Paper 42 (abstract only)

Title:

Applying the Institutional Economics to Understand the Transaction- Costs in Oil Exploration Agreements: a Brazilian case study

Concession/Taxes Agreements

Author keywords:

Production Sharing Contracts
Qualitative methodology
Contratual analysis

Transaction Cost Economics

Introduction: The oil industry has developed very complex contractual schemes mainly since the mid-1960s. Over more than 40 years two major contractual tradictions have dominated the oil scene, almost spliting the world in two major contractual cultures based on Concession/Taxes Agreements (CTAs) and Production Sharing Contracts (PSCs) (Smith and Dzienkowski 1989). For each nation, the choice between CTAs or PSCs is explained by historical reasons, the existing institutional environment as well as by the goals the government aims to achieve. This paper adopts the theoretical elements from the New Institutional Economics (NIE) to explain how the contractual governance of oil activities is related to economics (Williamson 1996). The authors are particularly concerned with the Transaction Cost Economics (TCE).2 The TCE shows how contracting is costly for the involved parties – the host government and the investors.

Methodology: The method was qualitative and based on the TCE parameters (i) the uncertainty; (ii) the frequency with which the transactions occur; and (iii) the degree to which durable transaction- specific investments are incurred. In the current analysis about the uncertainty parameter, the focus concentrated on two questions: Are there provisions in the Brazilian CTAs that would increase the political risk?; And what are the safeguards in the Brazilian CTAs that would reduce political risk? Regarding frequency parameter, we asked this question: have been held Annual Biddings? On specific investments: Which provisions prescribe the long term relationship on investments?

Results and discussion:

Abstract:

The Brazilian concession agreement includes many provisions about ANP's sole discretion. Also, national and public interest expressions can be found. From the investors' point of view, these provisions create higher political risk because the open meaning from these expressions could justify arbitrary decisions. The transactions costs are increased, creating more costs and less profit for the company. ANP's budgets are defined by article 15 of the Petroleum Law which seems to guarantee that its decisions are independent. It appears that the political and regulatory risks, as well as the transactions costs are minimised. Regarding frequency parameter, with the Annual Biddings, the ANP maintains the regularity and the credibility of its relationship with the petroleum companies in the market place. Moreover, the concession agreement has many provisions that create a continuing relationship between ANP and the concessionaire, which results from ANP's inspection role. On specific investment parameters, petroleum production is characterized as a capital intense industry, and the concessionaire is liable for the costs and risk of the petroleum operations, including the specific assets and information for performing its activities. According to the Brazilian concession agreement, the concessionaire must make its investment in each phase under the ANP inspection. The concessionaire must demonstrate financial guarantees to perform the Minimum Exploratory Program, such as irrevocable letters of credit, insurance- quarantee, mortgage agreement, and Oil Pledge Agreement. Besides the Work Exploratory Program, more provisions about the specific investments are included in the concession agreement, such as the obligation of the Development Plan, the Local Content Clause, The Relinquishment, and the Inactivation and Abandonment Program.

Conclusion:

The concession agreement and the Petroleum Law were drafted in a specific and singular

moment of the Brazilian history. The institutional changes were a significant step to increasing investments and attracting both international and national oil companies. Key changes were the transfer of the produced petroleum ownership from the government to the concessionaire and allowing more investor control over exploration, development, and production operations.

Nevertheless, it is important to stress that the concession agreement and the Petroleum Law include provisions that seem to create political risk and ex post transactions costs. The non-existence of clear standards for ANP's regulatory decisions and the presence of vague expressions of the oil field standards and public interest are prime examples.

The amendment clauses of the concession agreement make a trade-off between higher ex post transactions costs and flexibility, which create a comfortable environment for the concessionaire to perform its operations.

From the investor's point of view, the concession agreement provides a 25 continuous relationship with ANP, the higher ex post costs of keeping ANP informed are compensated by the increase of credibility between the parties.

The ex post costs in the specific investments may be increased for the concessionaire by the local-content requirements. Because of the intensive investments, it is essential to create more guarantees that the investors' rights can not be violated by the government or by ANP. If the Brazilian Federal Government wishes that the country become an attractive option in the petroleum world the government must consider provisions to minimize political risk. The results could be improved by adding others parameters into the qualitative analysis, as well as a quantitative analysis from any econometric model could be done.

Also, the current paper could be extended with the governmental point of view and an analysis about the regulatory process in Brazil carried out by ANP.

## References

Anderson, Owen L. 2009. "International Petroleum Negotiation", notes of class. Oklahoma: University of Oklahoma. (February 3, 2009).

