



Revista Base (Administração e Contabilidade)
da UNISINOS

E-ISSN: 1984-8196

cd@unisinos.br

Universidade do Vale do Rio dos Sinos
Brasil

DA COSTA, ANTONIO RUFINO; DIAS LOPES, FERNANDO
INSERTION OF LOCAL SUPPLIERS AS A SOURCE OF PERFORMANCE IN TRANSACTION
COSTS AND LEGITIMACY
Revista Base (Administração e Contabilidade) da UNISINOS, vol. 9, núm. 3, julio-septiembre, 2012,
pp. 216-227
Universidade do Vale do Rio dos Sinos
São Leopoldo, Brasil

Available in: <http://www.redalyc.org/articulo.oa?id=337228651002>

- How to cite
- Complete issue
- More information about this article
- Journal's homepage in redalyc.org

redalyc.org

Scientific Information System

Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal

Non-profit academic project, developed under the open access initiative

INSERTION OF LOCAL SUPPLIERS AS A SOURCE OF PERFORMANCE IN TRANSACTION COSTS AND LEGITIMACY

INSERÇÃO DE FORNECEDORES LOCAIS COMO FONTE DE PERFORMANCE EM CUSTOS DE TRANSAÇÃO E LEGITIMIDADE

ANTONIO RUFINO DA COSTA
rufinonatal@yahoo.com.br

FERNANDO DIAS LOPES
fdlopes@ea.ufrgs.br

ABSTRACT

The hiring of goods and services is a critical activity for oil companies, so the availability of qualified suppliers is desirable. In Institutional Theory, the insertion of suppliers and relationship forms between them and the main agent may be analyzed from the perspective of the search for legitimacy by organizations in the organizational field. The Transaction Costs Economics, in turn, gives support to analyze opportunism and uncertainty in exchange relationships as factors that alter transaction costs. The study shows a case of insertion of local suppliers as an industrial concentration encouragement sponsored by the State, in which pragmatic and cognitive legitimacy strategies are used to gain legitimacy and to keep it. Although there are no clear gains associated with transaction costs, Petrobras did not demonstrate that reduction in transaction costs was a priority in this process. The accomplishment of its mission, which is legitimized in society, is placed as a priority, in a behavior that can be understood as the result of a political decision to adopt sub-optimal goals, which are better explained through an institutional perspective.

Key words: Institutional Theory, transaction costs, insertion of suppliers, oil and gas.

RESUMO

A contratação de bens e serviços é uma atividade crítica para as empresas petrolíferas, de forma que a disponibilidade de fornecedores qualificados é desejável. Na Teoria Institucional, a inserção de fornecedores e as formas de relacionamento entre estes e o agente principal podem ser analisadas a partir da perspectiva da busca de legitimidade por organizações no campo organizacional. A Economia dos Custos de Transação, por sua vez, dá suporte para analisar o oportunismo e a incerteza em relações de troca como fatores que alteram os custos de transação. O estudo mostra um caso de inserção de fornecedores locais como uma forma de incentivo à concentração industrial patrocinada pelo Estado, no qual as estratégias de legitimação pragmática e cognitiva são usadas para ganhar legitimidade e mantê-la. Embora não existam ganhos claros associados aos custos de transação, a Petrobras não demonstrou que a redução dos custos de transação fosse uma prioridade neste processo. O cumprimento de sua missão, a qual é legitimada na sociedade, é colocada como uma prioridade, em um comportamento que pode ser entendido como o resultado de uma decisão política de adotar objetivos sub-ótimos, os quais são mais bem explicados através de uma perspectiva institucional.

Palavras-chave: Teoria Institucional, custos de transação, inserção de fornecedores, petróleo e gás.

INTRODUCTION

The hiring of goods and services is a critical activity for large oil companies. The availability of qualified suppliers is desirable for any company, because it ensures greater competitiveness in the hiring process, faster responses to operational requirements, and lower costs. Besides that, it's interesting to qualify suppliers, especially in regions where there are few available options of specialist suppliers of goods and services.

The disclosure of Petrobras' strategic planning envisaged investments of around U.S. \$ 34 billion in the 2003-2007 period¹, with a major part of goods and services to be supplied by foreign industry, since Brazilian industry would not be capable of meeting a demand of that magnitude. Thus, the Federal Government established the National Oil and Gas Industry Mobilization Program (PROMINP) with the objective of maximizing the participation of the national industry in the implementation of oil and natural gas projects.

The actions of PROMINP aim to identify opportunities, insert suppliers, increase productivity and develop a local park of goods and service suppliers for meeting the demand from oil and gas enterprises. Thus, actions are primarily designed to qualify the workforce and to build the capability of suppliers.

In Institutional Theory, the insertion of suppliers and relationship forms between them and the main agent may be analyzed based on the perspective of the legitimacy searched by organizations in the organizational field (DiMaggio and Powell, 1999b; Oliver, 1990; Suchman, 1995). The Transaction Costs Economics, in turn, gives support to analyze the magnitude of opportunism and uncertainty in exchange relationships with local businesses, among other aspects, as factors that alter transaction costs (Williamson, 1989).

Thus, the purpose of the study was to identify the occurrence of different performances of Petrobras due to the insertion of local suppliers in the oil and gas production chain in the State of Rio Grande do Norte – Brazil.

The investigation is of a qualitative nature, and the collection of data was done in two stages. Firstly, secondary data were collected from Petrobras' internal newspaper and Results Based Strategic Management Information System (SIGEOR) from the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE). Then, nineteen semi-structured interviews were carried out with actors involved in actions of the program (seven interviews) and representatives of companies (twelve interviews). Suchman's model (1995) was employed to make content analysis regarding legitimacy strategies, while fourteen categories associated with the variables *assets specificity*, *bounded rationality* and *opportunism* (Williamson, 1995, 1989) were employed to analyze transaction costs.

THEORETICAL BACKGROUND

OVERVIEW ON INDUSTRIAL CONCENTRATION

One of the first authors to discuss the location of industries and industrial concentration was Marshall (1882), indicating that there are a number of causes to location, especially physical conditions. The gains of industrial concentration, according to Marshall, are based on external economies, whose concept was introduced to explain why and how the industry location occurred and why and how small enterprises could become efficient and competitive.²

The external economies concept was incorporated by Krugman (1992), in whose view the concept is always complex from an analytical perspective and of difficult characterization. He proposes that "the geographic concentration arises, basically, from the interaction of rising incomes, transport costs and demand" (p. 20).

Schmitz (1997) takes up the discussion of concentration from Krugman's analysis, proposing that local economies are not sufficient to explain the strength of clusters. Then, he presents the concept of collective efficiency, "the competitive advantage derived from local external economies and from joint action" (p. 9), the former being incidental, the latter built consciously. The joint action can occur with or without help from the government, but when the latter intervenes, it tends to be more effective if working with the private sector.

Porter (1993, p. 210) considers concentration as "part of the broader process by which the advantage is created and maintained". He believes that through an evolutionary process many national characteristics influence the success of competitive enterprises, in the constitution of a complex system that culminates in the construction of national advantage. Emphasis is given to the rivalry and the concentration of industry. The grouping provides, according to Porter, mutual support, which projects benefits forwards, backwards and horizontally, becoming a vehicle for maintaining the diversity among rivals and obstructing the entry of new firms. Porter argues that the State would have the role of providing national conditions, which combined with local conditions stimulate competitive advantage.

