IAEE Energy Forum

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International Association for Energy Economics

President's Message

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> It is a great honor to serve as IAEE President for 2015. The job has been made easier by the efforts of many past Presidents, to whom I am most grateful. The Association is also in a good position as a result of the exemplary efforts of many other dedicated volunteers including past and current members of the IAEE Council, regional affiliate councils, and conference committees, and journal editors, referees, and authors of our journal articles. The extraordinary devotion of our Executive Director and the AMS staff in Cleveland will make my job a lot easier. There is no doubt that managing the IAEE's affairs is much more than a job for Dave and his staff, and we appreciate all that they do.

> Our association continues to grow in strength and membership. In 2014, we had successful conferences in New York, Beijing, and Rome. The New York and Rome conferences attracted large numbers of participants and featured many interesting sessions and speakers. The Beijing conference was also a great success, extending the Association's brand to a new and important region, and we look forward to hosting further activities in China under the IAEE brand in the coming years.

> The reputation of our publications and conferences is integral to our success. Maintaining their quality needs to remain a core concern of our conference organizers, editors, referees, and article authors. In the latter regard, we encourage members to submit their best articles for publication in our journals.

> Speaking as an academic, a significant differentiating characteristic of the IAEE is the strong involvement of individuals from industry and government. Energy economics is an applied discipline, and the best research in the field addresses issues about which practitioners care. The reward system in academia is biased in favor of research that advances methods of analysis. That is probably appropriate, for if academics did not advance the analytical methods and tools, who else would? The emphasis on methods also explains why so many researchers beginning their careers are keen to display their prowess in using, or improving upon, the latest analytical techniques. Ultimately, however, the primary task of energy economists is to say something useful about energy markets and energy policy. There is no better way for researchers and students to gain an appreciation for the burning issues of the day than to attend one of our conferences and listen to what energy economists from government and industry are keen to discuss.

> At the same time, energy economists working in government and industry can obtain value from interacting with academics and students. Governments or firms usually are looking for the best solution to a problem that can be obtained within strict time and resource budget constraints. More in-depth analysis using more sophisticated techniques might provide a better solution, but such analyses often are impractical when advice or answers to a question are needed quickly. Some issues of interest to industry economists might also be of general concern to the industry as a whole, and the public good nature of such research does not make it attractive for any one firm to pursue. Metaanalyses that present an overview of the results from many different studies, or compare and contrast the effects of different policies or actions in different countries, can also be valuable to practitioners, but may require more time than is available before an answer is required. Finally, academics with tenure ought to be able to speak frankly about any issue of importance to the industry. More objective analyses are valuable even if the consequence is reduced support for a position or policy that a decision-maker favors on





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other grounds.

Our student members provide another important point of contact between the academic, industry, and government sectors represented in the IAEE. Many students working in energy economics are interested in industry or government careers. The chance to meet prospective employers is of great value to them. On the other side of the market, students who are well-trained in basic economic and econometric analytical tools can be valuable employees in industry and government.

In order for the dialog between our different members to be as productive as possible, we need to ensure they are speaking a common language. This is one reason I strongly support the recent innovation to require authors of articles accepted for publication in the Energy Journal to provide a non-technical Executive Summary of their paper. As the memo to authors notes, "While this may entail some additional work for authors, it will accelerate the propagation and visibility of your ideas and allow non-technical readers to appreciate the value of the research."

In closing, I would like to remind you of the great conferences we have planned for 2015. First, we have the 5th ALADEE Conference to be held in Medellin, Columbia from March 16-18. The theme is "Energy Outlook in Latin America and the Caribbean: Challenges, Constraints and Opportunities." This will be followed by the International Conference in Antalya, Turkey on May 24-27. The conference theme is "Economic, Environmental, Technological and Security Challenges for Energy." Finally, Pittsburgh will host the North American conference from October 25-28 under the theme "The Dynamic Energy Landscape." These conferences will provide great opportunities for you to catch up with friends, interact with new members, try out your new ideas or present your newest research findings, and provide constructive feedback to other members regarding their research and ideas. I hope to see you at as many of these conferences as possible.

Peter Hartley

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IAEE Mission Statement

The International Association for Energy Economics is an independent, non-profit, global membership organisation for business, government, academic and other professionals concerned with energy and related issues in the international community. We advance the knowledge, understanding and application of economics across all aspects of energy and foster communication amongst energy concerned professionals.