ANP (National Agency of Petroleum, Gas and Biofuels). 2008. "Brazilian Petroleum Law." (online at: http://nxt.anp.gov.br/NXT/gateway.dll/leg/leis/1997/lei%209.478%20-%201997.xml?f=templates\$fn=default.htm&sync=1&vid=anp:10.1048/enu, accessed: Ocotber 10, 2008).

ANP (National Agency of Petroleum, Gas and Biofuels). 2009. "Concession/Taxes Agreement (CT A)." (online at: http://www.brasil-

rounds.gov.br/arquivos/editais/Conc\_agreement%20R10.pdf, accessed: April 20, 2009).

ANP (National Agency of Petroleum, Gas and Biofuels). 2009b. "ANP Round Biddings: W ebsite." (online at:

http://www.anp.gov.br/petro/rodadas\_de\_licitacoes.asp#rodada, accessed: April 20, 2009).

ANP (National Agency of Petroleum, Gas and Biofuels). 2009c. "10th Brazil Round –

Qualification Guidelines." (online at: http://www.brasil-

rounds.gov.br/ingles/guia\_rodadas.asp, accessed: April 20, 2009).

ANP (National Agency of Petroleum, Gas and Biofuels). 2009d. "Brazil Rounds." (online at:

http://www.anp.gov.br/petro/rodadas\_de\_licitacoes.asp and http://www.brasil-

rounds.gov.br/index\_e.asp, accessed: April 20, 2009).

Brousseau, Éric, and Glachant, Jean-Michel. 2008. "A Road Map for the Guidebook. New Institutional Economics: A Guidebook." Ed. Éric Brousseau and Jean-Michel Glachant. New York: Cambridge University Press.

Cameron, Peter D. 2006. "Stabilisation in Investment Contracts and Changes in Rules of Host Countries: Tools for Oil and Gas Investors", the Association of International Petroleum Negotiators (A.I.P.N.), Final Report, (30), July 2006.

Klein, Peter.G. 1999. "New Institutions Economics." Georgia: University of Georgia, (online at: http://www.scribd.com/doc/239200/0530-New-Institutional-Economics. Pp.456-489,

accessed: April 3, 2009).

North, Douglas.1991. "Institutions, Institutional Change and Economic Performance." New York: Cambridge University Press, 1991.

Otillar, Steve P. and McQuaid, Kristina. A. 2008. "Recent Developments in Brazil's Oil & Gas Industry: Brazil Appears to be Stemming the Tide of ResourceNationalism." Houston Journal of International Law, 30.2, (Spring 2008): 259-68 (29).

Petrobras. 2009. "An integrated energy company that performs in a profitable manner, with social and environmental responsibility." AboutUs (online at:

http://www.petrobras.com/ptcm/appmanager/ptcm/dptcm;jsessionid=wNgGJjVDG2Knvz8LfYnnln62RNftGPMcTDGGK2VV7bdJ4gBld8Cv!1602454944!-

1240714531?\_nfpb=true&\_pageLabel=petr\_com\_conheca\_empresa, accessed: April 14th, 2009).

Riordan, Michael and Williamson, Oliver E.1985. "Asset Specificity and Economic Organization," International Journal of Industrial Organization, 1985 (3): 365-78. Smith, Ernest E. and Dzienkowski, John S. 1989. "A fifty-year perspective on world petroleum arrangements." Texas International Law Journal 24 (13): 17-23.

The Economist Intelligence (Unit ViewsWire). 2009. "The next oil giant? Brazil's oil industry has big hurdles to clear." (online at:

http://www.economist.com/agenda/displaystory.cfm?story\_id=13348824, accessed: March19th, 2009).

Williamson, Oliver E. 1979. "Transaction-Cost Economics: The Governance of Contractual Relations." The Journal of Law and Economics. 22 (2): 233-261. (Published by: The University of Chicago Press. Stable URL: http://www.jstor.org/stable/725118. Accessed: February 20, 2009)

Williamson, Oliver E. 1985. "The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting." New York: Free Press.

Williamson, Oliver E. 1993. "The Logic of Economic Organization. The Nature of the Firm: Origins, Evolution, and Development." Ed. Oliver E. Williamson, Sidney G. Winter, Ronald Harry Coase. NC: Oxford University Press US.

@Williamson, Oliver. E. 1996. "The mechanisms of governance." NC: Oxford University Press.

Authors						
first name	last name	email	country	organization	Web site	corresponding?
Hirdan	Costa	hirdankatarina@gmail.com	Brazil	Universidade de Sao Paulo		•
Edmilson	Santos	edsantos@iee.usp.br	Brazil	Universidade de Sao Paulo		