INSTITUTIONAL THEORY AND LEGITIMACY

The Institutional Theory is a centenary theory that had its first writings on the economy with valuable contributions from other sciences, especially sociology. Its draft began to be prepared at the end of the nineteenth century as a reaction to the hedonistic view of human behavior, which interprets the collective political and economic behavior as the aggregate result of individual choices. The key issue of institutionalism, in the perception of DiMaggio and Powell (1999a), is how social

¹ Data from a lecture given by the Director of Services of Petrobras in the National Organization of Petroleum Industry, on June 11, 2003. See material on http://www.onip.org.br/arquivos/apresentacao_duque.pdf

² Although Marshall's work cited in this article is from 1882, the original work was published in 1890.

choices are shaped, mediated and channeled by institutional arrangements.

Institutional theory focuses on the role of external institutions in decisions and organizational behavior. These institutions may include regulatory structures, agencies, laws, courts, professions, interest groups and public opinion. According to Scott and Christensen (1995, p. 310), "more than any other theoretical paradigm in social sciences, the institutional perspective emphasizes the importance of wider social context". This includes non-local forces, historical, relational and cultural factors and models of organizations.

The literature on institutional analysis used to be classified in three institutional currents: the old institutionalism, based on the contributions of Veblen, Commons and Mitchell, the New Institutional Economics (NIE) of Coase, Williamson and North, and the neo-institutionalism current of Meyer and Rowan (Carvalho and Vieira, 2003; DiMaggio and Powell, 1999a; Scott, 1995). The NIE, besides the institutional environment, also considers the way in which private interaction shapes governance mechanisms. Then, among the aspects that can determine the governance structure someone could point out the specificity of assets.

All institutional currents give emphasis to institutionalization processes and isomorphism, which are central in the creation and perpetuation of durable social groups. For Davis *et al.* (2000), isomorphism is a restriction process which forces a unit in a population to be similar to other units that are in the same set of environmental conditions. According to Motta and Vasconcelos (2002), an institutionalized concept is something taken for granted that becomes an accepted truth for members of that group, inspiring their actions and social practices.

Meyer and Rowan (1999) deal with the question of isomorphism among organizations of a particular organizational field as a matter of myth reproduction. When reproducing institutionalized practices and procedures, organizations are increasing their legitimacy, even if sometimes it does not necessarily represent effectiveness for the organization. In complex institutional environments, obedience to standards enables organizations to obtain legitimacy and the necessary resources, while the deviation from the requirements of institutionalized myths leads to failure, due to high costs incurred to acquire legitimacy (Meyer and Rowan, 1999).

In the process of isomorphism, the pressures of the institutional environment take an isomorphic position on social institutions, which seek to adapt their structures and procedures to context expectations through coercive, mimetic or normative processes. According to Hall (2004, p. 260), the institutional perspective sees the organizational architecture "not as a rational process, but subject to external and internal pressures, leading organizations in a field to seem like the others, as time passes". Davis *et al.* (2000) cite the example of multinational companies that choose different modes to

enter into new markets according to the levels of internal and external isomorphic pressures.

One of the contributions of institutional theory is the enlargement of the concept of environment. Scott and Meyer (1999) discuss the existence of technical and institutional environments: the technical environments are those in which production is made, goods and services are exchanged and where organizations are rewarded by an effective control of their production systems. The institutional environments are those "characterized by rules and requirements to which individual organizations must adjust, if they wish to receive support and legitimacy" (Scott and Meyer, 1999, p. 170). The two environment types exert pressure on the organizations with different characteristics and add a greater deal of legitimacy in terms of meeting the requirements and rules.

DiMaggio and Powell (1999a, p. 68) combine the organizational environments to cultural elements, "that is, beliefs and consolidated widely promulgated rules that serve as patterns of organization". The institutional reproduction is linked to the institutional power of central actors, such as the State, the professions or other agents, who can make their demands within the prevailing organizational areas.

DiMaggio and Powell (1999b) define three types of isomorphism: the coercive, which results from formal and informal pressures from other organizations and the cultural expectations of society; the mimetic, that is, the reproduction of models in response to uncertainties; and the normative, which occurs in response to professionalism.

An important concept for the discussion of environments is the organizational field. DiMaggio and Powell refer to the organizational field as a set of organizations that "constitute a recognized area of institutional life: the main suppliers, resources and products consumers, regulatory agencies and other organizations that produce similar services or products" (1999b, p. 106).

It is perceived, thus, that in an organizational field organizations seek not only results related to the technical field, but another factor that is also important is the social acceptance of the structures and procedures adopted, which will lead to legitimacy. According to Scott (1995, p. 45-46), from an institutional perspective, legitimacy "is not a commodity to be owned or transacted, but a condition that reflects cultural alignment, normative support, or line with relevant rules or laws" and "refers to the degree of support of a cultural organization".

Suchman (1995, p. 574) defines legitimacy as a "generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions". In his view, studies of legitimacy can be divided into two groups: the strategic one, which "adopts a managerial perspective and emphasizes the ways in which organizations instrumentally manipulate and deploy evocative symbols in

order to garner societal support", and the institutional type, which "adopts a more detached stance and emphasizes the ways in which sector-wide structuration dynamics generate cultural pressures that transcend any single organization's purposive control" (p. 572). While the strategic view takes legitimacy as an operational feature that organizations draw from their cultural environments and employ in the pursuit of their goals, institutional researchers describe it as a set of constitutive beliefs.

Suchman (1995) classifies legitimacy in three types: pragmatic, which involves exchanges among organizations and the audience and is more practical about the character of the consequences of organizational behavior; moral, which is associated with the acceptance of organizations' moral conduct, in a way that their actions are evaluated as the right thing to be done; and cognitive, which is associated with the acceptance of organizational practice based on cultural models. Finally, the author proposes a typology for strategies focused on the legitimacy, where the organizational actions are arranged in a matrix according to the objectives of the action (gain, maintenance or repair of legitimacy) and the type of involved legitimacy (pragmatic, moral or cognitive).

TRANSACTION COSTS ECONOMICS

The origin of TCE is associated with Coase (1937), who explains the reason for firms' existence. He criticized the economist's neoclassical view about the economic system, because they accepted just the price as a governance mechanism. In the neoclassical view, little activity of planning was imputed to individuals, who would do their choices from the alternatives available. Coase considers that in a system governed by prices, as in the view of neoclassical economists, there would not be a necessary organization of production by entrepreneurs. That is a different situation from what in fact occurs, where the presence of firms replaces the price mechanism in the organization of production. Coase shows, then, that the analysis of transaction costs in the economy determines the organizational forms and institutions of the social environment.

Coase's ideas are then taken by Williamson in his formulation of TCE, which does not see the company as a production function, but as a governance structure (Williamson, 1989), and the question of economic organization as "a hiring problem". Thus, given the need to perform a task, with the possibility of several alternative forms of organization, it is essential to know the costs involved (Williamson, 1989).

