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The Privatization Paradox of the Electrical Distribution Utilities in Peru

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1 Introduction

1.1 Research Problem

This research will explain why stakeholders (workers, politicians, media, suppliers, consumers and population) reject the privatization of the electric distribution utilities and to find out the factors that explain how a privatization process can be run in order to be successful.

The Literature Review leads us to say that a successful privatization depends on the utility efficiency, regulatory issues, privatization process and more importantly on how the stakeholders' interests and beliefs are taken into account.

Jamasb et. al. (2005) stated the main theories that examine why ownership and market oriented reforms might lead to a greater efficiency are the following: Property Rights, Bureaucracy, Influence, Economic Regulation and Commitment.

In developing countries the studies show that the privatized firm performs better than the SOE. (Bernal and Leslie 1999, Gallardo 2000, Megginson, Nash, Netter, and Schwartz 2000). A recent study made by Fischer, Gutierrez, and Serra (2003), made a historic review of 37 Chilean SOES that were privatized during 1981-2001. They find that privatized firms reached a significant improvement in efficiency, but this improvement is no different from the change experienced by other private firms in their respective economic sectors. This means that the evaluated Chileans SOES were efficient before privatization.

In Peru, a developing country, efficiency measurement studies show that the electric distribution private utilities obtained better profits, less energy losses and more consumers per employee (Alva and Bonifaz, 2004). But it is not understood why the population disagrees with the continuing of privatization. To understand this, it is necessary to analyze other factors such as the regulatory issues, the privatization process itself and the interests and beliefs of the stakeholders.

The question is, if the performance of the private distribution utilities in Peru is better than the state-owned, why does the population reject the completion of the privatization of the state-owned utilities?

The conventional hypotheses are (a) lack of communication of the benefits of the privatization, (b) lost jobs and the inadequate treatment of the laid - off workers, (c) tendency to forget the poor administration of the SOES, (d) privatization accompanied by a poor macroeconomic policy, and (e) poor performance of some regulators (Clifford 1993).

Other hypotheses that follow the ideological context are (a) hostility and lack of confidence towards the State, (b) absolute property rights, (c) permissive competition policies with private monopolies, (d) elimination of subsidies and (e) inability of consumers to pay their bills (Távara 2004).

Other hypotheses are related with the conflict of interests of the privatization committee members, such as (a) transactions with families or friends, (b) acceptance of substantial gifts, (c) use of influence, (d) use of public assets for private benefit, (e) use of information for private benefit and (f) openness to lobbying. (Távara, 2004)

1.2 Research Purpose

One objective of the research proposal is to explain why stakeholders reject the privatization of the electric distribution utilities. A second objective is to find the factors that can lead to a successful privatization of the remaining state-owned utilities in Peru.

The efficiency analysis of the electric distribution utilities in Peru shows that the private utilities perform better than the state-owned, but since 2001 the privatization process of the remaining electric distribution utilities has been stopped due to the rejection of the population. This paradox can be explained by the traditional hypothesis referring to the interest of the stakeholders, ideological context and the ethics of the members of the privatization committee during the process.

Understanding the interests and beliefs of the stakeholders will be useful for explaining the privatization paradox and will be used for a future policy that the government may adopt in order to reinitiate the privatization process or to define the future treatment of the state-owned distribution utilities in Peru.

2 Conceptual Framework

2.1 Introduction

The literature review will follow the map shown in Figure N° 1.

