance

Norway has a tradition of good governance, transparent rules, a well-developed judicial system, long term licensing processes and cooperation between licenses and government authorities, and an energy sector that is not very much dependent on oil, but mainly water resources. Additionally, its NOC Statoil and energy policy have been considered a model for developing economies, mainly for the economic impact and social use of oil proceeds, as posited by Mexican authorities (Al-Kasim 2006; Senado… 2013). Moreover, it is a desirable characteristic that cooperation amongst all present and future stakeholders in Mexico, as argued by the ER Initiative, find little friction, and effective plus open dialogue becomes key to cooperative projects.

Statoil was founded in 1972, and partially corporatized and privatized in 2001, where the state holds 67% of the NOC, via the Minister of Petroleum and Energy. In that year it became listed in both the Oslo and NY stock exchanges, as a "global company from Norway." (Statoil company webpage, 2013; Thurber and Istad, 2010).

From Statoil's company information, US investors hold 9.4% of equity, Norwegian ones hold 9%, and well as 9% of British interests. Statoil integrated Hydro's Oil and Gas in 2007. The Ministry carries out strategic and long term plans with the political actors, and oversees the licensing process (Thurber et al, 2011). The types of contracts Statoil seeks as a service and engineering firm, actually the world's larger offshore oil and gas company, vary from production sharing, profit sharing, engineering services, licensing, and concessions. Statoil has contracts and development projects in around 21 countries and 15 offshore fields, according to the company's webpage (2013). In the domestic front, the Norwegian Petroleum Directorate (NPD) compiles all information and data from hydrocarbon activities on the so-called Norwegian Continental Shelf that includes on-shore and mainly offshore, and collects royalties, fees, and set regulations on resource management (Thurber et al, 2011).

It has been argued that the Norwegian model makes a balance between commercial, policy, and regulatory roles, granting governance dimensions with a long term vision not only in contracts, but also in uses of net income by government for pension funds rather than state/municipal distribution, or subsidizing research and innovation, that are given back to Statoil for its own commercial strategies. Also, a pragmatic approach to promote competition in all segments of the value chain, balancing political positions with efficiency gains, has been a paradigmatic characteristic of this country's NOC and its regulators and policy makers. On another issue, Statoil followed a lean, commercially oriented organization. For example, Statoil decided in 2000 to be organized in the following subsidiaries that take a good account for the governance approach to a leading NOC: Development and Production (D&P) Norway; D&P International; D&P North America; Marketing, Processing, and Renewable Energies; Exploration, Technology, Projects, and Drilling; Global Strategy and Business Development. In fact, Statoil has become a global name in the energy sector, with formal and informal ties across the world (Statoil web page 2013; Thurber and Istad, 2010).

On the policy side, the government in 1990 created the Government Petroleum Fund (the name was later changed in 2006 to the Government Pension Fund –Global), with little political influence, to make a stance over the use of proceeds and committing to social policy. Any non-oil budget deficit receives only a partial transfer from the Fund.

Additionally, to avoid issues of “dutch disease,” meaning inflationary or exchange rate pressures in Norway, the Fund is generally invested abroad. So as a savings fund with little or no political use, it has received population support, even when international prices have been volatile. In contrast to the above, the Mexican ER Initiative has proposed a multiple, almost unlimited assumed use of the oil reform’s proceeds (Thurber and Istad, 2010; Tordo et al, 2011; Senado… 2013).

Not all has been easy for the triad company-policymakers-regulators in Norway, as stressed by Thurber and Istad (2010). In their account of the recent history of Statoil, the authors present various cases in which Statoil as a powerful NOC has tried to influence political behavior, mainly regarding mergers, dividends, and other policy decisions. Another issue of tension has been Statoil intervention in oil sand projects in Canada, not aligned with Norway’s state ideas around environmentally sensitive projects.

On the financial side, Statoil has derived strong performance in the international contracting front, not only in oil but also in gas licenses. Given that it is a listed company, its shares are influenced by the overall capital markets in a global context, but the company’s market mix has saved it from wild equity variations, even if domestic oil production has been declining.

