



CORPORATE GOVERNANCE
IN WATER AND SANITATION
ENTERPRISES

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CORPORATE GOVERNANCE IN WATER AND SANITATION ENTERPRISES

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ABBREVIATIONS AND ACRONYMS

AAA	Aqueduct, Sewerage, and Waste Management Company of Barranquilla (Triple A – Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla S.A. E.S.P.)
ADR	American Depositary Receipts
BD	Board of Directors (Junta Directiva)
BOVESPA	Stock Exchange of the State of São Paulo
CCG	Code of corporate governance
CG	Corporate governance
CGG	Codes of good governance. Synonym of code of corporate governance (CGC)
CONPES	National Council of Economic and Social Policy (Consejo Nacional de Política Económica y Social) (Colombia)
CRA	Water and Sanitation Regulatory Commission (Comisión Reguladora de Agua y Saneamiento) Colombia
EAAB	Aqueduct and Sewerage Company of Bogotá (Empresa de Acueducto y Alcantarillado de Bogotá S.A. E.S.P.)
EBITDA	Earnings before interest, taxes, depreciation and amortization
EPM	Public Enterprises of Medellín (Empresas Públicas de Medellín E.S.P.)
EVA	Economic Value Added
GAAP	Generally Accepted Accounting Principles
HPAGC	Action Plan Tool for Corporate Governance (<i>Herramienta de planes de acción para el gobierno corporativo</i>)
IDB	Inter-American Development Bank
IFC	International Finance Corporation
INE/WSA	Water and Sanitation Division of the IDB
IFRS	International Financial Reporting Standards
NPV	Net Present Value
OMP	Optimized Master Plan
PUE	Public Utility Enterprise ¹ (Empresa proveedora de servicios públicos)

¹ This document will use “public utility enterprise” to denote any business organization that maintains the infrastructure for a public service (often also providing a service using that infrastructure), notwithstanding whether is a chartered, listed, limited liability, or non-stock state-owned. Cf. [encyclopaedia/thefreedictionary.com](http://encyclopaedia.thefreedictionary.com). The

SABESP	Basic Sanitation Company of the State of São Paulo (Companhia de Saneamento Básico Saneamiento do Estado de São Paulo)
SEC	Securities and Exchange Commission, United States
SEDAPAL	Water and Sewerage Service of Lima (Servicio de Agua Potable y Alcantarillado de Lima)
SOE	State-owned enterprise (Empresa de propiedad del estado)
SUNASS	National Regulatory Body for Water and Sanitation Services (Peru) (Superintendencia Nacional de Agua y Servicios de Saneamiento)
WSE	Water and Sanitation Enterprise (Empresa proveedora de servicios públicos de agua potable y saneamiento)

expression “company” will be used only for chartered enterprises, in which the owners’ capital –the stock- is divided in parts (shares) represented by transferable certificates of ownership.

Abstract

This technical note contains a methodology to promote the use of good corporate governance practices for water and sanitation enterprises – especially SOEs – in Latin America and the Caribbean, based on IDB experiences and other relevant cases from network utilities. The methodology evaluates how corporate governance practices are currently being applied in those firms, and facilitates progressive advancement in successive stages. The methodology is rooted in theory in order to ensure that the governance of water and sanitation enterprises contributes to the efficient and sustainable use of resources, so that the social investment in water and sanitation in the region may play a part in the achievement of the Millennium Development Goals.

Key words

Corporate governance; water and sanitation enterprises; agency costs; SOEs; good governance practices; corporate governance indicators.

Resumen

Esta nota técnica contiene una metodología para promover la adopción sistemática de buenas prácticas de gobierno corporativo para empresas proveedoras de servicios de agua potable y saneamiento en América Latina y el Caribe –especialmente empresas de propiedad estatal– con base en las experiencias de proyectos apoyados por el Banco Interamericano de Desarrollo y en otros casos relevantes de empresas que atienden servicios de red. La metodología sirve para evaluar el estado de aplicación de prácticas de gobierno corporativo en las empresas y para facilitar el avance progresivo o plan de acción en etapas sucesivas. La metodología consulta también la teoría, a fin de que el gobierno de las empresas de agua potable y saneamiento contribuya al uso eficiente y sostenible de los recursos de las empresas, y a que la inversión social en agua y saneamiento en la región contribuya al logro de las Metas de Desarrollo del Milenio.

Palabras clave

Gobierno corporativo; empresas de agua y saneamiento; costos de agencia; empresas del estado; prácticas de buen gobierno; indicadores de gobierno corporativo.

1. INTRODUCTION

This final report defines a methodology for evaluating and promoting good practices of corporate governance (CG) in water and sanitation enterprises in Latin American and the Caribbean (in this report the abbreviation PUE will be used to refer to enterprises that provide public services, in general, and WSEs will be used to refer to water and sanitation enterprises). For this purpose, project experiences, including corporate governance initiatives supported by the Inter-American Development Bank (IDB), are examined.

This report is organized in five parts: First, it briefly describes the analytical framework. The second section reviews experiences of the IDB in Colombia, Peru and Brazil. The third part presents a Tool for Action Plans for Corporate Governance (*Herramienta de planes de acción para el gobierno corporativo*) (HPAGC) that supports the evaluation of good practices of CG. This tool is attached as a Microsoft Excel file (*Herramienta GC EPE.xls*) for readers to use.² The fourth part describes the diagnostic indicators, aimed mainly towards identifying agency problems and CG tensions that present the greatest risks. Finally, the report provides a bibliography of material on corporate governance, and cases and experiences relevant for WSEs.

This report is the product of a consultancy by the author for the IDB. The project benefited from the participation of experts in different aspects of CG in Public Utility Enterprises (PUEs), from public officials with policy, regulatory and supervisory responsibilities in the water and sanitation sector, and management personnel from the various companies. Contributions from these participants were received in two seminars held in Bogotá, Colombia, and Washington, D.C. that also included specialists from the Water and Sanitation Division (INE/WSA) of the IDB and from the Water and Sanitation Initiative for Transparent and Efficient Enterprises. The author also conducted interviews in Bogotá, Lima, and São Paulo. A list of seminar participants is provided in the annex. Their contributions were valuable in understanding the real difficulties blocking the adoption of

² The tool is also available at <http://www.iadb.org/document.cfm?id=36648871>.

CG practices, the origin of the barriers and how they were overcome in the most successful cases, and in testing the elements of the methodology presented here.

The author is grateful to Yvon Mellinger for his leadership and support, to the project team -Carmiña Moreno, Henry Moreno and Sergio Campos-, to Jorge Ducci for his comments on the final report, and to the Water and Sanitation Division of the IDB. Mr. Ducci also did a thorough edition of the English translation. Thanks are also due to Juan Benavides for his comments with respect to editing and contents, and to Deyrin Reyes for her contributions to the bibliography. Silvia Calderón from the IDB office in Bogotá is acknowledged for her role in the successful organization of the seminars. Hernando Sánchez and Sandra Delgado of the Economía y Empresa team provided important professional help throughout the entire project. The International Finance Corporation, through its Corporate Governance Officer, Roman Zyla, graciously authorized the use of the Corporate Governance Progression Matrix for SOEs, which has been adapted for the final report.