TCE's assumption about human being is that he is subject to be rationally bounded and prone to opportunism. Bounded rationality implies that human agents are intentionally rational, but only in a limited way. An opportunistic approach, in turn, argues that "human agents do not reliably fulfill their promises, but will violate the letter and spirit of an agreement where it suits their purposes" (Williamson, 1989, p. 389). The problem

of economic organization, on the basis of these two assumptions, would be the creation of "governance and engagement structures that have the purpose and effect of saving the bounded rationality, while defending the transactions of the dangers of opportunism" (Williamson, 1989, p. 10). The concurrent existence of bounded rationality and risk of opportunism with assets specificity makes the hiring process fail through planning, promise and competition, giving rise to governance mechanisms to mediate transactions (Williamson, 1989).

Williamson (1989, p. 57) treats opportunism as a behavior that "refers to incomplete or distorted disclosure of information, especially to premeditated efforts to conduct to misunderstanding, to distort, to hide, to obscure or to confuse". It also takes the obvious, subtle and natural ways (Williamson, 1995). Williamson does not support the argument that individuals are always opportunistic, but believes that "some individuals are opportunistic sometimes and that the differential reliability is rarely transparent *ex ante*" (1989, p. 73). Since it is not easy to identify individuals prone to opportunism, safeguards are adopted in order to reduce the risk of transactions with these agents. According to Barney and Hesterly (2004, p. 135) "there is a cost to distinguish those who are prone to opportunism from those who are not". So, the point is to protect the transactions using *ex ante* safeguards to prevent *ex post* opportunism.

According to Williamson (1989), the *ex ante* costs include preparing and negotiating agreements, and the *ex post* costs include installing and operating governance structures to monitor and resolve disputes, in other words, the cost to ensure the perfect accomplishment of the contract. In practice, there is a great interdependence between *ex ante* and *ex post* costs. It is also very difficult to quantify them, so they are evaluated on the basis of their amount, comparing hiring modes with each other. "What matters is the difference between the transaction costs, rather than its absolute magnitude" (Williamson, 1989, p. 32).

Concerning governance structures, the market appears to be more efficient when the transactions are recurrent, as we can notice in cases of mature industries. In general, transactions involving non-specific assets and in which there is no risk of opportunism are made under this structure (Williamson, 1989). However, the market is unable to meet all transactions demanded by organizations, especially when: the perfect competition conditions are not found; the transactions become more frequent and complex, which increases costs to conduct and monitor transactions; or when "the boundaries of a firm expand to internalize transactions and resource flows that were previously conducted in the marketplace" (Powell, 1990, p. 303).

The hierarchical structure, also called vertical integration, is an option when there are market failures. According to Powell (1990), the normative basis in the hierarchy is found in employment relations, communications occur through routines,

conflicts are resolved administratively through supervision, the flexibility degree is low, the commitment among parties is from mid to high, the atmosphere is formal and bureaucratic and the choices of actors are dependent. Williamson (1989) points out the advantages of vertical integration, compared with the market, such as the possibility of making adjustments without the need to consult, complete or revise arrangements made among companies.

Assets specificity is the main reason for vertical integration. "As we increase the assets specificity, the balance is tilted in favor of internal organization" (Williamson, 1989, p. 97), or "the hiring in market leaves its post to bilateral contracting, which in turn is seen replaced by unified contracting (internal organization), as it gradually deepens the assets specificity" (p. 86).

In addition to the conventional governance structures (market and hierarchy), TCE recognizes the intermediate forms. Williamson, in the early formulations, considered these structures unstable, but later he saw them as so frequent as markets and hierarchies (Barney and Hesterly, 2004). These forms constitute a range of options larger than classical alternatives of governance structures (Williamson, 1975).

Among the classical governance structures developed by Williamson (1975), a number of other alternatives have been employed to coordinate economic activities. International joint ventures, licensing and co-production agreements, joint research programs, exploration consortia and other cooperative relationships between two or more potentially competitive firms have joined the *modus operandi* of the firms, presenting themselves as an alternative to the entry of international executives into new markets or lines of business. The new organizational forms are related to new patterns of organization of production, different mechanisms of coordination and control, as well as information and production systems and dissemination of knowledge in organizations (Baldi and Lopes, 2002).

The governance structures discussed above represent stylized models that help in understanding the diversity of economic arrangements found in today's industrial world (Powell, 1990). From the TCE point of view, the choice of one of these structures is determined by transaction costs. On the other hand, institutional theory theorists pointed out that non-reflexive issues are central in order to understand the decision process among different kinds of governance structures. Social and cultural norms and values are thought to play an important role in governance structure choice. Then, the choice of a set of governance structures is a consequence of economic and social-cultural elements of the environment. Legitimacy can be a determinant in this context.

RESEARCH METHOD

The research may be classified as qualitative (Richardson, 1985), with a descriptive level (Oliveira, 1998).

The case study technique was employed, with strategy type 2, with a simple case and two analysis units (Yin, 2005). The case study may be undertaken as an intensive analysis of a single or a few real organizations and may have the purpose of exploration, description or practical goal. Usually, the peculiar case poses problems, suggests conjectures, refutes them, illustrates a theory, but cannot generate it. Case studies are inspired on an empiricist doctrine, based on the conviction that an accumulation of facts will bring a satisfactory explanation of real situations. The case studies should not be limited to a description, but be supported by concepts and assumptions and be guided by a theoretical framework (Bruyne *et al.*, 1977). Scott (1995) argues that qualitative and quantitative case studies are appropriate for the study of social processes, and, just as qualitative research, have long been used in the study of institutional processes.

In the case of suppliers' insertion, the analysis unit was the action of inserting the supplier in the supply chain through PROMINP. As to the issue of legitimacy and transaction costs, the analysis unit was the relationship between Petrobras and the goods or services suppliers which have been included in the production chain through actions of PROMINP. The study covered a period of five years between 2003, PROMINP's starting year, and 2008, when the research project was completed.

DATA SOURCES AND COLLECTION

Data collection was performed in two stages. In the first stage secondary data from consultation from two sources were collected: Petrobras' internal journal and Results Based Strategic Management Information System (SIGEOR) from the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE), available on <http://www.sebrae.com.br/uf/rio-grande-do-norte/go/projects/>. In both sources, since many other data were available, the focus was on information about PROMINP. The use of these sources was interesting because it allowed to complement the program characterization and served as a counterpoint to the perceptions of two important actors involved in the process of insertion: Petrobras and SEBRAE, which have an intensive interaction with local enterprises. The fact that the main author is a Petrobras employee enabled the choice of secondary data sources, as well their analysis.

In the second step, data were collected through nineteen semi-structured interviews (Gil, 1999; Hayman, 1984; Marconi and Lakatos, 2002), conducted mainly individually and at the interviewees' institutions. The recorded interviews totaled 16 hours and 33 minutes.