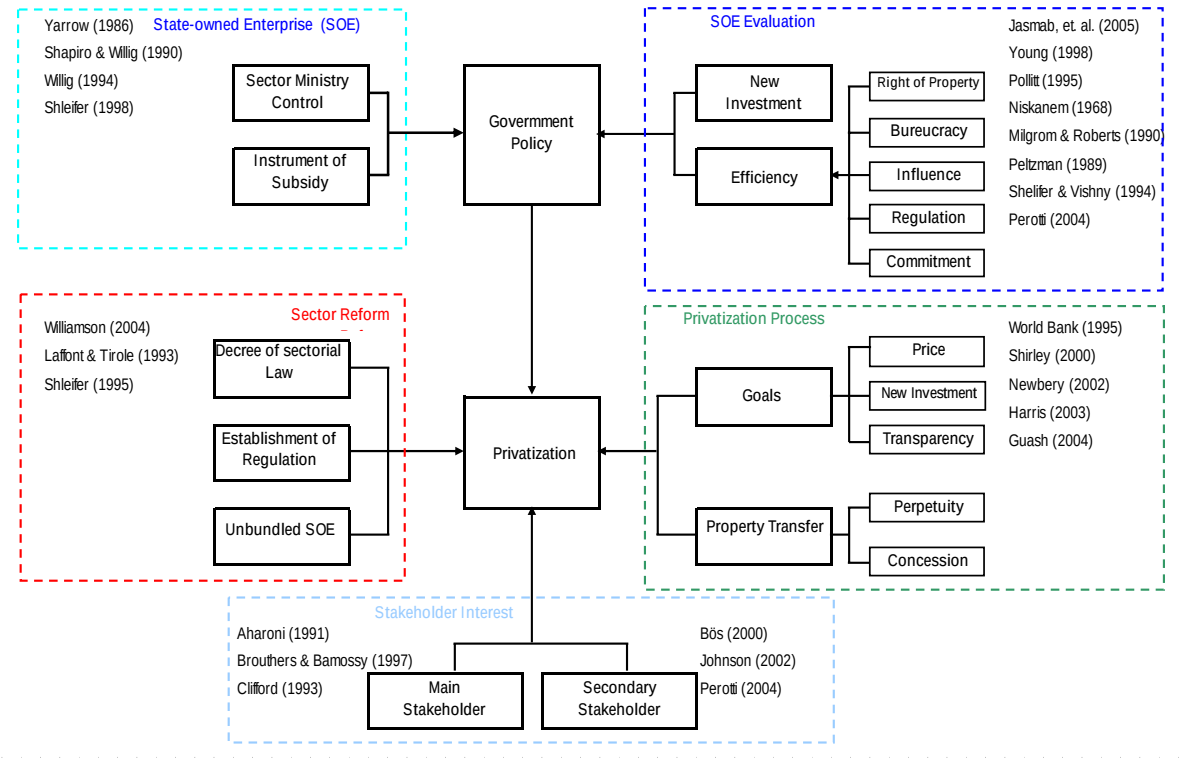

Figure Nº 1. Map of the Literature Review

2.2 Ownership

The question is if the ownership of the utilities influences the good performance of the utilities.

Laffont and Tirole (2002) stated that a public enterprise is a firm whose assets are, in the majority, owned by the government who therefore performs both internal and external control.

The property rights theory claims that the shareholders of a private firm can control the managerial team in order to increase profits while the public firms can not. For that reason the performance of public firms is by definition less than the privates. (Hinds, Sanchez and Schap 1990). Otherwise, the potential owners, capable of increasing profits by reducing costs, would be interested in purchasing the private utility via stock market takeover (Pollitt 1997).

Niskanen (1968) (as cited in Pollitt 1997) said that the bureaucracy theory model comprehends the behavior of civil servants and politicians who may be responsible for running state-owned utilities. Their managers are not interested in the profitability of the firm or in minimizing its costs. Indeed they may have the objective of maximizing the budget of their department as this allows them to maximize departmental discretionary expenditure which is related with the number of employees or the size of its capital stock.

Milgrom and Roberts (1990) (as cited in Pollitt 1995) stated that activities occur when an individual or group of individuals attempts to increase their power within an organization at the expense of others and possibly of the organization as a whole. Pollitt (1997) said that Privatization should reduce the extent to which managers and workers are willing to incur costs in an attempt to influence the government. Also this theory highlights the role of the reduced influence activity of managers in lobbying civil servants and politicians and vice versa.

Regulation theory sustains that regulatory models and an autonomous regulatory body are necessary in natural monopoly markets in order to guarantee reasonable profits for the private owners and an efficient tariff for the consumers.

Perotti (2004) said that the private commitment problem identifies the difficulty for regulators to control significant decisions by private owners, unless government has direct control over the enterprise. The inability to commit arises from sovereign authority (the monopoly of authority) and may lead to inefficiency when coupled with biased preferences and/or political opportunism, leading to corruption, excessive spending or targeting of benefits, which in turn induces excessive taxation or interference.