2. ANALYTICAL FRAMEWORK

This section provides basic concepts of corporate governance (CG): what is a system of CG?; what are the two main CG risks for large and medium-sized businesses?; what agency conflicts give rise to these risks?; how does urban growth contribute to the separation between property and control in Public Utility Enterprises (PUEs) and encourage its reorganization?; how is political governance distinguished from corporate governance?; what is the relationship between CG, contractual arrangements and regulation?; what are agency problems and why are they important for companies and other enterprises?; what is the relationship between natural monopoly, regulation, and incentives for PUEs and their owners? Subsequently, the section defines the objectives of enterprises that provide water and sanitation services (WSEs), and how these objectives are broadened in the case of SOEs. It then enumerates and justifies the criteria for assessing the adoption of corporate governance principles and discusses the problems of implementing them in SOEs. The conflicts of interest, the control rights that by rule are granted to those who assume residual risks, and the relationships between shareholders and administrators, between majority shareholders and those who are not, and between the enterprise and its creditors, are topics considered in the second part of this section.

BASIC CONCEPTS

We start from the following operational definition of CG:³ Corporate governance is the interaction of an enterprise's management, its board of directors, and its owners, to direct and control the firm, and to ensure that all financial stakeholders (owners and financial creditors) receive their fair share of the enterprise's earnings and assets. In general, any private, public or mixed enterprise that demonstrates an ability to create economic value after covering its capital costs is making an efficient use of its resources. Whether the business operates in a competitive context, or in a monopolistic or oligopolistic market that is adequately regulated, as should be the case for the urban water and sanitation markets, it can be expected that the

³ Dallas (2004: 21). The original definition, meant for companies (corporations), was adapted for a more general type of business enterprises, including unchartered state firms.

business does not exploit its users and customers and that, on the contrary, the social investment administered by the WSEs results in greater coverage and quality of water and sanitation services at an efficient cost; that is, an outcome with greater general economic welfare. Consequently, a WSE with good practices of CG should simultaneously obtain reasonable profitability in private and social terms. This is the reason for the central importance of CG in a utility: to contribute in obtaining the greatest positive social impact from the limited public and private resources to be invested in water and sanitation, keeping these resources from being wasted on expenditures unrelated to the purpose of the business, or on unjustified benefits for particular interest groups.

TWO LARGE RISKS OF CG

The risk of CG entails the possibility of loss of business value, due to system faults –the set of rules, relations and corporate organs- that control and direct management.⁴ The risk of CG rises when the interaction between ownership and control is deficient. Clearly there are other eventual sources of losses for any business –and in particular for PUEs- originating in external factors such as threats related to the economic cycle, competitive pressure from innovation by other companies, freezing of tariffs in regulated markets, volatility of interest rates or exchange rates that affect the value of the debt or investment, natural disasters, operational and engineering risks, etc., as well as internal weaknesses identifiable through strategic analysis. The risk of CG refers specifically to the case in which the structure of power becomes a barrier that impedes a business from responding adequately to threats, correcting weaknesses, and managing internal risks.

The risk of CG has a second component: the possibility that the structure of power may distort the distribution of wealth generated by the business among its owners, so that the allocation of earnings and net cash flows, as well as the exploitation of business opportunities, may not be done in proportion to the capital invested and the risks assumed by owners, including the state, but rather, in a manner controlled from the power structure.⁵ In this second component of the GC risk, the business may create value, but the results are not

⁴ This definition is taken from the Superintendencia Financiera de Colombia (2006: 7).

⁵ This notion has been proposed by Fox and Heller (2006), and has been applied to evaluating the results of large-scale privatizations in the post-socialist economies, mainly in Russia.

fully recorded in the financial statements, since they are transferred one way or another to some internal or external interest groups before being registered as earnings. This is observed, for example, in companies that have large amounts of unproductive assets (non-operating land, non-competitive plants, subsidiaries in recurrent crisis, etc.) or an excess of liquidity that gives managers a large amount of power and security even when performance is deficient. Another example of the second component of the GC risk entails the firm not taking advantage of its best opportunities because those who control it act upon incentives that are not consistent with the optimization of the firm's value, or behave as public employees averse to taking business risks so as to protect themselves politically.

Based on these two components of CG risk, it is possible to identify some pathologies of CG, like those shown in Box 1 (Fox and Heller, 2006). It is worth noting that the pathologies identified by Fox and Heller can also be understood as CG outcome indicators. Starting from normal or "pathological" outcomes, the analysis could be done in the opposite direction to examine CG practices and infer a cause-effect relationship.

Box 1

Risk / pathologies of corporate governance

I. Non-maximization of residuals (the difference between prices paid for inputs and what is received for outputs)

- 1 Unreformable value-destroying firms fail to close. Firms dissipate cash or liquid assets.

- 2 Viable firms fail to use existing capacity efficiently.

- 3 Firms misinvest internally generated cash flows. The firm invests in new negative NPV projects.

- 4 Firms fail to implement positive NPV projects, as managers tend to be risk averse.

- 5 Firms fail to identify positive NPV projects when is particularly well positioned to fund

II. Non-pro rata distribution of benefits

- 6 Firms fail to prevent diversion of claims, through manipulation of statutory rights (corporate, bankruptcy or other laws), to shift ownership away from other residual owners.

 - 7 Firms fail to prevent diversion of assets by some owners or administrators.
-

Source: Adapted from Fox and Heller (2006: 5).

CONFLICTS OF CG

The risks of CG and its pathologies stem from the existence of basic conflicts in three areas: the separation between ownership and businesses control, agency problems, and the effects of the businesses activities on interest groups.

1) *The separation between ownership and control of the public utility enterprise (PUE).* One of the keys for understanding the problems of CG in large, complex businesses was provided by Berle and Means in *The Modern Corporation and Private Property* (1932), where they indicated that business owners had less influence and that the firm's effective control had transferred to other hands. This phenomenon is also evident – in a very specific way – in state-owned WSEs, particularly as cities grow.

In small cities and communities ownership and control is in the hands of the same leaders; citizens – organized in associations, cooperatives, community action boards, guilds, etc. – tend to participate in water and sanitation investments by co-financing public works with the municipalities and regional jurisdictions while providing work time or organization. The negotiations are carried out collectively and around a single project.

When various services coexist in an emergent urban area, at some point, small municipalities combine them into one, thereby assuming the operation of the local water and sewage services as a natural activity of the state, with a low cost and level of specialization, though frequently with limited quality and coverage. Tariffs tend to be politically set prices and the service is administered with a cash focus, with a tendency to underestimate labor and employee benefits, postponing their adequate accounting for years. The business operations are not sufficient to finance the regular replacement of infrastructure, so that investments have to wait for surplus fiscal balance, municipal borrowing capacity, or contributions from other state entities. There are some scale economies from common administration.

Experiences of political abuse of the control of water and sanitation services can be found throughout the world, particularly in *cities at an intermediate stage of development* (Kramek and Loh, 2007), but the proximity of those affected provides necessary degrees of control, though often insufficient. Coalitions with multiple interests emerge, generating haggling in the municipal or state councils. The need for PUEs to be separated from general municipal functions is increasingly strong. Local conditions (Vives, Paris, Benavides, et al., 2006) determine the contractual arrangements that are viable for the development of public or mixed enterprises that provide network services.