The interviewees were divided into two groups: the first group consisted of seven actors involved in the process of insertion of suppliers in the production chain, and included six individuals of different institutions that lead PROMINP. The seventh actor was Petrobras' Manager of Operational Support, who is in charge of the activities of material purchasing and

contracting of services. To select individuals from this group, a previous survey was performed with the Executive Secretary of PROMINP in Rio Grande do Norte, in order to identify the main actors involved in actions of insertion. After starting data collection some individuals with low representation and participation in the program were discarded from the interviews. So, interviews were conducted with seven individuals involved with the insertion of suppliers.

The second group consists of twelve executives of companies involved in relations of service and supply of goods with Petrobras in Rio Grande do Norte. To select company leaders, initially we chose to work with companies located in Mossoró because this town concentrates more enterprises that benefited from actions of PROMINP (thirty-eight of a total of sixty-two). Within this group, a new selection was made according to activity type, which selected those whose activities involve transactions with specific assets. Additionally, at least one representative from each of these activities was chosen, giving preference to companies that have a tradition in providing services to Petrobras. The adoption of this criterion resulted in the selection of twelve companies.

DATA ANALYSIS

Interviews were literally transcribed for later analysis. Through a triangulation technique their contents were confronted with secondary data collected. Data were broken down into smaller units and then grouped into categories related to each other in order to emphasize patterns, themes and concepts.

Information concerning the insertion of suppliers in the process enabled the characterization of PROMINP, the description of its actions and results, and the mapping of its institutional field of reference. With regard to legitimacy, it was made content analysis through the use of codes that allowed comparison with legitimation strategies identified by Suchman (1995). As to transaction costs we employed an analysis framework with three variables and fourteen categories, based on Williamson (1975, 1989, 1995, 1996a), Allen (2006), Gorbaneff and Restrepo (2007) and Zaibet *et al.* (2005).

RESULTS AND DISCUSSION

A CHARACTERIZATION OF PROMINP

PROMINP adopts a policy of minimum local content and may be inspired by the policy of substitute imports. The program's philosophy is linked to the idea of local productive arrangements.

The program is implemented by the Mines and Energy Ministry (MME) and Petrobras. The latter, as a company partially owned by the State and the largest operator in the oil and gas sector in Brazil, is used to diffuse the program in the producing States. Many entities also participate in the program, such as the National Bank of Economic and Social Development (BNDES), the National Organization of the Petroleum Industry

(ONIP), the Brazilian Institute of Oil, Gas and Biofuels (IBP) and the National Confederation of Industry (CNI). The Federal Government is the major program funder through MME.

The program's governance structure is based on the creation of regional forums in the States, with coordination usually made by representatives of Petrobras, which also coordinates the national PROMINP. The role of regional forums is "to meet the demands not mapped in the regional portfolio of investments in the sector, encourage the provision of goods and services by local industry and include small and micro enterprises in the oil and natural gas chain" (PROMINP, 2007, p. 3).

Furthermore, these forums serve as spaces for discussion at the regional level where, on the basis of the identification of oil and natural gas industry demands, opportunities for development and training for local suppliers of goods and services are identified. The regional forums increase the program's capillarity, "allowing the identification of new opportunities that contribute to increasing the local content" (PROMINP, 2007, p. 3).

The program focuses on capacitating providers of oil and gas production chain and operates in the States where the production of these energy sources occurs. By fomenting domestic industry based on competitiveness and sustainability, it encourages the formation of local productive arrangements, with Petrobras representing the State in the process. This is an industrial concentration encouragement case sponsored by the State where there is a generation of a specialized demand, the attraction of technical workers and the training of local workers. The generation of external economies from the existence of spillovers (Marshall, 1982) favors the permanence of local companies and the installation of new entrants.

The program can also be explained as an attempt by the State to establish economies of scale arising from the interaction of rising incomes, transport costs and demand (Krugman, 1992), or the creation of demand and factor conditions (Porter, 1993) to develop the oil and gas industry on the local level. Anyway, it is a process in which the government operates almost alone (Schmitz, 1997) to create the conditions that lead to industrial concentration.

Although the program has been originated from State action, its presence is not clearly perceived by the interviewees, and, when it is perceived, it is linked to the Federal Government, with little visibility of the State government and of actions by municipalities. Moreover, the institutional action of State and municipalities, when it does exist, is more reactive than proactive.

Petrobras is the great articulator of PROMINP. As the largest purchaser of the chain, it directs the agenda and the course of the program. Maybe for strategic reasons, like the fact that the company directly benefits from the inclusion of enterprises in the production chain, and due to statutory limitations in dealing with suppliers, Petrobras does not deal directly with companies within PROMINP, but through other institutions, such as SEBRAE, which promotes various actions

aiming to integrate suppliers, to articulate, and to encourage companies to participate in the program.

Educational institutions, in turn, format and operate courses addressed to workforce qualification. Outstanding among them are the Federal Center for Technological Education (CEFET) and the National Service for Industrial Learning (SENAI). Universities have little participation in the program.

In the wake of PROMINP, Redepetro/RN was created, which is a company network formed under the coordination of a group of people from various institutions, mainly from CEFET and SEBRAE, aiming to articulate companies, research centers and support institutions, identify and exploit business opportunities, generate business through the alignment of supply and demand, business training and technological development (Redepetro Folder).

Forty-five institutions were identified, forty being national and five international organizations, as members of the program's institutional context of reference (Machado-da-Silva *et al.*, 1999), which indicates that it is broad and complex. These institutions play different roles as representatives of the productive chain links, exert regulatory and legislative pressure, meet the technical environmental demands, legitimate practices or provide symbolic demonstrations.

In this context there is strong participation of employers' entities, with thirteen institutions. This reflects the range of the oil and gas production chain, which involves several segments, as well as the importance that these activities have for the performance of the sector. So, the actions of PROMINP cannot be designed only to meet the chain tip demands, represented mainly by Petrobras' operations, but should consider the whole chain, under the risk of not resolving the existing bottlenecks.

There is also a great participation of institutions that exert regulatory and normative pressures (DiMaggio and Powell, 1999b) in terms of the regulation of activities, standardization, certification and manpower qualification, with eleven institutions in these categories. This serves as a harbinger for the strong regulatory and normative character found in the organizational field under study.

The presence of technical-scientific reference institutions, as well as some engineering research, may be explained as a response to demands of the technical environment (Scott and Meyer, 1999), while the mention of a consultancy may be seen as a symbolic demonstration (Meyer and Rowan, 1999) associated with the compliance with ideals, which is a strategy of moral legitimacy (Suchman, 1995).

There is reference to internationally recognized institutions, perhaps as a way of legitimizing the practice in the organizational field. The compliance with internationally accepted standards, such as the American Petroleum Institute (API) standards and certification processes through bodies such as Bureau Veritas (BV) and Det Norske Veritas (DNV) serves to expand the legitimacy to areas outside the national borders.

Two companies were quoted as references due to their practices in operation standardization and initiatives for social responsibility. They may be seen as those that disseminate rational myths in the organizational field under study (Meyer and Rowan, 1999).

So, the institutional context of PROMINP is broad and complex and constituted by institutions that justify their presence for several reasons, such as representing the supply chain segments, exerting regulatory and normative pressures, responding to technical environmental demands, legitimizing practices or providing symbolic demonstrations.