We facilitate:

- · Worldwide information flow and exchange of ideas on energy issues
- High quality research
- · Development and education of students and energy professionals
- We accomplish this through:
 - · Providing leading edge publications and electronic media
 - Organizing international and regional conferences
 - · Building networks of energy concerned professionals

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Is Resource Nationalism on the Rise? Evidence from Service Contracts in Eight Countries

By Abbas Ghandi and C.-Y. Cynthia Lin*

Introduction

Resource nationalism is the tendency of people and governments to assert control over natural resources located on their territory. There is a debate over whether resource nationalism is on the rise as a result of the general belief about the increasing global scarcity of oil and natural gas prior to the recent shale gas and tight oil development in the U.S., as increasing scarcity may cause some governments to hold on to their ownership or control over their fossil fuel resources for strategic and economic reasons.

This article assesses whether resource nationalism is on the rise by reviewing the energy strategy and oil and natural gas fiscal systems of eight major oil or natural gas producing countries that have either adopted a variation of a service contract or have shown interest in this framework as an alternative to production sharing contracts over the period 1990 to 2014.

Like a production sharing contract, an oil or natural gas service contract is a long-term contractual framework that is used by some host governments to acquire the international oil companies' expertise and capital without having to hand over the field and production ownership rights to them. However, in contrast to production sharing contracts, in a service contract the IOCs agree to a pre-determined return in lieu for sharing profit oil. In addition to the IOC's method of compensation, service contracts and production sharing contracts could also differ in four other major categories: field ownership rights, produced crude ownership rights, field's operatorship, and the degree of risk that each side bears.

Our review suggests that heightened sovereignty concerns could be an important factor explaining the interest in service contracts in these eight countries. Resource nationalism may, therefore, be on the rise for those countries that are interested in service contracts due to sovereignty concerns. However, as we discuss below, the evidence for such a rise in resource nationalism in these eight countries is mixed.

We categorize the eight countries reviewed in to two groups: those for which evidence supports a rise in resource nationalism, and those for which evidence does not support such a rise. In particular, the first group includes those countries whose current status of cooperation with international oil companies lends support to a rise in resource nationalism. These countries include Venezuela, Kuwait, Iraq, Bolivia, Ecuador and Turkmenistan. The second group of countries consists of those that have shown evidence against resource nationalism even though they too have service contracts. These countries are Iran and Mexico. In what follows, we briefly describe our reasons for the above categorization.

Evidence for a Rise in Resource Nationalism

Countries whose current status of cooperation with international oil companies lends support to a rise in resource nationalism include Venezuela, Kuwait, Iraq, Bolivia, Ecuador and Turkmenistan.

Even in these countries where evidence supports a rise in resource nationalism, there might also be some evidence against the rise of resource nationalism at least for a short period of time. For example, Venezuela adopted a variation of service-type contract, known as operational service agreements, in 1991. Among the three rounds of auctions for this framework, the third round's allocation of produced crude entitlement in accordance with the IOCs' internal rate of return in the project is indeed a sign of a move towards more openness to IOCs in the countries' upstream sector (Manzano & Monaldi, 2010). However, we consider Venezuela among the countries with strong evidence of resource nationalism rise because in 2006-2007 it forced the conversion of the IOCs' operational service agreements into "mixed enterprises" with majority stakes for the Venezuela's state-owned oil company Petróleos de Venezuela, SA (Manzano & Monaldi, 2010). This situation might be lessening in coming years due to the country's economic hardship, which has affected the performance of the IOCs in the mixed enterprises (Mogollon, 2014).

Kuwait has also shown some movement towards letting more IOCs in the country through introducing different versions of service-type contracts since the early 1990s (Middle East Economic Digest, 2010). In particular, the country's 1999 "operating service contract" (Stevens, 2008) and 2010 "enhanced technical service agreement" (Business Monitor International, 2011) could be seen as important steps away from resource nationalism. However, because of the long lasting dispute (Stevens, 2008) over the terms of the contracts between differ-

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ent segments of the government and also the investigation (Energy Compass, 2014) of the enhanced technical service agreement, we categorize Kuwait under the countries with resource nationalism on the rise. In fact, the government's recent decision (Strouse, 2013) to sign oilfield service contracts with service companies as opposed to service-type contracts with international oil companies reinforces such categorization.