The participation of community representatives with direct and close interests in the water and sanitation services tends to decline

with *urban growth* (Diagram 1). Community participation does not occur except in an indirect mode, through management and oversight agencies, or through local political and institutional control. Public network services start to require larger investments, long term planning, specialized operation, well-identified costs and, in general, specialized business-

Regulation and natural monopoly

The New Deal initiated regulation of PUEs in the United States as a reaction to the first significant crisis of CG of private utilities. Between 1890 and 1932, urban public service markets were developed with decreasing prices and large earnings in a context of strong oligopolistic competition. Governmental power for granting concessions was used advantageously by businessmen and corrupt politicians against their adversaries. Samuel Insull absorbed and consolidated hundreds of firms from Chicago through pyramidal capital schemes. Insull's holding companies were financed with bonds placed among thousands of small investors. The multi-level scheme gave him real control over the PUEs and their profits, with low capital contributions, at the cost of enormous and concealed indebtedness. When Insull's empire collapsed and the savers lost, the Roosevelt administration allowed large PUEs to continue (and therefore validated the existence of natural monopolies) but limited pyramids to only two levels, prohibited the PUEs from investing in non-adjacent areas, and impeded the manipulation of investments and assets of the firms (Skeel, 2005: 80–106).

like standards of management that usually do not adapt well to the municipalities' general administration framework.

In sum, *urban growth generates a progressive separation between ownership and control of water and sanitation services*, independent of their legal status as state or private services. Citizens and the state grow further apart from one another, and accountability mechanisms tend to rely on the formalism typical of the public realm, bypassing the focus on results and efficiency. Thus, it is necessary to structure the WSEs with the goal of consolidating greater efficiency and transparency in the management of state resources. Even though in the strict sense citizens are the final owners (because they assume the residual equity risk), the legal owner is the state, that is, the public capital accumulated through citizen's taxation. However, the state administrators, custodians of public capital, have a vision influenced by the need to conserve or increase their political capital to govern. This is, therefore, the source of the conflict between the corporate governance of the public utility and the governance challenges of public administrators: ownership on one side and control on the other.

In many cases, the operation of public services begins with private businessmen as licensees of the state with minimum public controls. Soon enough challenges, conflicts or risks arise, creating the need for regulations or for the creation of an SOE to take over the service.⁶ The OECD has acknowledged that within developed economies, state enterprises have often been created and sustained for theoretically valid reasons, like resolving market failures and regulatory failures –the cases of natural monopoly, the provision of public goods and merit goods- but also because of controversial motivations, like being designated as “strategic” sectors.⁷ Numerous countries have also gone in the opposite direction, shifting

⁶ In the United States there are more than 50,000 water utilities and more than 30,000 sewage utilities: the majority of enterprises are public, while private enterprises are mostly small and serve 11% of the population. About 300 water and 200 sewage utilities serve cities with more than 100,000 inhabitants. Given that tariff regulation only applies to private companies, a substantial majority of larger water and sanitation services are public enterprises with little tariff regulation or are municipal services. The first type of CG conflict (business-creditors) was controlled since the 1930s with the regulation of securities, but another type of CG conflict is frequent (the state as both arbiter and advocate).

⁷ See OECD, 2005b: 32. The expression “strategic” sector was controversial because it became an all-purpose category: it included business activities in which the state sought to obtain extraordinary profits or grant price subsidies to important social or political groups, promising but deficit-ridden “infant industries”, non-profitable declining activities but with many employees, sectors exposed to high risks, activities related to

control from the public sector to private enterprises. Since 1990 there have been a large number of privatizations of PUEs in OECD countries, former socialist economies, and developing countries. A number of cases were successful, but others were costly failures, leaving in their wake valuable lessons, including the following: a) good governance conditions and practices are fundamental so that both SOEs and private enterprises can perform well;⁸ b) in the case of those that continue to be SOEs, a clearly defined policy of state ownership, overseen by a specialized state agency, is indispensable for CG to function fully, so that the implementation of internal incentives promotes efficiency and little by little the public enterprises go from a position of destroying value to one where they generate it; c) few utilities in the region are able to attract good quality potential strategic partners.⁹ Some countries, like China and Brazil, have retained ownership in the hands of the state, but have also registered their most important SOEs in the stock market with the goal of subjecting them to market discipline. These lessons are more advanced in some cases than in others. For example, energy and gas utilities have been more proactive in undertaking programs in these directions, while the WSEs, even in the same cities, have been trailing behind.

Many countries exert great efforts to define modern regulatory frameworks and contractual arrangements that complement what can be done through CG. Table 1 shows the various possibilities for contractual arrangements with public and private participation in infrastructure projects that are equally applicable to network public utilities. The financial, managerial and political viability of the different contractual arrangements depends greatly on local conditions. Vives et al. (2006) propose a sound methodological approach inspired in the economic theory of contracts and the best practices for identifying the optimal contractual arrangements for each group of local conditions. For example, when local conditions are weak (characterized by a legal framework that does not clearly protect property rights,

national defense, etc. The common denominator of the “strategic” sectors was having obtained the political label as such. In the majority of the countries many of the “strategic” public enterprises were purged.

⁸ See OECD, 2005b: 36 and ss.

⁹ See, for example, the 2008 management report of the Sociedad General Aguas de Barcelona S.A.: “International growth strategy. In the international market, the growth strategy is based on the analysis of opportunities for acquiring companies that operate in markets with stable legal and economic environments, as well as on exporting to emerging market economies business models with low risks that do not entail significant capital investments but rather transfers of technology and know-how.” p. 88.

http://www.agbar.es/inversores/esp/pdf/2008_Informe%20_Financiero_Anual.pdf

political instability that can make public utilities fall prey to expropriation, a history of macroeconomic or exchange rate volatility, weak fiscal capacity for supporting public investment or the subsidies promised for projects) private investors' risk perception for investing resources and efforts over a long term horizon increases. Sometimes some of these factors can be neutralized, appealing to mechanisms that allow contractual arrangements to be made viable where the risk and effort of investment is not assumed entirely by the public sector, as shown in Table 1. In other instances, cities' only choice is to try a public contractual arrangement for providing water and sanitation services. What is the domain of CG? If a particular project was financially viable with a given tariff horizon, but in reality, the tariffs increase because the PUE's internal management allows some spending factors to get out of control, this is a problem of CG, not of the contractual arrangement. The impact of the advances that can be obtained in the CG of PUE is limited by the conditions of the contractual arrangements themselves, and the scope and efficiency of the regulatory framework. The methodology of contractual arrangements of Vives et al. makes a lot of sense in suggesting that no contractual arrangement is generically or constantly valid or invalid, and that the organizational schemes with greater potential efficiency and greater positive impact on welfare may not be viable when local conditions are weak.