LEGITIMATION STRATEGIES ASSOCIATED WITH PROMINP

It was observed that legitimization strategies associated with pragmatic legitimacy and cognitive legitimacy are more present than strategies associated with general legitimacy and moral legitimacy. Also, these strategies are employed most notably to gain legitimacy and to a lesser degree to keep it. References to repair of legitimacy are negligible (Suchman, 1995).

Regarding pragmatic legitimization strategies, it was observed that the most frequent ones are those related to protect exchanges: stockpile trust, police reliability, and communicate honestly. These three strategies allow Petrobras to manipulate the environment, which it does through popularization and standardization of new models. In response, suppliers adopt the strategy of seeking certifications, while they absorb the organizational field culture, emanated mainly from Petrobras. The legitimization strategies' interaction is shown in Figure 1.

Petrobras' stockpiling of trust may be identified through the perception that the respondents believe that the company used to usually honors its commitments; carries honestly its bids; is very serious; works correctly and with honesty, in compliance with laws, rules and certifications. According to interviewees, Petrobras' leading role gives more credibility to the program.

The strategy of communicating honestly has been intensively used by Petrobras as a means to protect exchanges, as well as in the relationship with suppliers. This can be seen in the way that the company acted in the period in which it publicized the program, the company's strategic planning and the diagnosis of their demand. Petrobras also communicates clearly to suppliers the requirements that have to be met to become a provider, as well as changes in the process of carrying out transactions with the company, which during the period covered by this article changed to e-procurement tools.

So, the combined effect of pragmatic legitimization strategies of stocking trust, policy of monitoring reliability and communicating honestly allows Petrobras to manipulate the environment, allowing changes in the organizational field to be made under its control and reflecting its interests (DiMaggio, 1999).

The environment manipulation by Petrobras is made

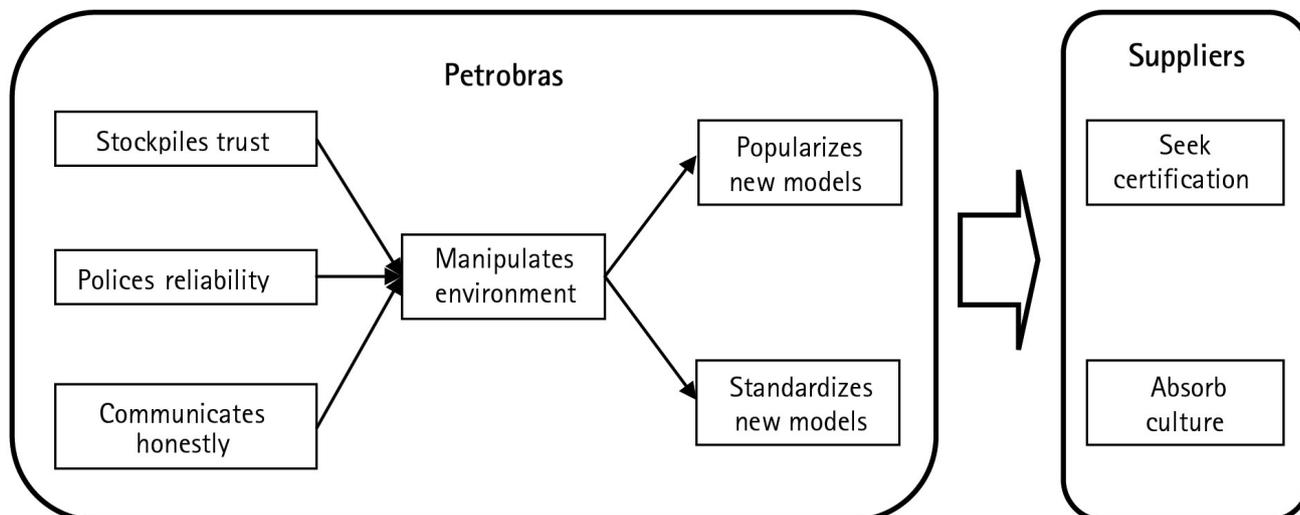


Figure 1 – Interaction of legitimization strategies.

Source: Prepared by authors.

through two strategies designed to gain cognitive legitimacy: popularization and standardization of new models. According to Suchman (1995), cognitive legitimacy, once established, is more elusive to obtain, more difficult to handle, more subtle, deeper and more self-sustaining. The cognitive legitimacy, once established, acts in the institutions' interpretative schemes (Machado-da-Silva *et al.*, 1999). Thus, the permanence of changes in the organizational field is acquired.

With the capillarity that Petrobras has with the other actors in the field, it disseminates the new standards. With the power that it has to exert coercive pressure it imputes new standards, which, if not followed, may entail penalties that can go as far as excluding a supplier from the chain. In this way, the company can create technical and institutional demands that define changes in the organizational field (DiMaggio, 1999; Meyer and Rowan, 1999; Scott and Meyer, 1999).

There are a lot of new models popularized by Petrobras. One of these is the new profile required from professionals, which induced the hiring of qualified workmanship, and the inclusion of women in the industry, which was rarely seen some decades ago. Another disseminated procedure was the adoption of stricter policies for Health, Safety and Environment (HSE), where the company made considerable efforts to disseminate its practices, making them widely known in the organizational field.

Regarding standardizing new models of strategy, Petrobras acted in order to standardize requirements for a company to become a production chain supplier, use of e-commerce tool for carrying out commercial transactions, and HSE requirements.

The results of the institutionalization process led by Petrobras can be seen more clearly in the adoption of cognitive strategies by suppliers to gain legitimacy through the choice of titles, specifically the quest for certification. Moreover,

companies adopt models which are popularized and standardized by Petrobras. Whether through coercive pressures or by mimetic behavior, they adapt themselves to the organizational field culture.

There is a great compliance of companies to the local oil industry culture. It seems that in order to participate in the organizational field it is not necessary only to meet requirements that are formally documented, such as those from Petrobras, but also to incorporate socially accepted practices (Hatch, 1997).

The oil sector in the region was characterized as having a culture with a strong presence of requirements relating to security, which requires that participants are prepared for emergency actions in certain situations, which works in very short times, requires care and rigor in operations and is strongly anchored in working with standards, quality and organization.

New companies in the field have difficulty to adapt themselves to the working mode, which is strongly absorbed by the companies involved in the chain. Standardized procedures disseminated among organizational field members act to force new entrants to adopt a mimetic behavior as a *sine qua non* survival condition.

PROMINP has been a strong tool for spreading the oil culture. In fact, the various institutions involved in the program produce a cultural mix resulting from the culture of each institution individually. The choice of the participating institutions should not be seen as made in a random way, but in tune with possibility of adding values to the sector's culture.

RESULTS IN TRANSACTION COSTS

The variable assets specificity was operationalized through the following categories: place specificity, physical assets specificity, human assets specificity and dedicated

assets. In order to categorize the physical assets specificity, we considered items identified by Petrobras as being of low competitiveness. This classification includes equipment supply and service provision items.

It was possible to identify some physical assets classified as specific to the production chain, such as mineral products, workover rigs, tugs, helicopters, tubes, industrial laundry and instruments maintenance and calibration services. Specific physical assets, however, are not the most critical ones for the chain. This position belongs to human assets, which represent the biggest bottleneck for the sector's maintenance and expansion.

