



## “The birth of Neo-Petronationalism: a new emerging model”

*Musings from the Mexican Energy Reform*

Paola Carvajal, Paolo R. Dutto, Agustin Gogorza, Rodolfo Guzman

In 2013, after more than seventy years of Petronationalism, Mexico (one of the first countries to nationalize its petroleum industry back in 1938) approved an ambitious energy reform, allowing private investors to participate through four different contracting models on hydrocarbon exploration and production activities. The implication of this significant change in Mexico’s energy policy is a controversial topic among global industry analysts, who are debating not only whether the implementation of the reform law will be as deep and broad as outlined by policy makers, but also whether this case may represent a trend setter for other oil producer countries around the world. Can this trend be considered as the emergence of a “Neo-Petronationalism” concept? If so, how is it characterized, and which other countries are likely to follow suit?

In this article we argue that a successful implementation of the Mexican Energy Reform will position Neo-Petronationalism as a new paradigm for certain countries, such as Iraq or Venezuela, that share similar conditions of large hydrocarbon reserves, but stagnating production, limited capital and undeveloped technical capabilities to exploit their resources. In contrast, cash rich producing countries of conventional oil, such as Saudi Arabia or UAE, may not need to implement similar reforms in the foreseeable future since they have plenty of easy-to-access reserves, and they face neither significant financial constraints nor technical challenges to develop these resources.

In 2013 Mexico approved an ambitious energy reform that ended 70 years of Petronationalism. The country opened its market and now allows private and international investors to participate through a range of contracting models. The authors believe that a successful implementation of the Mexican energy reform will position Neo-Petronationalism as a new paradigm for certain countries that share similar conditions. What are the business opportunities, and who will be in the next wave?

## The Mexican Energy Reform

The Mexican reform case is not unique since its drivers are not very different from those encountered in other significant hydrocarbon producers as shown on Table 1. Mexican oil production has been declining over the last decade from a peak of 3.8 MMBpd in 2003 to 2.9 MMBpd last year. Mexico's government finances depend largely on petroleum income, which represents almost 30% of the total federal income. In this context, the National Oil Company (Petroleos Mexicanos, Pemex) has received a lot of pressure to accelerate the discovery and development of hydrocarbons in more challenging technical plays such as deepwater basins in the Gulf of Mexico (GOM) and unconventional reservoirs. However, financial constraints and limited technical capabilities have been key barriers for the achievement of the company's targets.

In 2008, the Mexican Government approved a first petroleum reform, allowing private firms to engage in Incentive Service Contracts for the exploration and development of mature fields. However, this model was not sufficiently attractive for IOCs, and most of the bidding areas were assigned to traditional oil & gas service firms, such as Schlumberger, Petrofac and Halliburton. Although these players are equipped with strong technological capabilities, they still lack some of the key operational competences of sophisticated IOCs:

- Oil & Gas Service firms do not have the capabilities required to efficiently and effectively operate the whole asset life cycle (from exploration through development to operations) over the long term for the most challenging resources such as deepwater or unconventional. This is because they have mostly a project oriented culture and limited experience in managing long term asset profitability trade-offs.
- Large-scale complex projects require significant financial depth to support long term investments and returns and this is not necessarily the business model of services providers.