2.3 Regulatory issues

The regulatory body is established to restrict the natural monopoly advantages of the regulated utilities and to protect the users from monopolistic behavior and investors from an arbitrary government action (Guash 2004)

As the electrical distribution utility operates within a natural monopoly, it is necessary to regulate it in order to limit the profits of the utility in such a way that the firm obtains a reasonable profitability over its assets and at the same time obtains a fair tariff to the consumers.

Regulation by Incentives is the use of rewards that induce the utility to reach objectives where it is empowered to act discretionally in order to get the wished-for outcomes. Peru adopted the Model Firm which is a form of Regulation by Incentives. The main criterion that guides the calculus is the use of efficient assets as base of capital, named the New Replacement Value (NRV). Operation and maintenance costs are calculated on the supposition that the model firm executes efficient activities in the provision of the distribution service of electricity.

2.4 Privatization

Privatization is based on the fact that managers of private utilities are different and superior to their peers in the public utilities. Privatization is a change from government to private ownership, and is the end-point of a continuum of changes in ownership/management.

Privatization was implemented in developing countries in order to solve the poor performance of government provision of the essential services such as water, electricity, and telecommunications. Thus privatization pursued the following goals: (a) to raise revenue for government and to cut the fiscal drain, (b) to improve the productivity of the company, (c) to attract domestic and foreign capital, and (d) to improve service, quality, and availability to the customer (Forrer 2004, Vickers and Yarrow 1991, Clifford 1993).

The electricity supply industry is divided into four activities: (a) generation: the production of electricity, (b) transmission: the transfer of electricity in bulk across the country, (c) distribution: the delivery of electricity in bulk over local networks and (d) supply: the acquisition of electricity and its sale to customers (Pollitt 1995).

The arguments in favor of privatization are sustained by many authors whose primary reason is that the public will benefit from the operational efficiency and equity that privatization is believed to bring about. The following arguments are claimed in favor of privatization: a) Increased competition in product and services, b) Increased discipline of capital markets, c) Reduction in government loans, d) Reduction in government controls, e) Reduction in politicians' controls (Lipczynski and Wilson 2001).

The arguments against privatization are sustained by many authors whose primary reason is the prejudice that the nation and consumers will have if privatization is adopted. The following arguments are claimed against privatization: a) Natural monopolies versus private monopolies, b) Short-term, c) Economies of scale and scope lost, d) No substantial difference in efficiency gains, e) The revenue obtained by the sale is lower, f) Increase of unemployment, g) Loss of Autonomy and release of nationalist sentiment, h) Expense to Government (Lipczynski and Wilson 2001).

The success of any privatization program can only be measured in terms of the objectives that motivated it, and that those objectives are likely to be different for the different actors affected by privatization. Therefore judging the success of any privatization program is likely to be difficult unless there happens to be a consensus in society about the goals prompting that program, which is highly unlikely, or unless one imposes one's own criteria for evaluation, as economists frequently tend to do (Aharoni 1991).

2.5 Stakeholders Interest

There are important stakeholders in the decision-making process that must be identified and taken into consideration. The potential stakeholders are the following: (a) Main stakeholder: workers, government privatization committee, and investors, and b) Secondary stakeholder: politicians, media communications, suppliers, consumers, and population (Aharoni 1991, Clifford 1993, Johnson 2002).

2.6 Stakeholder Beliefs

North (2005) said that economies that adopt the formal rules of another economy will have very different performance characteristics from the first economy because of different informal norms and enforcement. The implication is that transferring the formal political and economic rules of successful Western market economies to the third-world is not sufficient

condition for good economic performance. Privatization is not a panacea for solving poor economic performance.

The Peruvian electrical sector reform was made in 1992. Privatization was implemented resulting in 65% of the assets of the SOES being transferred to the private sector. In 2001, the population of Arequipa rejected the privatization of the electrical utilities and the process of the economic change in this sector has been stopped. A recent survey shows that the perception of the population is negative with respect to the privatization process. Figure N°2 shows a result of a survey made by OSINERG in 2004.