Because human assets constitute a critical specific asset, one option for Petrobras would be to internalize this asset in its hierarchical structure (Williamson, 1989). This shows, however, undesirable effects such as increase in trade union power, increase in expenditures with governance structure and reduction of mobility and flexibility to make changes in the labor force. One interviewee believes that "it is easier for Petrobras to replace a supplier than to replace an employee, because the labor laws are very protective, and it is more difficult for Petrobras to have flexibility by increasing labor. It is very easy to replace a company. Petrobras makes a contract dissolution and puts other company in the place" (E6).

There is a shared understanding that Petrobras hires professionals with good skills for its staff, mainly in key areas. On the other hand it outsources tasks to carry out activities that aren't part of its core business. Its organizational structure, thus, transfers the dependency on internal employees to a very large dependence on outsourced human assets.

The dependence on specific human assets is not an exclusive practice adopted by Petrobras. Other companies in the region complain about the difficulty in finding and retaining professionals with the skills required by the industry. This lack of professionals in the market creates conditions for opportunistic behaviors, which may be minimized by actions of the program, once it qualifies professionals for functions in which there is a greater scarcity in the market. Some professionals that the market is not able to supply efficiently are maintenance electricians, electricity commissioners, drilling rig operators, industrial, mechanical, civil, electrical, and instrumentation project designers, and welding, pipelines, and painting inspectors.

Thus, considerations related to chain transaction costs should focus primarily on specific human assets and, secondarily, on specific physical assets.

The variable bounded rationality was analyzed on the basis of both increase of uncertainty and reduction of uncertainty.

One factor that contributes to increasing uncertainty are short duration contracts and the so-called "umbrella contracts". Short contracts involve uncertainty because the contracted firms do not usually know whether the contractors will continue providing services after the term. A new bid is usually made, without any differential treatment for those firms. Given the

uncertainty, companies avoid investments in purchasing new equipment, as well as improving processes and technological improvements.

The "umbrella contracts" are characterized by a wide and varied scope of services, which are paid per unit price items. They are considered of high risk due to variability in the billing and the high share of fixed costs in the total cost of the company. Since it's necessary to maintain a large structure during the entire contract period, any decrease in revenues may result in losses to the company. As a way to protect themselves, companies consider a higher risk factor and increase the prices of offered services.

The reduction of uncertainty is related to labor qualification, business training, to the dissemination of Petrobras' demand and its business planning, and clear specification of requirements in contracts.

Labor qualification reduces uncertainty by helping to improve technical capital, productivity and quality of services, increasing the chances of continuing the business relationship. Thus, by collaborating with the improvement of the workforce's training, PROMINP increases the stability of contractual relations, since it reduces the uncertainty about the availability of specific human assets.

Business training, in turn, through training and process certification, enables businesses to develop standardization, prevision and control of activities that result in better prepared budgets. Thus, the chances of winning the bidding processes and of reducing the risk of contractual performance are increased. Price reductions due to better control resulting from certification processes were recorded.

The dissemination of Petrobras' demand and its business planning, however, was identified as the main action to reduce supplier uncertainty. According to respondents, access to this information mitigates risk, since it is possible to associate the services that are being contracted with Petrobras' strategic objectives. Thus, the disclosure of such information enables companies to participate in bidding and make investments with greater certainty about the contract.

It may be concluded, therefore, for the variable bounded rationality, that there is a tendency to reduce the uncertainty in the sector over the covered period, which may contribute to transaction cost reduction.

The variable opportunism was operationalized through two groups of categories: one associated with safeguard increase and the other with safeguard reduction. The concept of opportunism has been operationalized by authors such John (1984), Provan and Skinner (1989), and Achrol and Gundlach (1999), in order to make more evident the possibility of assessing the advantages and disadvantages of different governance structures. In this work, the logic adopted is that safeguard increase is a preventive measure against high risk of opportunistic behavior and, therefore, indicative of increasing transaction costs. Safeguard reduction, in turn, is indicative of

a lower risk of opportunistic behavior and of transaction costs reduction. It was observed that there is a tendency to increase safeguards in order to avoid opportunistic behavior.

Categories associated with safeguard increase measures were: adoption of more complex contracts, shorter contracts, and reduction of both trust and dependence. Of this group, the most cited ones were more complex contracts and reduction of dependence.

Petrobras has extended contractual requirements regarding manpower qualification, certification of process and evidence of compliance with labor obligations. There is an understanding that these requirements increase business costs, which are transferred to Petrobras.

Regarding reduction of dependence, the understanding is that Petrobras depends very much on its suppliers, but it tries to find alternatives to reduce this dependence through its high bargaining power, the great number of suppliers and its presence throughout the national territory. On the other hand, local suppliers depend almost exclusively on Petrobras for the continuity of their business activities.

Even with this high bargaining power, Petrobras needs to have more companies registered, mainly due to the existence of specific assets in the various regions where it operates. Thus, the expansion of local suppliers may be seen as a broader strategy to reduce the dependence on outside and local suppliers. This enables reduction in operation costs and allows faster response in emergency situations and in case of a failure by large suppliers.

Categories associated with safeguard reduction were: less complex contracts, longer contracts, increase in trust and increase in dependence. In this group, the category increase of dependence was the one most cited. The other categories had a negligible number of citations. This is an interesting result, since the category that deals with dependence reduction was also mentioned with high frequency, as already discussed. This shows that there is no consensus in the industry about the effect that the insertion of suppliers produces in the degree of Petrobras' dependence.

It can be concluded, therefore, for the variable opportunism, that there is a tendency to safeguard increase in order to avoid opportunistic behavior in the sector over the period

considered, which may contribute to increasing transaction costs. This trend is materialized mainly through the increase in contractual requirements and initiatives for reducing dependence on suppliers. Scholars have pointed to the use of safeguards as a means of reducing the tendency toward opportunism. Achrol and Gundlach (1999) specifically evaluate the use of contractual and social safeguards as a means of mitigating opportunism. Chiles and McMackin (1996) follow the same line of thought, emphasizing the increase in transaction costs due to adoption of safeguards and pointing to the increase of trust as an alternative to reduce such costs.

For a comprehensive analysis of transaction costs trends in the sector, table 1 shows the behavior of transaction costs depending on the combination of the variables bounded rationality and opportunism, in a scenario of existence of high-specificity assets.

It is possible to perceive that in an environment where there is a simultaneous occurrence of uncertainty and safeguard increase, the transaction costs tend to increase. In contrast, the reduction of uncertainty and safeguards creates a tendency of towards decreasing transaction costs.

Where there is uncertainty increasing and safeguard decrease, or uncertainty decrease and safeguard increase, it is not possible, *a priori*, to predict transaction costs behavior. In these scenarios, further investigations are required in order to identify the variable with greater influence and, then, understand the behavior of those costs. Studies that analyze transaction costs considering that there are changes in just one variable (*ceteris paribus* condition) have their limitations, because they are not representative of situations encountered in the real world. Williamson (1995), e.g., analyzes the adoption of safeguards as a determinant of transaction costs, as they influence the risk of opportunism, but does not consider the character of this framework with dynamic changes in bounded rationality. Williamson (1989) recognizes the incompleteness of TCE, pointing out as one of its shortcomings the partiality of employed models. Child and Faulkner (1998) call attention to the static character of TCE analysis.