Table 1

Contractual arrangements in infrastructure projects: ranges of public-private participation, duration and viability, when local conditions are weak										
Contractual arrangements	Allocation of responsibilities				Duration	Weak local conditions				
	Oper. and Admin.	Commercial risk	Capital investment	Asset ownership		Legal framework	Political risk	Fiscal space	Willingness to pay	Size and location
Fully public										
1 Non business public entity	□	□	□	□	Undefined	√	√	○	√	√
2 Fully public - PUE	□	□	□	□	Undefined	√	√	○	√	√
3 Joint Venture - Public	□	□	□	□	Undefined	√	√	○	√	√
4 Cooperatives	□	□	□	□	Undefined	√	√	√	√	√
Management contracts										
5 Outsourcing	■	□	□	□	Less 1 year	√	○	○	√	√
6 Management contract	■	■	■	□	3 - 5 years	X	○	○	○	√
7 Franchise	■	□	□	□	5 or more years	X	○	○	○	√
Concession										
8 Leasing	■	□	■	□	8 - 15 years	X	○	√	X	√
9 Concession	■	■	■	□	25 - 30 years	X	X	√	X	X
10 Joint Venture - Private	■	■	■	■		X	X	○	X	√
11 BOT / BOO / BOOT	■	■	■	■	20 - 30 years	X	X	√	X	X
Fully private										
12 Fully private - sale	■	■	■	■	Undefined	X	X	√	X	X
13 Fully private - license	■	■	■	■	Undefined	X	X	√	X	X
14 Fully private	■	■	■	■	Undefined	X	X	√	X	√
Source: Vives, et. al (2006)										
Convenciones										
□ Public responsibility										
■ Public Private responsibility										
■ Private responsibility										
√ The contractual arrangement from this line IS feasible, given the conditions of this column										
○ The contractual arrangement from this line WOULD NOT be feasible, given the conditions of this column, BUY IT CAN BE made feasible with some contractual reinforcements										
X The contractual arrangement of this line is NOT feasible, given the conditions of this column										
Mechanisms that allow for contractual arrangements to be feasible										
a. Political risk insurance										
b. Partial credit guarantee										
c. Partial guarantee of sovereign risk										
d. Subsidies										
e. Previous institutional strengthening of the enterprise (credit covenants)										
f. Financing in local currency, to avoid exchange risk										
g. Arbitrage rules										
h. Supply agreement (guarantee of minimum volume of sales)										

In the case of urban water and sanitation services the reality of natural monopoly has been dominant and more enduring than, for example, in the case of electricity and telecommunications, partly due to the fact that the former has not experienced the same degree of technological advance as the latter. As a consequence, the WSEs lack strong incentives to be competitive and to control their costs, especially when regulation is weak, on the one hand, and when internal CG mechanisms allow internal groups with greater influence in the power structure to take advantage of their privileged position.¹⁰ Collective action

¹⁰ The impact is clear in respect to long term rates. In the United States between 1929 and 2006 the relative prices of water and sanitation compared to electricity increased by a multiple of six, while electricity rates fell

problems exacerbate the separation of ownership and control of the SOE to the extent that control is exercised according to objectives that are not consistent with public policy, or even worse, when there is a risk that the control of the WSE contributes to the destruction of the value of the public property incorporated in such businesses. If the effective control of the businesses is vulnerable to political manipulation, for example, then the final owners, the citizens, can be left without an effective capacity to make corrections or to ensure that the businesses are administered without deviating from their objectives. This can happen when citizens do not take part in management, do not have a majority in the shareholders' general meeting, cannot participate in this institution or the shareholders' meeting simply does not take place, and the members of the board of directors are not responsive to them but rather to the elected politicians, who have multiple and diverse objectives and publics to satisfy. Thus, the separation of ownership and control for urban development generates large CG challenges.

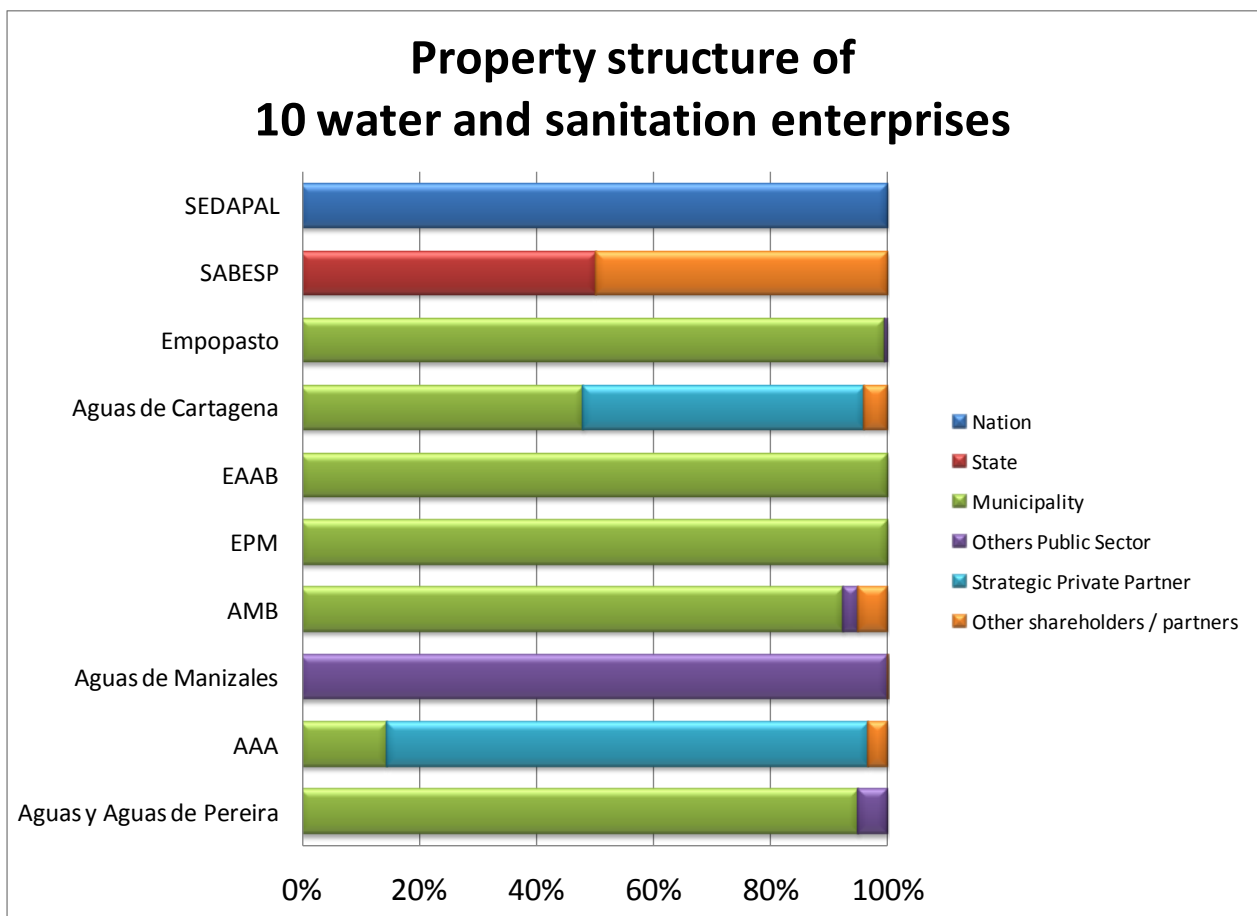
Figure 1 illustrates ten cases from Brazil, Colombia and Peru in which public ownership is the dominant feature, although with different configurations: in the majority of the cases the municipality is the controlling owner; in others, the state (regional government) or the nation, directly or through another entity, is the owner. In contrast, a report of the Sanitation Service Regulator (Superintendencia de Servicios Sanitarios) of Chile¹¹ shows a different reality for its 21 WSEs, with a substantial participation of institutional investors, frequently in conjunction with public sector participation through the Corporation for the Promotion of Production (Corporación de Fomento de la Producción). In both situations, however, it is clear that there are one or two controlling owners along with other minority or facilitating owners. Also, when a state entity owns a WSE, it has contradictory interests to greater or lesser extents considering that it is simultaneously an owner, the entity responsible for granting concessions in respect to water resources and the water and sanitation infrastructure,