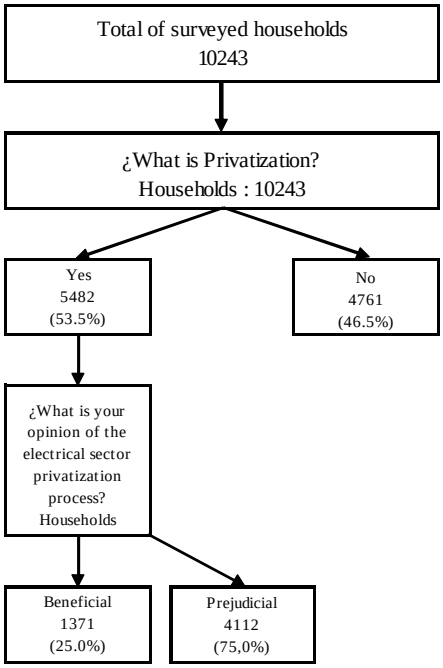

Figure Nº 2. Population perception of the privatization process
Note: Reform and Perceptions of Osinerg, OSINERG, (2004)

The population's answer reflects the results of the imposed policy of privatization in Peru. The Peruvian people depending on where they live and on the level of income have different levels of knowledge and acceptance of the privatization process. Thus, the surveyed population has its own beliefs, myths and paradigms about privatization. In Lima some agree with privatization, mainly the high income consumers, due to the improvement of the quality of service, and the low income consumers who have access to the electric service but not to the water service; however the rest, the majority of the Lima consumers, reject privatization. Those users with low income and located in other departments, mainly in the Andes, show the greatest rejection to privatization although the utility that provides service to that area remains in the hands of the State. Consequently, before restarting the privatization process, it is necessary to understand the beliefs that the population holds with respect to privatization.

3 Questions, Elements and Research Design

3.1 Nature and Research Importance

The literature review permits the building of a preliminary framework, the research questions and the choice of the research methodology.

During the last decade the Peruvian Government was the leader of the process while the Privatization Committee focused on the high sale price of the utilities. The privatization key factors were set according to the interest of the government. The private utilities' policies were oriented to obtain the maximum profitability. This process resulted in an incomplete privatization and the rejection of the population.

One purpose of this research is to understand why the stakeholders reject privatization despite the fact that the private utilities during the last decade have shown efficient results in terms of supply coverage, improvement of service quality and safety of the electric system, while the state-owned utilities have shown poor profitability, lack of service coverage, poor quality of service and poor safety (Alva and Bonifaz 2004).

Therefore it is very important to discover the interests and beliefs why the workers, politicians, media, suppliers, consumers and general public reject privatization.

Another important issue is to develop a theoretical model that explains the interrelation that these factors play before, during and after the privatization process. If the interests and beliefs of the stakeholders are comprehended, then it is possible to formulate a good policy in order to reach a successful privatization. Figure N° 3 shows an initial identification of the interests of the stakeholders with respect to privatization.

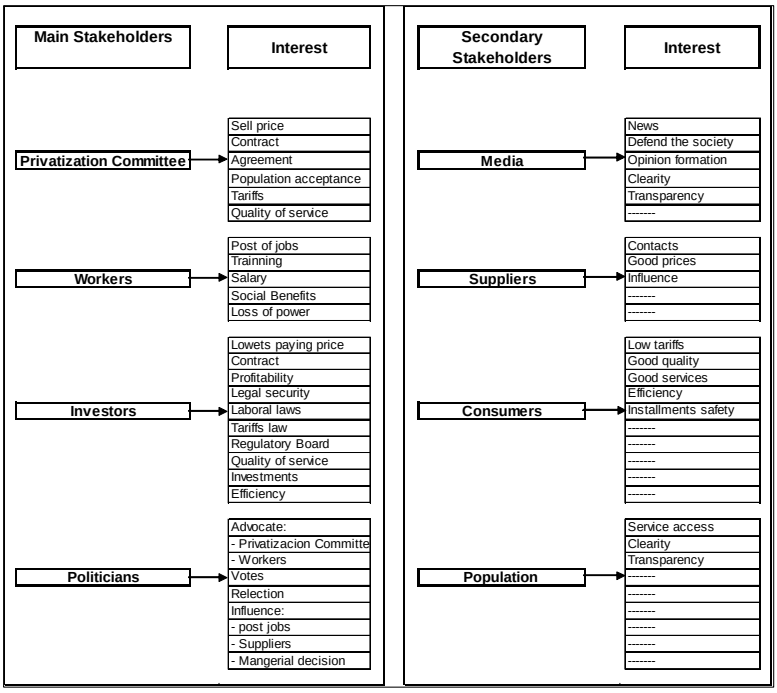

Figure Nº 3. Stakeholders' Interest and Beliefs

Aharoni (1991) claimed that it is not possible to satisfy all the stakeholders' interests, but it is possible according to the Bulldozer Privatization Committee to satisfy the interests of at least the main stakeholders, as they said that a successful privatization can be reached if the main stakeholders can arrive at an agreement.