In this study, it was observed that there is reduction of uncertainty and safeguard increase, which complicates the analysis of the result of the combination of these variables in

Table 1 – Combined effect of changes in bounded rationality and opportunism on transaction costs.

Variable		Effect in transaction costs
Bounded rationality	Opportunism	
Increasing uncertainty	Increasing safeguards	Increasing
Increasing uncertainty	Decreasing safeguards	Undefined
Decreasing uncertainty	Increasing safeguards	Undefined
Decreasing uncertainty	Decreasing safeguards	Decreasing

Source: Compiled by authors.

transaction costs behavior. Further studies would be needed to determine such costs behavior. Considerations of institutional character shed new light on the problem, helping to decipher it (Oliver, 1990, 1996; Roberts and Greenwood, 1997). Zawislak (2004) argues that companies' assets are adaptable to a tangle of institutional events and the less suited the assets are to this mess, the higher will the transactions costs be. Thus, since there is a strong adaptation process of institutions in the studied organizational field, it's possible to say that an isomorphic behavior contributes to transaction costs reduction.

CONCLUSION

The results of PROMINP are of great magnitude and extent and also encourage the increase of participation of local companies in the oil and gas production chain on a competitive and sustainable basis, according to the program's goal.

The institutional context of reference of the program is broad and has the presence of significant national and international institutions which provide the beliefs, rules and cultural norms that guide the program. PROMINP, thus, responds to coercive, normative and regulatory pressures of the organizational field, adapting itself to the expectations of the context.

From the point of view of legitimation, through strategies to gain cognitive legitimacy and maintain pragmatic legitimacy, Petrobras manipulates the environment, ensuring the program participants' conformity to its technical and institutional demands. Besides that, the cognitive legitimacy ensures that models institutionalized by Petrobras remain in the organizational field for a longer time. This manipulative conduct is not stressed by neo-sociological institutionalist authors, but is central in old institutionalism, specifically in Selznick's work.

Enterprises respond to organizational field demands through compliance with technical requirements, primarily through processes certification, and cultural changes. The RedePetro/RN, fostered and created on the basis of the interaction of PROMINP participants, presents itself as a viable alternative to the continued participation of companies in the chain, on PROMINP's institutionalized basis, even after the termination of the program. In other words, the network would take on the institutionalizing role of the field, but in this case the isomorphic pressures would change from being normative and from PROMINP into being mimetic and coercive, and would be exerted by Petrobras and other enterprises in the chain.

There are no clear gains associated with transaction costs, since in the relationship between Petrobras and its suppliers there is an increase in safeguards adoption simultaneously to a decrease in uncertainty, making it difficult to analyse the effect on the behavior of those costs. However, Petrobras did not demonstrate that reduction on transaction costs was its priority in this process. The accomplishment of its mission, which is legitimized in society, is placed as a priority. This behavior may be understood as a result of a political

decision to adopt sub-optimal goals, i.e. a strategy aligned to the concept of inefficiency by design (Williamson, 1996b, 1999, 2000). On the other hand, gains in legitimacy can be seen as an accumulated capital that can serve as a distinctive competition factor that generates economic gains.

In terms of theoretical findings, we can conclude that Institutional Theory presents complementary explanatory power for actions that are also explained in economic terms. Thus, it may be used as a theoretical support concurrent with other theories, such as TCE. Albeit the TCE model may explain the program's actions, the ultimate goals of actions taken by Petrobras are better explained from an institutional perspective.

For future studies the authors suggest the use of quantitative analysis, especially as regards transaction costs analysis, and the use of Brazilian authors to mix institutional dominant discourse with local reality. In the same way, a historical study with emphasis on the trajectory of Brazilian industrial development and the creation of Petrobras may bring important elements to understand the phenomenon.

REFERENCES

- ACHROL, R.S.; GUNDLACH, G.T. 1999. Legal and social safeguards against opportunism in exchange. *Journal of Retailing*, 75(1):107-124. [http://dx.doi.org/10.1016/S0022-4359\(99\)80006-2](http://dx.doi.org/10.1016/S0022-4359(99)80006-2)
- ALLEN, D.W. 2006. Theoretical difficulties with transaction costs measurement. *World Scientific*, 2(1):1-14.
- BALDI, M.; LOPES, F.D. 2002. Rede - forma híbrida ou nova forma? *Revista Portuguesa e Brasileira de Gestão*, 1(3):32-46.
- BARNEY, J.B.; HESTERLY, W. 2004. Economia das organizações: entendendo a relação entre as organizações e a análise econômica. In: S.R. CLEGG; C. HARDY; W.R. NORD (eds.), *Handbook de Estudos Organizacionais*. São Paulo, Atlas, vol. 3, p. 131-179.
- BRUYNE, P.; HERMAN, J.; SCHOUTHEETE, M. 1977. *Dinâmica da pesquisa em Ciências Sociais*. Rio de Janeiro, F. Alves, 256 p.
- CARVALHO, C.; VIEIRA, M. 2003. Contribuições da perspectiva institucional para a análise das organizações: possibilidades teóricas, empíricas e de aplicação. In: C. CARVALHO; M. VIEIRA (Orgs.). *Organizações, cultura e desenvolvimento local: a agenda de pesquisa do Observatório da Realidade Organizacional*. Recife, Editora UFPE, p. 23-40.
- CHILD, J.; FAULKNER, D. 1998. *Strategies of cooperation: managing alliances, networks and joint ventures*. Oxford/New York, Oxford University Press, 378 p.
- CHILES, T.H.; MCMACKIN, J.F. 1996. Integrating variable risk preferences, trust, and transaction costs economics. *Academy of Management Review*, 21(1):73-99.
- COASE, R. 1937. The nature of the firm. *Economica*, 4. Available at: <http://www.cerna.ensmp.fr/Enseignement/CoursEcolIndus/SupportsdeCours/>, access on: 03/01/2008.
- DAVIS, P.S.; DESAI, A.B.; FRANCIS, J.D. 2000. Mode of international entry: an isomorphism perspective. *Journal of International Business Studies*, 31(2): 239-258. <http://dx.doi.org/10.1057/palgrave.jibs.8490904>
- DIMAGGIO, P. 1999. Construcción de un campo organizacional como un proyecto profesional: los museos de arte de los Estados Unidos, 1920-1940. In: W. POWELL; P. DIMAGGIO (eds.), *El nuevo institucionalismo en el análisis organizacional*. México, Fondo de Cultura Económica, p. 333-361.