to less than half compared to the consumer price index. Water and sanitation rates, by contrast, increased by 2.6 relative to this same index (*U.S. Census Bureau, Price Indexes for Personal Consumption Expenditures by Type of Expenditure*). For energy the natural monopoly features of the market have weakened because technological advances have contributed to higher levels of competition. In the case of water and sanitation this has not taken place, which has permitted internal power groups to extract rents when the CG of the state-owned enterprise is not strong and regulation is weak.

¹¹ See http://www.siss.cl/articles-4266_recurso_1.pdf

the regulator of the quality and coverage of the service, the defender of the interests of customers, etc. The case of greater relative development of CG is that of the Brazilian Basic Sanitation Company of the State of São Paulo (SABESP), in which the participation of the minority shareholders is freely negotiable in the Novo Mercado de São Paulo stock market and through American Depositary Receipts (ADR, representative shares of stocks with value in the New York stock market), subject to the very demanding CG standards of those markets. This freedom to enter and leave is an automatic and centralized form of control that does not exist in the other cases.

Figure 1

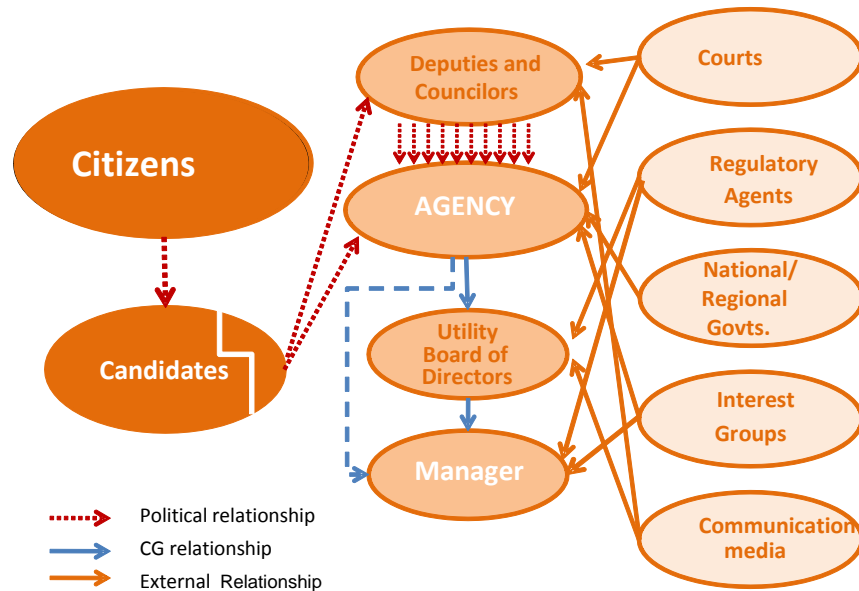


2) *Agency problems* (another conceptual framework mentions a similar concept under the name *transaction costs*). Agency problems arise because of the information asymmetry between a principal and an agent, which makes it difficult for the principal to observe the characteristics or effort of the agent. The costs of agency problems are reflected in efficiency losses that can affect both the principals and the agents. The agency problems of greatest relevance in complex enterprises are those that occur: i) between owners (principals) and administrators (agents delegated by the principal to defend their interests); ii) between majority owners (agents) and minority owners (principals); iii) between the enterprise (agent) and external interest groups (principals), especially in regulated industries like banking and public utilities. The structure of CG of contemporary corporations is the accumulated result of the evolution and efforts for finding adequate responses to agency problems.¹² Good CG practices, therefore, are aimed at improving the quality of information available to principals, improving opportunities for timely and adequate control of the principals over the agents, underpinning the consistency of the incentives aligning the interests of principals and agents, and providing for the effective fulfillment of fiduciary duties on the part of the agents, such as care, loyalty, and accountability.

¹² Kraakman, Davies, Hansman, et al. (2004) undertake a comparative analysis of corporate law to study agency problems in the most important legal systems. Roe (in Jeffrey and Roe, 2004) affirms that political institutions affect the quality of corporate governance and finds that social democratic systems weaken the control of owners and contribute to increases in the managerial agency costs: the principals lose when the power of administrators is biased toward the adoption of low risk decisions that favor the stability of management, the retention of unnecessary liquidity in the firms as opposed to paying higher dividends to the shareholders, and excess administrative and labor costs. The focus of agency theory explains that interest groups seek laws and structures that generate rents, thus distorting the incentives among principals and agents, and increasing the risk to CG.

Diagram 1

Chain of Agency Relations in Public Utility Companies



3) *The effects of the activity of the businesses on stakeholders* who do not contribute capital such as the users of the service, workers, contractors, and many more, besides the multiple externalities common to the enterprise's activity. In this sense, there are frequent ties between CG practices and regulatory norms, leading to confusion about the domain of each. To clear up this confusion, a sound criterion is to avoid trying to obtain objectives through CG practices that should be sought through regulation, and vice versa.

OBJECTIVES OF WSEs

The objective of a WSE is to provide water and sanitation services in accordance with defined minimal quality standards, at reasonable rates.¹³ The reasonableness of the rates

¹³ One kernel of wisdom holds that each instrument should be employed for reaching the objective of the greatest efficiency, and only for that objective. To do the contrary implies a loss of welfare, according to Tinbergen in *The Theory of Economic Policy (La teoría de la política económica, 1952)*.

implies two necessary conditions: 1) that they cover costs¹⁴ and 2) that they are affordable. When an enterprise provides the service in the context of a natural monopoly, it may be able to extract monopolistic profits from its customers through rates that exceed those necessary to recuperate costs. By contrast, when a utility enterprise with a natural monopoly is state-owned, it may set rates that do not allow costs to be recovered, or it may inflate the costs for providing the service. Thus, it implies the need for an independent body to regulate the sector. In theory, state ownership of utilities with natural monopolies is established so that the companies set rates that allow them to recover the average costs. In practice, state enterprises set objectives and additional activities in relation to political, social and community purposes, forgetting at times that the cost of capital is a fundamental economic reality that does not depend on the legal nature of the enterprise used in its productive activity. Thus, PUEs –state owned, as well as privately owned - should be governed in accordance with commercial criteria. This means that to create economic value the utility firms must be competitive in order to survive in product and factor markets, including the markets for their services, and optimize their financial results by refraining from making investments that do not cover the costs of capital. The businesses that are not able to fulfill their business purpose while preserving their equity value destroy social wealth and, if they are state owned, weaken public finances and put themselves at risk of eventual liquidation.