The interests of the main stakeholders where the agreement represented by the intersection of the main stakeholders is a starting point for defining the factors that make for a successful privatization.

North (2005) said that transferring the formal political and economic rules of successful Western market economies to the third-world is not a sufficient condition for good economic performance, so it is important to understand the beliefs of the stakeholders before implementing policies for the restarting of the privatization process.

Clifford (1993) and Johnson (2002) claimed that a government can not implement a privatization process if a political agreement is not reached by the politicians.

Figure N° 4 shows the theoretical framework of the new privatization process that will be developed based on the discovery of the real interests and beliefs that the main stakeholders and secondary stakeholders have with respect to privatization.

Figure Nº 4. Conceptual framework of a successful privatization

The framework shows an initial conceptualization in which political agreement is an important step which must be obtained before the restarting of any privatization. The second step necessary is the understanding of the interests and beliefs of the main and secondary stakeholders. The third step will be the development of the key factors that will lead to a successful privatization with a direct impact on the future management of the private utility and the expected results.

Finally, the research proposal aims to fill a lack of research in the relevant literature in such a way that it will permit discovery of the key factors that lead to a successful privatization in a developing country with cultural differences.

3.2 Research Questions

The main issues that can be answered are the following:

Issue 1: Is there a relation between the efficiency gained by the private utilities and the stakeholders' positive perception of privatization?

Issue 2: Does the Peruvian privatization committee have the formal power to obtain an agreement among the main stakeholders in a privatization process?

The research questions that emerge from the main issues are:

Research question 1: Why do stakeholders (workers, politicians, media, suppliers, consumers and population) reject privatization of the electric distribution utilities in Peru?

Research question 2: Which factors and how can such factors lead to a successful privatization of the remaining state-owned electric distribution utilities in Peru?

The purposeful unit of analysis has been selected in order to cover the definition of the research questions. Thus, the electric distribution utilities that will be studied are: Edelnor, Luz del Sur, Electro Sur Medio, Distriluz Holding (Electrocentro, Hidrandina, Electronoroeste, Electronorte) and Electric Society of Arequipa (SEAL).

3.3 Research methodology

Creswell (2003) stated that research design should be addressed describing: (a) the research theoretical perspective, (b) the research strategies, and (c) the research methodology for data collection and analysis.

3.3.1 Research Theoretical Perspective

According to the research purpose and the questions that were formulated, the research will be made under the perspective of constructivism.

A qualitative research will be used, because this method is based on the view that reality is constructed by individuals interacting with their social worlds. (Merriam 1998, Creswell 2003).

The second research question's aim is to find the factors and how these factors will lead to a successful privatization of the electric distribution utilities in Peru.

For this, it will be necessary to understand the context or setting of the participants. The information will be gathered through deep interviews and using open-ended questions. The challenge is to interpret the interest and beliefs that the stakeholders have with respect to privatization and thus develop a theoretical model inductively that explains those factors that will lead to a successful privatization.

3.3.2 Research Strategies

This research proposal is focused on the understanding of the factors that lead to the successful privatization of the electric distribution utilities of Peru and will answer the "How" and "Why" research questions.

Firstly, a case study methodology is an exploration of a "bounded system" or a case (or multiple cases) over time through detailed, in-depth data collection involving sources of information rich in context. This bounded system (the unit of analysis) is bounded by time and place, and it is the case being studied – a program, an event, an activity, or individuals (Stake 1995, Creswell 1998, Merriam 1998, Yin 2003).