As a final reference and comparison, Statoil employs 23,000, its Capital expenditures are one of the largest among NOCs, at USD$19 billion/ year in average of the last years between 2010-2013, its debt/ capital ratio stands at 15%, and its company information refers to expansion plans in new exploration well larger than 50, with reserves of 5.4 million bbl.

V. Discussion, Lessons, and Conclusion

The move from government to governance has deep implications for Mexico's energy sector, if the changes are done in an integral way, and a long term vision is guaranteed for Mexico to grow out of an overprotected and politicized trap. A move towards governance with new horizontal rules and many actors, could face some changes in the short term, while other will be evidenced in the medium, and longer term. First, the ER initiative, voted by the Mexican Senate on December 10, 2013, and also by the Lower House a day after, set deadlines in 120 days after the ER is enacted, and also set 365 days, mainly for the reorganization of the now "productive enterprises (not wholly state-owned)," and government regulators and policy makers. Given the petroleum rent as a critical element in the issuance of bidding processes for oil and gas exploration offshore and onshore, the types of contracts and risk-sharing deals, first needs to be clear. Mexico's ER shows various types of contracts to be offered by the NOC: under service contracts, there are performance, and pure service contracts, then risk-sharing contracts of various alternative types, profit-sharing, and production sharing contract/licenses.

According to Bindemann (1999) in a seminal research work on parts and types of production sharing contracts in the oil industry, starts from defining that the main owner of oil resources is the government of the country or its delegated NOC, while the residual owner/claimant is the IOC or POC contractor. Different vintages imply that the NOC participates in some part of the exploration or development, from minimal or zero under concessions (not voted in Mexico's ER initiative), to some of a larger share in various licenses. Also, production sharing contracts call for a joint committee of shareholders of the projects among the IOC and NOC with oversight by the government agency, mainly for transparency in royalty and tax collection, but sometimes it also oversees other aspects such as environmental issues (the Norway case).

Regarding bearing the risk of the exploration project, main licenses make the IOC bear all the risk, meaning that if no crude or gas is found, the IOC partner receives no compensation. Then after a royalty from gross production is paid from the IOC to the host government (say 10 to 15%), the remaining production share of production for cost recovery (say between 40 and 60%). Then the remainder of production, called profit oil, is shared between the host government or NOC, and the IOC (say between 50 and 25%, as deducted from above, with a formula that can tilt in favor of the government or else to the IOC). Finally the IOC pays income tax out of its share of either profit oil or net profit.

The Mexican government will need to determine how the new contractual governance will imply fiscal revenues similar to the present, (it will have to see its oil fiscal dependence reduced through time, as spelled out in the ER proposal) without reducing attractiveness both to the IOC and the NOC Pemex. This appears in Transition article # 9, section (c), and #14, section 4, of the ER voted proposal. In the case of Brazil, Colombia, and Norway, the referent national oil companies have increased capitalization, projects have grown, and governments have seen fiscal challenges that have apparently been controlled for. For the analysis of bargaining positions, IOCs have relatively more power and knowledge than the host government or NOC, but bargaining positions change over time when projects mature and partners are more permanent than one shot. This is a natural phenomenon, typical of governance horizontality and internal-external organization (Laffont and Martimort, 2002).

Related to the subcontracting figure now opening for Mexico, the hiring of blue collar personnel, and engineering, geological, and other professional services, need to be clear. For example, in the case of Norway, less in Brazil and Colombia, IOCs and POCs had been free to set hiring procedures and unionization. This is not clearly spelled out in the ER initiative just voted, but will have to addressed. Originally, the first production sharing contracts were signed in Abu Dhabi, Oman, and Indonesia in the sixties (Bindemann, 1999). AS opposed to production sharing contracts, pure service contracts imply a fixed fee to the IOC, independent of finding oil or not, but the IOC or POC bears all the technical and financial risk, with little or no direct compensation towards public finances. They could be used for development as a direct contract, rather than for the exploration stage.

Finally related to this licenses, many countries establish that domestic contractors and suppliers are preferred for governance to increase the number of participants and technology is transferred. However, one needs to pay attention to rules of the game in international trade norms, at both multilateral and bilateral levels, to not to set "performance" measures that can negatively affect the normal flow of trade.

With the above points, we can now summarize the referents and Mexico's ER initiative, its strengths and weaknesses, as shown by the voted ER, as follows in Table #2.