Utilities can also be public policy vehicles oriented toward favoring meritorious social groups; that is, they can fulfill non-commercial objectives, a possibility which is foreseen in their statutes. What they should not do is to use their equity for such purposes. The costs of public policy decisions that imply open or indirect subsidies or transfers should be charged to the budget of the respective territorial entity (nation, department, municipality). The costs of the programs associated with the political function of the public enterprises should be estimated and reimbursed by the state. It is not sufficient to allocate resources to programs and watch over them to ensure that they are applied correctly and legally; it is necessary to allocate the costs related to each of these programs before undertaking them.

¹⁴ It is understood that the firm tries to cover the necessary costs to provide the service and that the firm operates under the principle of economizing on costs.

CORPORATE GOVERNANCE PROBLEMS IN STATE-OWNED COMPANIES

In Colombia, Ecuador, Peru and Brazil the capital for the majority of the WSEs comes from state contributions. In the case of SOEs, agency problems, the capturing of the enterprise by special interests, and other distortions in the allocation of public capital, are fairly common, as discussed below. One can think of the state as a shareholder with sole control that knows what it wants – ideally seeking the welfare of the population. However, the opposite often happens and the SOEs are expected to be instruments for obtaining objectives that conflict with each other.

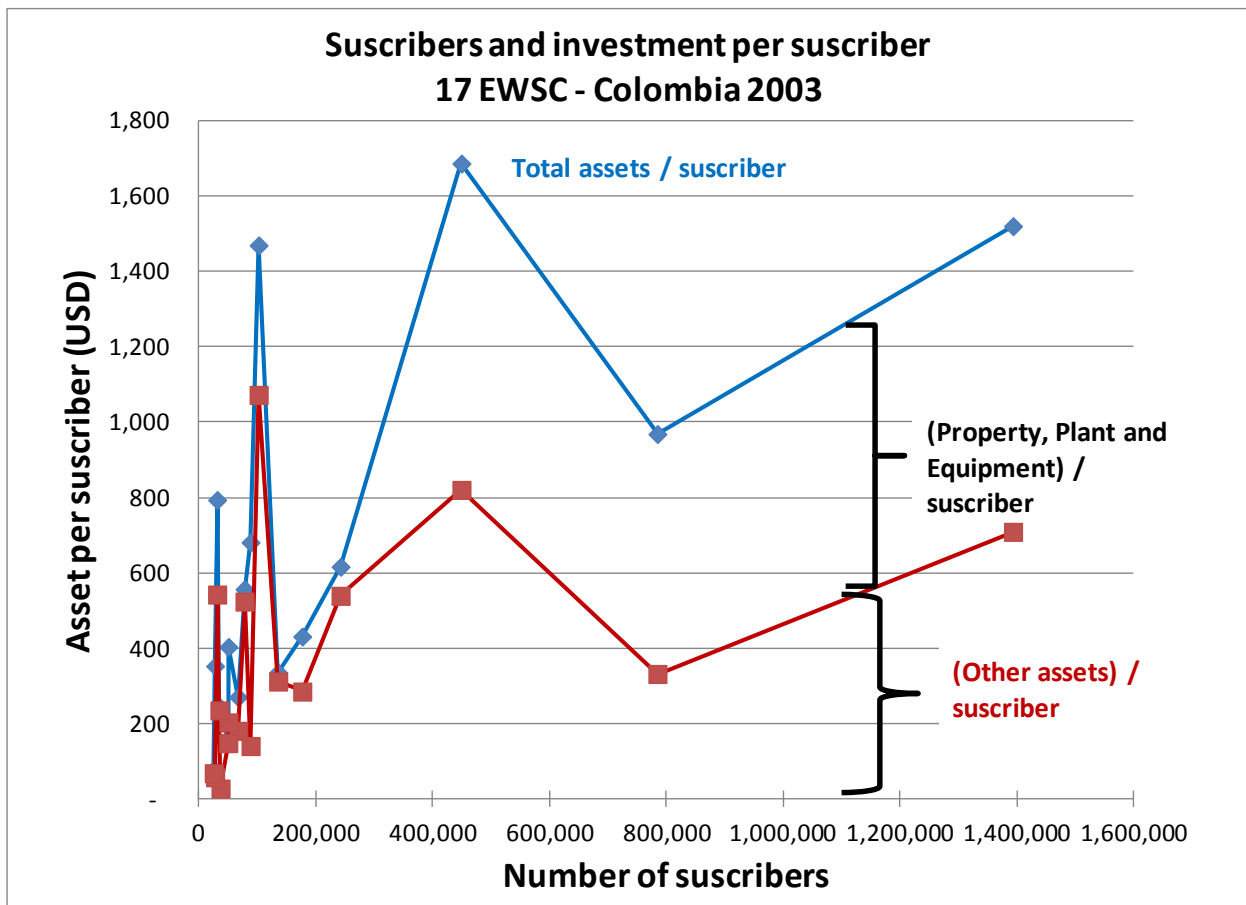
a) Predisposition of governing officials to exceed the state's fiscal capacity through SOEs

Governing officials have two broad objectives of equivalent importance: to execute the programs announced in their electoral campaigns, and to defend the public treasury under their care. There is a conflict of CG within SOEs when governing officials sacrifice the defense of the public treasury (in terms of the equity value of the PUE) to fulfill their electoral promises. In CG diagnostics, it is not uncommon to find that PUEs provide services below costs, without compensation from the state entity that mandates this practice. Other similar pressures on these businesses are: to undertake investments or activities that are not in accordance with the enterprise's business purpose, or that would not be carried out in such a magnitude or at a loss for businesses with different ownership structures; to increase the amount of operational or non-operational assets to levels that are financially problematic; to expand the payroll to contribute to overall employment policies; and one that is very frequent, to meet the needs of philanthropic programs or substitute public expenditure programs that could have clearly been included in the public budget, that is, using PUEs as secondary windows of the fiscal treasury.¹⁵ Figure 2 shows an interesting trend: among the 17

¹⁵ A study of costs by the Water and Sanitation Regulatory Commission of Colombia (CRA) (2007: 174-186) of 96 Colombian PUE's did not find economies of scale for administrative costs nor for operational costs, relative to the number of subscribers, except for the smaller-sized public utilities for which the risks of CG are less relevant. The finding of the CRA contrasts with the World Bank study (Nauges y van den Berg, 2007) that identified economies of scale in a set of 48 Colombian WSE, but not in those in Brazil, measured by the change in the costs of energy, labor, contracted and miscellaneous services relative to the change in the volume of water produced. The second study suggests that administrative costs increase more than proportionally with the size of the business, eliminating the advantage of lower unit costs of service. Neither of the two studies tried to isolate

largest Colombian public utilities, raising the number of subscribers increases by a large amount both the accounting value of the operating investment per subscriber (property, plant and equipment) and the value of the other assets per subscriber. It should be noted that there are important differences between firms of similar size and that concessionaires do not own the infrastructure (and in some cases are only charged with improvements). Although it may occur that the assets of some smaller size companies are undervalued or estimated at a historical cost, the figure is an indication that the risks to CG increase with the size and complexity of the business, since it is frequent for businesses to keep non-productive assets, that are not closely related with the provision of water and sanitation, although they could be of fiscal or urban interest for the municipalities, or as reserves for paying labor benefits.