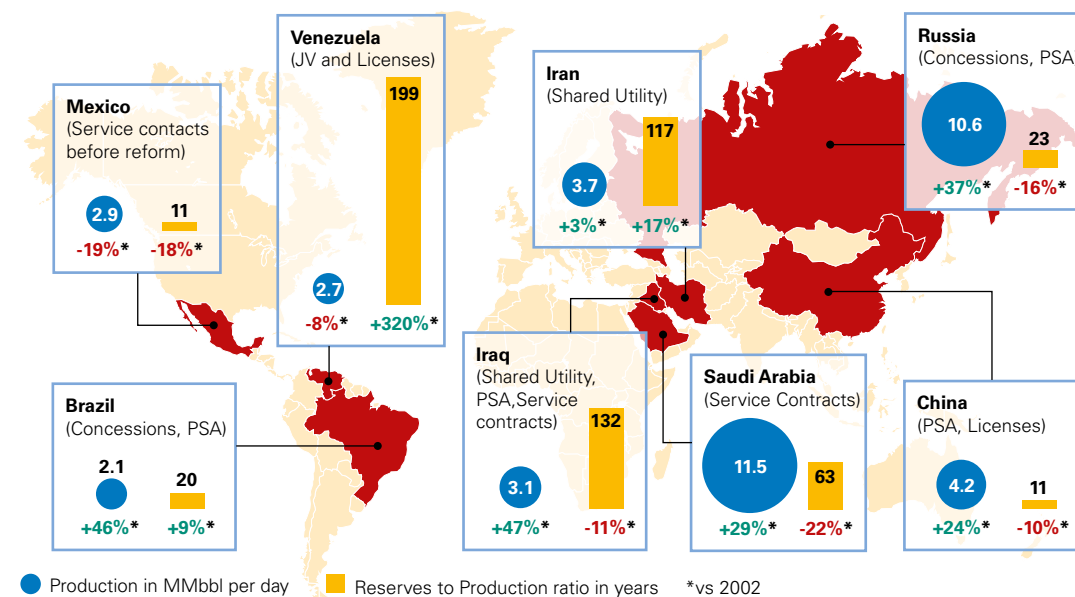


Table 1 Oil producing countries indices

Source: BP Statistics 2012, analysis Arthur D. Little

- There are specific capabilities developed by IOCs regarding deployment of technologies and operational know-how that oil service firms have not fully developed.

The effectiveness of Oil Service Contracts has also been questioned in Iraq where, in spite of known large easy-to-tap proven oil reserves, production levels have failed to meet Governments targets. From 2009 onwards, the Federal Government awarded twelve Technical Service Contracts, aiming to reach a production target of around 12 million bbl/d by 2017. However, these contracts are now being re-negotiated to more modest production levels and as a consequence the new 2017 target has been revised to 9.5 million bbl/d. One of the key problems was that the Technical Service Contracts did not provide sufficient incentives for contractors to increase production at the expected levels. Additionally, the aging facilities could not benefit from new technology in order to increase production, and Government bureaucracy slowed down IOCs' investments plans.

In the latest bidding process the new version of the Technical Service Contracts has started to improve the terms for international investors, allowing contractors a share of the project revenues and early recovery cost in the operations. Additional renegotiation processes are expected for the original Technical Service Contracts in the short term in order to promote higher investments in infrastructure and technology deployment.

### The Chinese Shale Gas Second Bidding Round

Another interesting case that exemplifies the increasing pressure on NOCs to partner with IOCs is the Chinese 2012-2013 Shale Gas Second Bidding Round. Greater involvement of International Oil Companies was embraced by the Chinese Government during this bidding process in which foreign investors were allowed to participate through Chinese-foreign joint ventures controlled by local partners. This policy represented a major landmark since during the previous process no international players were invited to bid in the round and only minimal farms-in were possible after the assignment of the contract. Recent policy changes aim to increase local access to technology and know-how since shale gas developments in China are still a nascent industry that will require significant international expertise.

### Emergence of the Neo-Petronationalism Paradigm

Based on these examples we believe that the Neo-Petronationalism paradigm, as represented in the Mexican case, will be characterized by three features:

1. More **business friendly policies to attract IOC investments** to highly challenging hydrocarbon development projects (i.e., Deepwater and Unconventional).
2. **Increasing autonomy for IOCs in project management and execution** to leverage their experience in developing hard-to-access reserves.

3. **Strengthening of the NOCs' competences** to make them more efficient and capable of incorporating key know-how transferred by IOCs.

### Who will be in the next wave?

Based on the insights of the Mexican reform, we think that some other countries which share similar characteristics such as large hydrocarbon reserves, declining hydrocarbon production, need of capital, lack of technology and/or high levels of social inequality, will take similar steps in the near future (see the "The Next Wave" in the table below.) It will be interesting to see if this could also be the case with countries such as Venezuela or Iraq. In these countries, the IOC's technological capabilities and financial resources would have to be sufficiently enticing for strong nationalist and ideological stances to be relaxed.