Secondly, the first and most important condition for differentiating among various research strategies is to identify the type of research question being asked. "How" and "Why" questions are more exploratory and likely to lead to the use of case studies (Yin 2003)

Thirdly, the resulting four types of design for case studies are: a) holistic single, b) holistic multiple, c) embedded single, and d) embedded multiple. Each multiple-case must be carefully selected so that it either:

(a) Predicts similar results: a literal replication
(b) Predicts contrasting results but for predictable reasons: a theoretical replication.

A few cases (2 or 3) would be literal replications, whereas a few other cases (4 to 6) might be designed to pursue two different patterns of theoretical replications. A multiple holistic case study will be adopted.

3.3.3 The Research Methodology for Data Collection and Analysis

The essential characteristic of a qualitative research is that the primary instrument in data collection and analysis is the researcher. The research activities include fieldwork and the process is primarily inductive. The data collections that can be used are the document data, archival data, interview data (open-ended questions), direct observation, participant observation and physical artifacts (Merriam 1998, Yin 2003).

The data collection can be maximized if a multiple source of evidence is used that permits the triangulation of the data. There are four types of triangulation: (a) data sources (data triangulation), (b) different evaluators (investigators' triangulation), (c) perspectives of the same set (theory triangulation), and (d) methods (methodological triangulation) (Yin 2003, Patton, 2003).

The method of analysis that will be used in this research is the constant comparative method introduced by Glaser and Strauss in 1967. Basically the Constant Comparative Method involves comparing one segment of the data with another to determine similarities and differences.

Kidder and Judd (1986) (as is cited in Yin 2003), said that the criteria for judging the quality of research designs have to be validated through the following tests: (a) Construct validity, (b) Internal validity (c) External validity, and (d) Reliability.

Maxwell (1996) claimed that in qualitative research the main threats of validity are: (a) Description, (b) Interpretation, and (c) Theory.

3.4 Research Contribution

The main goal of this research is to understand the paradox of the privatization of the electric distribution utilities in Peru produced by the rejection of the stakeholders despite both the benefits (reduced tariffs, access to the service, improvement of the quality of service) and the efficiency (profits, reduction of energy losses, cost reduction) gained. A second goal is to find out the factors that explain how a privatization process can be run in order to be successful.

This research will be a contribution to the knowledge of privatization in developing countries.

The research will contribute to the designing of a new policy that will permit the restarting of the privatization process especially in the provinces where all the utilities remain in the hands of the government. The goal is to transfer state-owned utilities to the private sector in order to obtain the investments that will give access to new customers to the service and an improvement in the quality of service.

Another contribution will be to develop a strategy that can help the main stakeholders reach an agreement that will lead to a restarting of the privatization process.

Due to a lack of investigations that explain why the people of developing countries reject privatization, this research is awaited by those interested in explaining the privatization paradox e.g. the government authorities, the World Bank and some others (foreign and national investors, scholars, and politicians)

4 References

Aharoni, Y. (1991). "On Measuring the Success of Privatization." Ramamurti. R. and R. Vernon, eds. Privatization and Control of State-Owned Enterprises. Washington, DC: The World Bank. EDI, Development Studies, pp. 73-85.

Alva, S. & Bonifaz, L. (2004) "Eficiencia Relativa en el Servicio de Distribución Eléctrica en el Perú durante el Periodo 1997-2000: Un estudio de Fronteras", en Jorge Fernández-Baca, *Experiencias de Regulación en el Perú*. Lima, Universidad del Pacifico.

Bernal, R. L., & Leslie, W. J. (1999). "Privatization in the English-Speaking Caribbean: An Assessment". CSIS Policy Papers on the Americas, X(7).

Bös, Dieter (2000). "Privatization under Asymmetric Information". Munich: CESifo.

Brouthers, K. & Bamossy, G.J. (1997). "The role of key stakeholders in international joint venture negotiations: Case studies from Eastern Europe". *Journal of International Business Studies*, 28(2), 285-308.

Clifford, V. R. (1993), "Implementing Privatization Policy in Developing Countries*",* USAID's Implementing Policy Change Project, Working Paper N°3, August.

Creswell, John W. (1998), "Qualitative Inquiry and Research Design Choosing Among Five Traditions*",* SAGE Publications, Thousand Oaks.

Crewell, J. W. (2003), *"*Research Design: Qualitative, Quantitative and Mixed Methods Approaches*",* Second Edition, SAGE Publications, Thousand Oaks.