Figure 2



the components of cost that could be attributed to non-productive expenditures, to discretionary spending, or to the use of the company as a window for fiscal expenditures, all of which are CG risks associated with large companies.

b) High turnover of managers and executives and board of directors' members

Until recently this was a frequent occurrence in the PUEs of the countries analyzed in this paper. High turnover prevents businesses' performance from aligning with the incentives of these agents. The enterprises' political appointees (agents) tend to be poorly remunerated compared to market standards. Frequently, they find that the progress of their careers is more closely connected to their membership in a political party than to a performance evaluation within the business. The short length of the terms of the mayor's office accentuates the need to ensure that the management of utilities is oriented towards addressing the priorities of the government plan; an objective that the government achieves through the appointment of board directors, managers, deputy managers and other officials. The second column of Table 2 shows data from 2009. If Table 2 had been produced using data from the 1980s or 1990s the terms of mayors would have been much shorter. In Colombia, recent constitutional reforms extended mayoral terms to four years, but the effective turnover of managers tends to be faster, as indicated by the coefficients of variation in Table 2. It is rare for a manager of a utility to survive the office term of the mayor that appointed him, and it is not uncommon for mayors to appoint two or three managers during their term. The board of directors' members tends to change even faster. In Peru, regulations governing the composition of the boards of directors of the PUEs have been reformed so as to introduce greater stability and increased responsiveness to urban development interests, with members recommended by professional associations and chambers of commerce. Although this introduces diversity to the boards, it is not completely clear if the directors tied to professional associations are free from potential conflicts of interest. In various countries, the larger PUEs, or those subject to the regulations of the stock market, have adopted in their codes of good governance (CGG) the requirement that some board members be independent (that is, free from economic interests tied to the businesses). However, these guidelines fail to establish a criterion of political independence from mayors and governors. The aspiration of public officials to have trust-worthy directors on the board is understandable given that it aims to prevent opposition party members in the boards of directors from using complex decision situations to attack or obstruct municipal administrations. Nonetheless it would be better to include within PUEs' boards, directors capable of exercising real independence, free from political solidarity or discord, and to

ensure some continuity in their positions with terms not coincident with those of the mayors. However, unless these criteria are adopted through rules that are external to the enterprises (of a constitutional, legal or regulatory nature) this situation will be difficult to resolve.

Table 2

Average tenure * of mayors and PUE's managers					
Country	Mayors**	PUE's managers			
		Enterprise	Period	Average	Coef. Var.
Bolivia	5				
Brasil	4	SABESP	1973 - 2009	3.03	81%
Colombia	4	Acueducto Metropolitano de Bucaramanga	1916 - 2009	5.83	77%
		Aguas de Manizales	1988 - 2007	2.18	37%
		EMPOPASTO	1991 - 2009	3.02	80%
Ecuador	4				
Perú	4				
Sources: PUE's reports, Wikipedia and Brazil Constitution					
* Years in the position.					
** In the case of mayors, it refers to the constitution in force in 2009, in each country.					

c) Reduction of the planning and management time horizon in utilities with state owned majority

Sometimes public utilities will not adopt profound changes when they entail political costs and therefore they postpone them to the limit of the business' sustainability. The case of delays in tariff adjustments is well known. Yet, the intent of rapidly or drastically correcting such delays can result in still greater difficulties or CG conflicts between the state owners and the private partners. It must be recognized that public utilities should operate as true businesses that require management and CG relatively distant from governmental administrations, and they should not act as agencies dependent of the central government. When the enterprises are fully state-owned, they can sometimes operate under the illusion that they cannot go bankrupt in spite illiquidity or insolvency, under the belief that the state will always find a means and an emergency law to avoid their closure ("fiscal illusion"). If the ownership structure includes minority shareholders that do not have real interests, but are mere state facilitator partners, the situation is similar to that described for SOEs. In some

cities or regions this risk has not affected their PUEs due to the safeguards of the political culture; but in general, the absence of checks and balances in the structure of ownership and control makes it more likely for the PUEs to decline and later collapse.

d) Flow and use of information for preventing residual losses

State-owned PUEs provide abundant information aimed at addressing multiple requirements of audit, regulatory and oversight agencies. However, it often happens that far-reaching decisions and relevant information go unnoticed. Agency problems cannot be observed directly so, to identify and correct them, various sources of information should be consulted. Good CG is a cost-benefit analysis of activities to obtain adequate information about the behavior of agents that control the enterprise and put that information to good use. Accounting systems, management information, internal audits, fiscal or external audits, obtaining the ratings of credit risk agencies, etc. all involve incurring in agency costs. These agency costs are justified if they prevent bigger residual losses for principals and agents such as fraud, capturing of rents and private benefits for controllers - (expropriations

Postponing tariff increases for eight years

Between 1994 and 2006 accumulated inflation in Peru was 91%. In this period the WSE of the country suffered a tariff increase delay due to the fact that tariff decisions had to be approved by the board of directors first, and then by the assemblies controlled by the mayors, who postponed tariff adjustments so as to avoid incurring in political costs.

In 2006 the government changed the composition of the boards of directors and handed over the tariff decisions of WSE to a national regulatory agency (SUNASS), which applied a public procedure, following technical criteria based on an “optimized master plan” (OMP).

Of the 40 principal WSE, 15 already have OMP (2009), with cost studies. Within five years, SUNASS is aiming for all companies with more than 40,000 connections to be compliant with the regulations and have updated tariffs.

The lapse in raising tariffs has affected the quality of the service and the indices of unbilled water. National governmental investments in infrastructure suffer given the weak management of the majority of the companies. Illiquid or insolvent companies are not easily intervened.

in the language of CG) and suboptimal decisions for the generation of business value. Otherwise, such costs are not justified. The assessment of CG in PUEs should measure whether the internal organs are efficient by formulating demanding questions. Further in this report, a set of indicators is presented with the aim of evaluating the results of CG practices, both for utilities and interest groups. In a complementary way, the Action Plan Tool for Corporate Governance (HPAGC) for evaluating the application of CG practices goes beyond verifying and surveying the formal compliance with CG actions: it seeks to link the CG action plan with the expected results.

A harmonious relationship is required between regulation, contractual arrangements and the CG of the PUEs. CG can fulfill a constructive function if the legal and regulatory frameworks and the institutions and basic contractual arrangements permit it. Diagram 2 suggests that CG alone cannot compensate for market failures, regulation or sector policy deficiencies, or for the effects of disinformation in the market that exercises control (the market for the stock shares of the firms). WSEs are traditionally prone to politicization and to tariff schemes that do not permit the full costs recovery of the service provision. Often a politically viable

Regulation, a long and winding path

In Colombia, regulation according to modern criteria was established through Law 142 of 1994. A first stage (1995-2001) sought to ensure the self-sufficiency of the companies. The initial lag in tariff increases was 46% relative to reference costs in the 12 major cities. The transition period for reaching tariffs that would be adequate for covering costs was extended until 2005. There was a regulatory framework in place, but CG was insufficient.

The second stage (since 2002) has promoted the formation of prices with efficient costs. The WSE's costs can only be recognized up to the reference costs of the new tariff scheme.