Nationalizations 1950s-1970s	Increasing private participation 1980s-1990s	The turning of the tide 2000-2010	The Next Wave 2010 onwards
<ul style="list-style-type: none"> <li>China-CNPC. 1950</li> <li>Venezuela-PDVSA. 1975</li> <li>Libya-NOC. 1970</li> <li>Angola-Sonagol. 1976</li> <li>India-ONGC. 1959</li> <li>Algeria-Sonatrach. 1963</li> <li>Kuwait-KPC. 1975</li> <li>Norway-Statoil. 1962</li> <li>Iran-NIOC. 1951</li> </ul>	<ul style="list-style-type: none"> <li>Argentina: YPF privatization. 1992</li> <li>Bolivia: YPFB capitalization. 1995</li> <li>Algeria opening. 1991</li> <li>Venezuela opening. 1991-1997</li> <li>Azerbaijan opening. 1996</li> <li>Brazil opening. 1997</li> <li>Spain: Repsol Public offerings. 1987-1996</li> <li>Italy: ENI, transform to a joint-stock. 1992</li> <li>Norway: Statoil Public offering. 1999</li> </ul>	<ul style="list-style-type: none"> <li>Venezuela: 51% state participation. 2005</li> <li>Argentina: creation of a new NOC. 2004. Renationalization of YPF. 2012</li> <li>Bolivia: New hydrocarbon law/ change to existing contracts. 2005</li> <li>Russia: 51% state participation. 2003-2005</li> <li>Kazakhstan: New tax structure. 2003</li> <li>Saudi Arabia: Elusive opening of the oil sector</li> <li>Mexico: Intensification of political debate over private participation</li> <li>Iran: Increasingly nationalistic sentiments</li> <li>Kuwait: Postponement of "Project Kuwait"</li> </ul>	<ul style="list-style-type: none"> <li>China: Shale round open for Chinese private and JV with foreign companies. 2013</li> <li>Peru's Congress approves the privatization of up to 49% of state energy firm Petroperú. 2013</li> <li>Argentina: Renationalized YPF signed 1.2 bn USD shale exploration agreements with Chevron. 2013</li> <li>Mexican Energy Reform. 2013</li> <li>NOC Privatization in Libya and Nepal being studied. 2013/14</li> <li>Iran: New Iran Petroleum Contract (PSC type) will offer greater incentives to IOCs. 2013/14</li> </ul>

## Insights for IOCs

In the last few decades the role of IOCs in exploring and developing new resources has progressively evolved. While they now face increasing difficulties in accessing new acreage/opportunities in the “easy oil” segment, they are still unchallenged masters of “complex oil” segments (e.g., Arctic, Deepwater/Ultra Deepwater, large Unconventionals) due to their technology leadership and superior deployment capabilities.

This leadership has been progressively challenged in the last few years by Global NOCs (such as CNPC, Petronas, Petrobras) and selected Oil Service Firms (including Schlumberger and Halliburton)<sup>1</sup>, but, as has been recently demonstrated both in Mexico and in China, IOCs still have unparalleled managerial and deployment capabilities in the field. Furthermore, many IOCs still retain the deep pockets and risk appetite required to finance large-scale developments.

The emergence of *Neo-Petronationalism* may, therefore, constitute for IOCs – willing to engage with host countries – a new business opportunity to:

- Enter into new markets where access was previously very limited (e.g., China, Mexico) with models that can allow for greater risks and rewards than service contracts and with opportunities for full operatorship.
- Re-establish business relationships with host countries that were previously severed/challenged (e.g., Iran, Venezuela).
- Acquire new resources leveraging a different kind of relationship, based on technology leadership and/or operational know-how rather than mere financial capabilities.
- Re-acquire their position as technology deployment and project execution leaders.

---

<sup>1</sup>“R&D Investment Trends and the Rise of NOCs”, B. Thuriaux-Aleman & P. Dutto, Journal of Petroleum Technology, October 2010

Picture by Pancaketom / dreamstime



Only those IOCs that have:

- clear vision concerning the differentiating role that their technology deployment capabilities have in the development of their future asset portfolio,
- willingness to engage with host countries following a new set of rules-of-the-game, and
- capabilities to demonstrate proactively the value they deliver to the host country both in term of Human Capital Development and Technology Transfer,

will be in a strong position to capture these new enticing opportunities.

### Paola Carvajal

is a Manager in the Houston office and a member of the Energy and Utilities Practice.

### Paolo R. Dutto

is a Partner in the Milan office and a member of the Energy and Utilities Practice.

### Agustin Gogorza

is a Consultant in the Buenos Aires office and a member of the Energy and Utilities Practice.

### Rodolfo Guzman

is a Partner in the Houston office and a member of the Energy and Utilities Practice.