Bolivia has also shown strong resource nationalism in recent years after a period of more openness to IOCs in its upstream sector. In particular, the renationalization of the oil industry in 2006 (Vargas, 2007), which was accompanied by a forced conversion of the countries' existing contracts to "operation contracts" as a variation of the service-type contractual framework, puts Bolivia under the group of countries with rising resource nationalism. Still, it is worth mentioning that even though Bolivia held a bidding round in 2012 under the new "operation contracts" introduced in 2006, the government has also shown signs of providing more incentives to the IOCs by designing more flexible contracts based on the area of exploration and on the potential reserve discoveries in addition to providing fast cost recoveries for the IOCs (Vargas, 2007).

Ecuador also started the process of converting the IOC's upstream contracts to service contracts in 2007 (Business News Americas, 2011b) with an agreed-upon flat fee cost recovery scheme for the IOCs. Therefore, we consider this move as a sign towards the rise of resource nationalism in Ecuador. The government has not shown any sign of lessening this trend yet by awarding incremental production contracts, as a new variation of service contract, on two mature fields in 2012 (Canada Stockwatch, 2012). In addition, the government has started a new exploration-based licensing round through the introduced service contact framework (Kerr, 2012c).

Turkmenistan is another example of the countries with the rise of resource nationalism as reflected in their effort to adopt service-type contracts. The Turkmen government has insisted on using a service-type contractual framework for the countries' onshore natural gas fields even though the Turkmen 2008 hydrocarbon law allows pursuing other frameworks such as concessions, production sharing contracts, and oilfield service contracts (International Comparative Legal Guide Series). Turkmenistan has yet to show some flexibility even after the departure of some IOCs from the country in 2013 (Roberts, 2013).

Iraq has also used three different versions of service-type contracts since 2009, which include producing field technical service contracts; production and development technical service contracts; and a service-type framework for exploration (Ghandi & Lin, 2014). Awarding contracts to IOCs in a country with limited presence of international oil companies for many years until 2009 could be seen as a sign of more openness in the countries upstream. However, since the government chose service-type contracts over other frameworks that the Iraqi Constitution had allowed for, we consider Iraq's decision to use service-type contracts as evidence of a rise in resource nationalism.

Evidence Against a Rise in Resource Nationalism

Not all countries with service-type contracts experienced a rise in resource nationalism. In particular, there is evidence against a rise in resource nationalism in Mexico and Iran even though these countries have relied on service-type contracts for many years.

In Mexico, after many years of reliance on oilfield service contracts, since 2001 (Soto, 2005), the country has started using multiple service contracts on non-associated natural gas fields (Kerr, 2009). Mexico's move from oilfield-service contracts to multiple service contracts and incentive-based multiple service contracts since 2009 (Dow Jones International News, 2009) might not be enough evidence against the rise of resource nationalism in Mexico. However, the continuance of this policy into 2012 (Business News Americas, 2012) and also the 2013 energy reform law that allows four contractual frameworks including service contracts, production sharing contracts, profit-sharing contracts and licenses (Kerr, 2013b) are evidence against a rise in resource nationalism.

Iran, one of the pioneer countries in awarding service-type contracts since 1995 (Alikhani, 2000), should be considered on the top of the list of the countries with a rise of resource nationalism. However, since the 2013 unprecedented election of Hassan Rouhani as the new president, the country is experiencing a full front effort to ease international pressures over its nuclear program and also to shake up the country's stagnated economy. As part of the effort, the new administration has opened up dialogues with the Western IOCs and has signaled that it is ready to offer more lucrative deals than its former buyback service contracts (1995-2009). In particular, Iran is getting ready to officially introduce its new joint-venture contracts called Iran Petroleum Contracts (IPC) in November 2014. Iran's new IPC has four risk-based tiers that allow the government to provide additional incentives to the IOCs that take on more risky projects. For example, IOCs could gain 60% more through the highest tier for more risky

projects than through the lowest tier. Iran's main objective is to increase the country's production potential to higher than 5 million barrels per day by 2018 with a particular attention to technology transfer and reservoir management. The government has also made it clear that they most welcome Western oil companies and in particular Shell, BP, Total and Exxon Mobil for their superiority in technology and reservoir management. These efforts serve as evidence against a rise in resource nationalism in Iran (Energy Intelligence Finance, 2014).

Conclusion

In this article, we examine the evidence for a rise in resource nationalism from the perspective of eight countries with oil and natural gas service contracts. We find that the evidence suggest a mixed trend in the rise of resource nationalism. While six out of the eight countries show evidence of a rise in resource nationalism, at least two countries, Iran and Mexico, have shown clear evidence against a rise in resource nationalism. Thus, while resource nationalism may be on the rise in some countries, it is not on the rise in all countries, and may even be declining in some.

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