Fischer, R., Gutierrez, R.. Serra, P. (2003). "The Effects of Privatization on Firms and on Social Welfare: The Chilean Case". Washington DC: Inter-American Development Bank

Forrer, John (2004) *"*Privatization and Organizational Change: Lessons from Cross-National research". The GW Centre for the Study of Globalization, Occasional Paper Series, March.

Gallardo, J. (2000). "Privatización de los Monopolios Naturales en el Perú: Economía Política, Análisis Institucional y Desempeño". http://www.pucp.edu.pe/economia/pdf/DDD188.pdf

Glaser, B. G. & Strauss, A. L. (1967). "The discovery of grounded theory: strategies for qualitative research". Chicago: Aldine.

Guash, J.L. (2004) "Granting and Renegotiating Infrastructure Concessions Doing it right". Washington, D.C: The International Bank for Reconstruction and Development - The World Bank

Harris, Clive (2003). "Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons". Washington D.C.: World Bank.

Hinds, S., Sanchez, N. & Schap, D. (1991), "Public Enterprise: Retrospective Review and Prospective Theory", Department of Economics, College of Holy Cross, MA.

Jamasb, T, Mota, R., Newbery, D., & Pollitt, M. (2005) "Electricity Sector Reform in Developing Countries: A Survey of Empirical Evidence on determinants and Performance" World Bank Policy, Working Paper 3549.

Johnson, R. A. (2002). "How to Navigate the Politics of Privatization". L.A.: Reason Public Policy Institute.

Laffont, J.J., and Tirole, J. (1993). "A Theory of Incentives in Procurement and Regulation". Cambridge, Mass.: MIT Press.

Lipczynski, J. & Wilson, J. (2001) Industrial Organization an Analysis of Competitive Markets (1st ed.). Singapore: Prentice Hall, Pearson Education Limited.

Maxwell, J. A. (1996). "Qualitative Research Design: An Interactive Approach", Applied Social Research Methods Series, Volume 41, SAGE Publications, Thousand Oaks.

Megginson, W., Nash, R.,Netter, J. & Schwartz, A. (2000). "The Long Term Return to Investors in Share Issue Privatizations". Financial Management, 29, 67-77.

Merriam, S .B. (1998), "Qualitative Research and Case Study Applications in Education: Revised and Expanded from Case Study Research in Education", Jossey-Bass Publishers, San Francisco.

Milgrom, P. & Roberts, J. (1990). “Bargaining Costs, Influence Costs, and the Organization of Economic Activity”. In Alt, J. & Shepsle, K. (Eds), Perspectives on Positive Political Economy. Cambridge: Cambridge University Press.

Niskanen, W. A. (1968). “The Peculiar Economic of Bureaucracy”. American Economic Review, 58, 293-305.

North, Douglass C. (2005). “The Process of Economic Change”. First Edition, New Jersey, Princeton University Press.

Patton, M.Q. (2003) “Qualitative Research & Evaluation Methods”, SAGE Publications, Thousand Oaks.

Perotti, E. (2004), “State Ownership: A Residual Role?”, The World Bank Policy, Research Working Paper 3407.

Pollitt, M.G. (1995), “Ownership and Performance in Electric Utilities”. Oxford University.

Pollitt, M.G. (1997), “The Impact of Liberalization on the Performance of the Electricity Supply Industry: an International Survey”, University of Cambridge.

Shapiro, C. & Willig, R. (1990), “Economic Rationales for the Scope of Privatization” Elgar Reference Collection. International Library of Critical Writings in Economics, vol. 44.

Stake, R. E. (1995). “The Art of Case Study Research”. Thousand Oaks, CA: SAGE Publications.

Vickers, J. & Yarrow, G. (1991) “Economic Perspectives on Privatization”. *Journal of Economics Perspectives*, 5(2), Spring , 111-132.

Willig, R. (1994), “Public versus Regulated Private Enterprise” The World Bank. Working Paper File 14337.

World Bank (1995). “CFI Privatización: Principios y Práctica”. Washington: Banco Mundial y Corporación Financiera Internacional.

Yin, R. K. (2003), “Case Study Research: Design and Methods”, SAGE Publications.