- DIMAGGIO, P.; POWELL, W. 1999a. Introdução. In: W. POWELL; P. DIMAGGIO (eds.), *El nuevo institucionalismo en el análisis organizacional*. México, Fondo de Cultura Económica, p. 33-75.
- DIMAGGIO, P.; POWELL, W. 1999b. Retorno a la jaula de hierro: el isomorfismo institucional y la racionalidad colectiva en los campos organizacionales. In: W. POWELL; P. DIMAGGIO (eds.), *El nuevo institucionalismo en el análisis organizacional*. México, Fondo de Cultura Económica, p. 104-125.
- GIL, A.C. 1999. *Métodos e técnicas de pesquisa social*. São Paulo, Atlas, 208 p.
- GORBANEFF, Y.; RESTREPO, A. 2007. Determinantes de la integración en la cadena de distribución de combustible en Colombia. *Cuadernos de Administración*, 20(33):125-146.
- HALL, R.H. 2004. *Organizações: estruturas, processos e resultados*. São Paulo, Prentice Hall, 324 p.
- HATCH, M.J. 1997. *Organization Theory: modern, symbolic, and postmodern perspectives*. Oxford, Oxford University Press, 416 p.
- HAYMAN, J.L. 1984. *Investigación y educación*. Barcelona, Paidós Educador, 194 p.
- JOHN, G. 1984. An empirical investigation of some antecedents of opportunism in a marketing channel. *Journal of Marketing Research*, 21(3):278-289. <http://dx.doi.org/10.2307/3151604>
- KRUGMAN, P. 1992. *Geografía y comercio*. Barcelona, Antoni Bosch Editor, 160 p.
- MACHADO-DA-SILVA, C.L.; FONSECA, V.S.; FERNANDES, B.H. 1999. Mudança e estratégia nas organizações: perspectivas cognitiva e institucional. In: M.M. VIEIRA; L.M. OLIVEIRA (orgs.), *Administração contemporânea: perspectivas estratégicas*. São Paulo, Atlas, p. 102-118.
- MARCONI, M.A.; LAKATOS, E.M. 2002. *Técnicas de pesquisa*. São Paulo, Atlas, 282 p.
- MARSHALL, A. 1982. *Princípios de Economia*. São Paulo, Abril Cultural, 272 p.
- MEYER, J.; ROWAN, B. 1999. Organizaciones institucionalizadas: la estructura formal como mito y ceremonia. In: W. POWELL; P. DIMAGGIO (eds.), *El nuevo institucionalismo en el análisis organizacional*. México, Fondo de Cultura Económica, p. 79-103.
- MOTTA, F.C.; VASCONCELOS, I.F. 2002. *Teoria geral da administração*. São Paulo, Pioneira Thomson Learning, 441 p.
- OLIVEIRA, S.L. 1998. *Tratado de metodologia científica: projetos de pesquisas, TGI, TCC, monografias, dissertações e teses*. São Paulo, Pioneira, 320 p.
- OLIVER, C. 1990. Determinants of international relationships: integration and future directions. *Academy of Management Review*, 15(2):241-265.
- OLIVER, C. 1996. The institutional embeddedness of economic activity. *Advances in Strategic Management*, 13:163-186.
- PORTER, M. 1993. *A vantagem competitiva das nações*. Rio de Janeiro, Campus, 897 p.
- POWELL, W. 1990. Neither market nor hierarchy: network forms of organization. *Research in Organizational Behavior*, 12:295-336.
- PROMINP. 2007. *PROMINP 2007: 4 anos de resultados*. [S. l.], [s. n.], 24 p.
- PROVAN, K.G.; SKINNER, S.J. 1989. Interorganizational dependence and control as predictors of opportunism in dealer-supplier relations. *The Academy of Management Journal*, 32(1):202-212. <http://dx.doi.org/10.2307/256427>
- RICHARDSON, R.J. 1985. *Pesquisa Social: métodos e técnicas*. São Paulo, Atlas, 287 p.
- ROBERTS, P.W.; GREENWOOD, R. 1997. Integrating transaction cost and institutional theories: toward a constrained-efficiency framework for understanding organizational design adoption. *Academy of Management*, 22(2):346-373.
- SCHMITZ, H. 1997. Collective efficiency and increasing returns. Working Paper N°. 50. Available at: <http://www.ids.ac.uk/ids/bookshop/wp/wp50.pdf>, access on: 20/07/2004.
- SCOTT, W.R. 1995. *Institutions and organizations*. Thousand Oaks, SAGE Publications, 178 p.
- SCOTT, W.R.; CHRISTENSEN, S. 1995. Conclusion. In: W.R. SCOTT; S. CHRISTENSEN (eds.), *The institutional construction of organizations: international and longitudinal studies*. Thousand Oaks, SAGE Publications, p. 302-313.
- SCOTT, W.R.; MEYER, J. 1999. La organización de los sectores sociales: proposiciones y primeras evidencias. In: W. POWELL; P. DIMAGGIO (eds.), *El nuevo institucionalismo en el análisis organizacional*. México, Fondo de Cultura Económica, p. 154-190.
- SUCHMAN, M.C. 1995. Managing legitimacy: strategic and institutional approaches. *The Academy of Management Review*, 20(3):571-610.
- WILLIAMSON, O.E. 1975. *Markets and hierarchies, analysis and antitrust implications: a study in the economics of internal organization*. New York, Free Press, 286 p.
- WILLIAMSON, O.E. 1989. *Las instituciones económicas del capitalismo*. México, Fondo de cultura económica, 435 p.
- WILLIAMSON, O.E. 1995. Transaction costs economics and organization theory. In: O.E. WILLIAMSON (ed.), *Organization theory from Chester Barnard to the present and beyond*. New York, Oxford University Press, p. 207-256.
- WILLIAMSON, O.E. 1996a. Economics and organization: a primer. *California Management Review*, 38(2):131-146.
- WILLIAMSON, O.E. 1996b. *The mechanisms of governance*. New York, Oxford University Press, 429 p.
- WILLIAMSON, O.E. 1999. Public and private bureaucracies: a transaction cost economics perspective. *Journal of Law, Economics and Organization*, 15(1):306-342. <http://dx.doi.org/10.1093/jleo/15.1.306>
- WILLIAMSON, O.E. 2000. The new institutional economics: taking stock, looking ahead. *Journal of Economic Literature*, 38:595-613. <http://dx.doi.org/10.1257/jel.38.3.595>
- YIN, R.K. 2005. *Estudo de caso: planejamento e métodos*. Porto Alegre, Bookman, 212 p.
- ZAIBET, L.; BOUGHANMI, H.; HABIB, Q. 2005. Assessing market efficiency: a transaction costs approach. *Journal of International Food & Agribusiness Marketing*, 17(2):245-259. Available at: <http://www.haworthpress.com/web/JIFAM>, access on: 21/04/2008.
- ZAWISLAK, P.A. 2004. Nota técnica: Economia das organizações e a base para o pensamento estratégico. In: S.R. CLEGG; C. HARDY; W.R. NORD (eds.), *Handbook de Estudos Organizacionais*. São Paulo, Atlas, vol. 3, p. 180-185.

Submetido: 18/08/2011

Aceito: 09/05/2012

ANTONIO RUFINO DA COSTA

Universidade do Estado do Rio Grande do Norte
Av. Ayrton Senna, 4241, Neópolis
59088-100, Natal, RN, Brasil

FERNANDO DIAS LOPES

Universidade Federal do Rio Grande do Sul
Rua Washington Luis, 855, Centro
90010-460, Porto Alegre, RS, Brasil