Table 2 Summary of Findings of Governance Dimensions in Brazil, Colombia, and Norway, and Emerging Position in Mexico, after ER Initiative voted by Congress on December 12, 2013

Dimension	**Brazil**	**Colombia**	**Norway**	**Mexico in December, 2013 after voting**
Efficiency Aims	Mostly economic, with Lula's and Ruseff's interventions on domestic content,	Economic converging objectives on costs, output, technology, final prices, conditioned	Economic and commercial, with gaming on who is stronger, Statoil or government	Economic and commercial, additional to urgency to finance deep water exploration and development, and shale oil and gas

	proceeds away from efficiency	somewhat by strong unionization		
International Competitiveness	Clear objective for Petrobras to stay as a leading player in technology and deep water	Objective originally to become self-sufficient, then to be a global player	Clear objective for Statoil to be a leader in engineering, servicing, and deep water exploration and development	ER initiative contains strategies for PEMEX (and less clearly utilities CFE) to become modern and internationally competitive, where international markets have been lost
Security	Guaranteed by the State	Guaranteed by the market mechanism	Guaranteed by the market	Contained in the ER proposal, with referents mentioned and international partners
Referents in the government and governance	International player in deep waters, along with other such as Statoil, BP	Democratization and shared state involvement, increasing a global player	Market-driven commercializati on with governance driven by international leading firms	Decided turn towards governance. Not very clear if governance will adhere to international, financial and market rules
Competition structure, fiscal, and financial regimes	Somewhat government protected	Transitional to market driven, including fiscal and financial regimes	Market driven, fiscal maturity, financial maturity and pensions	ER proposal contains articles to secure contracts, financial regimes, change towards corporate fiscal regime in 10 years
Geographical context	National and international	National, and international.	National, and international	ER not totally committed to international, national yes
Distribution of resources	Shared among participants	Shared among participants	Shared among participants	Shared among participants
Interests	Combined, but political tradition of intervention. International oversight	Combined, subject to regulatory oversight, international oversight	Combined, subject to regulatory oversight, international oversight (Norway government not dependent on oil fiscal income)	Combined in the ER voted proposal, with union powers not addressed, or other powerful interests. Not too clear on international oversight

Norms (legal and implicit)	Strong legal stance, and distributive aims	Distributed/ market control, strategic national stance, and efficiency.	Strong norms mainly legal in the Norwegian tradition	Proposal still needs to see implementation in secondary laws and rulings in 2014.
Decision-making and organization	Organizational , and decentralized	Organizational and decentralized, with strong union	Organizational, decentralized, and global	ER initiative calls for a strong reorganization and decentralized decisions
Policy implementation	Shared by various government agencies and regulators. Coercive	Shared by various government agencies and regulators. Promotional	Shared by various government agencies and regulators. Promotional	ER initiative calls for strong change in policy implementation, given the restructuring of all the sector
International scope	Very important	Very important	Very important	ER initiative only mentions Pemex to issue equity in the future, with no details
Transparency issues	Somewhat reached	Important	Very important	ER voted initiative not too clear on transparency

Source: own generation with reference to Krahmann (2005).

From the findings of the present analysis of governance standings and proposed dynamics after the Mexican ER initiative has been voted by Congress on December 12, 2013 (both the Senate and the Lower House have voted in favor of the ER), the initiative seems to have rather deep and committed parts and articles, to be placed in contrast to the referent cases. Indeed, out of the thirteen dimensions proposed in this research, the Mexican ER seems involved and integral, at least in the following five dimension: Efficiency aims, security, distribution of resources, distributed decision-making and organization, and policy implementation. In other dimensions, there is the need to wait for 2014, when secondary laws and specific regulations will be enacted. These five somewhat present dimensions are international competitiveness, competition-structure-fiscal and financial regimes, geographical context, international scope of reforms, and norms. Finally, dimensions that seem to be absent are: referents (used mainly to "sell the reform" but continuing to be governance paradigms), how the role of powerful interests will play, and finally transparency and corruption issues.

The analysis of government to governance has helped the analysis of the Mexican ER initiative with a new framework that has not been present in recent discussions of the convenience or weakness of Mexico's energy reform 2013.

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