It has not been easy to separate tariff and subsidies. The law created solidarity funds so that the local governments could determine the magnitude of the subsidies to low income consumers and assume the corresponding fiscal burden. Eight years after the reform in 2002, five funds operated within 1,091 municipalities. According to CRA (the regulator) barely 6% of residential consumers could provide contributions to the funds and the deficit was US\$217 million in 2001.

arrangement is reached which establishes tariffs that are insufficient for financing investments (and therefore the increase of coverage) and that only occasionally cover the costs of administration, operation and maintenance. Consumers refuse to pay more because the quality of service is poor. This situation has been called “low quality equilibrium” (Artana, Navajas and Urbiztondo, 1997; Acevedo and Dreikorn, 2006) in which assets are not replaced. This can occur both in the case of the PUEs and in the case of municipal administrations that directly provide the service.

The best CG practices will not be able to generate value if the enterprises keep their tariffs frozen for years; not they will be able to display optimal capital structures if they are exposed to financial markets that are affected by perceptions of systematic crisis; nor will companies be able to integrate into regional markets in order to optimize economies of scale if they are vulnerable to political conflict between their respective territorial entities. In the necessary coordination of CG governance practices with political, regulatory and legal framework actions, it is unavoidable for leaders to act with a dose of opportunism and shrewdness. On the other hand, if CG is constructed based on an ownership structure without true accountability, it is likely that the incentives act perversely, and that the board of directors and the administrators will not make the necessary adjustments to obtain efficient and sustainable businesses, but rather adopt a form of management oriented at least partly around political benefits, in spite of the fact that the regulatory framework is well conceived. In other words, the harmonious relationship between regulation and CG requires consistency in both domains, since CG alone cannot resolve regulatory failures, nor can regulation work if it is not applied well in relation to the structure of power of the PUEs. Also, CG should not be imposed over concessions’ contract restrictions, such as *Build-Operate-Transfer* or other investment and operation arrangements. In turn, the margin of action of regulatory agencies is limited by legislation.

Diagram 2

Scope of CG in water and sanitation enterprises



APPLICABLE PRINCIPLES FOR STATE-OWNED UTILITIES

In the CG approach, the results of PUEs and SOEs are expressed in terms of the creation and destruction of value, and its distribution is proportional to the contribution and risk assumed by the public and private providers of capital.¹⁶ Such results necessarily come from a style of management in which good or bad practices of CG are applied. Thus, an adequate assessment of CG for a private or a state-owned utility will look at the results as much as the actual practices. The ordered examination of the practices of CG adopted by the PUEs is done according to the criteria indicated by the OECD (2004, 2005a) for corporations and for the special case of SOEs. Table 3 summarizes the two sets of CG principles. The OECD's approach takes into account the most relevant risks (and pathologies) of CG according to the business' ownership structure, and the best responses supported by theory and experience. The six chapters on CG emphasize recommended practices (32 for corporations and 30 for SOEs) that should be interpreted and applied in the light of each country's corporate laws and sector regulations; that is, what is important regarding CG principles is their general meaning, not their literal reproduction.

¹⁶ The way in which a public utility enterprise can serve public policy purposes and obtain some results in this sense, is independent of the perspective of CG.

Table 3

CG Principles of the OECD

Corporations¹⁷	SOEs
<p>I. Ensure the foundation for an effective framework of CG</p> <p>The CG framework should promote efficient and transparent markets, be consistent with the rule of law, and articulate in a precise way the division of responsibilities between the different oversight, regulatory and economic policy authorities.</p>	<p>I. Ensure an effective legal and regulatory framework for the SOEs</p> <p>The legal and regulatory framework for the SOEs should ensure a level-playing field in markets where SOEs and private sector businesses compete in order to avoid market distortions. The framework should be built on, and be fully compatible with, the OECD principles of CG.</p>
<p>II. The rights of shareholders and the key functions of ownership</p> <p>The CG framework should protect and facilitate the exercise of shareholder's rights.</p>	<p>II. The state as owner</p> <p>The state should act as an informed and active owner, and establish a clear and consistent ownership policy, ensuring that governance of the SOE is carried out in a transparent and accountable manner, with the necessary degree of professionalism and effectiveness.</p>
<p>III. Equitable treatment of shareholders</p> <p>The CG framework should ensure the equitable treatment of all shareholders including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for the violation of their rights.</p>	<p>III. Equitable treatment of shareholders</p> <p>The state and the SOEs should recognize the rights of all stockholders and, in conformity with the CG principles of the OECD, ensure the equitable treatment and equal access to corporate information.</p>

¹⁷ The principles of CG are centered in corporations whose stocks are traded in public stock markets, and by extension to all the companies that issue stocks registered in these markets, even though they have closed ownership. The same principles, however, are conceptually applicable to businesses whose volume of operations and complexity of business activities has given rise to a significant separation of ownership and control, in which different governance institutions have been developed and the need for checks and balances has arisen.

CG Principles of the OECD

Corporations¹⁷	SOEs
<p>IV. The role of interest groups in CG</p> <p>The CG system should recognize the rights of interest groups, whether they have been established by law or mutual agreements, and promote active cooperation between the corporations and interest groups for creating wealth, employment and the sustainability of financially solid businesses.</p>	<p>IV. Relations with interest groups</p> <p>The state ownership policy should fully recognize the responsibility of the SOEs towards stakeholders and ensure their equitable treatment and equal access to corporate information.</p>
<p>V. Disclosure and transparency</p> <p>The CG system should ensure that there is timely and precise disclosure about all material subjects pertaining to the corporation, including the financial situation, performance, ownership and governance of the company.</p>	<p>V. Transparency and disclosure</p> <p>The SOEs should observe high standards of transparency in accordance with the OECD principles of CG.</p>
<p>VI. The responsibilities of the board of directors</p> <p>The CG framework should ensure the strategic orientation of the company, the effective oversight of the administration by the board of directors and the accountability of the board to company and shareholders.</p>	<p>VI. The responsibilities of the boards of the SOEs</p> <p>The boards of the SOEs should have the necessary authority, competencies and objectivity to carry out their function of providing strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions.</p>

A final note for this section. *The notion of corporate governance differs in meaning from the general idea of governance*, which is frequently used in political science. Definitions of political governance put emphasis on efficacy and legitimacy.¹⁸ Efficacy has to do with ensuring the political conditions to approve the laws that the government considers necessary and to enforce them through the bureaucratic apparatus. Legitimacy refers to the acceptance of public policies among broad sectors of the political community, which involves the political notions of representation, participation, dialogue and consensus. In this sense, the governance of water and sanitation institutions and policies refers to their degree of efficacy and legitimacy, that is, their ability to be issued and put into effect without sending the state's sector apparatus into a crisis. This notion of governance relates only tangentially to the concept of CG.

A similar, more recent approach is the definition of governance adopted by the World Bank. "Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them."¹⁹ The World Bank associates governance with the fight against corruption, understood as the set of programs that "promote transparency in the management of public finance, strengthen tax and customs administrations, improve the performance of the public administration, support reforms of the legal and judicial system, fight against corruption in procurement, and permit local and central governments to provide services and regulate the economy in a more effective way."²⁰ The World Bank has developed a set of national governance indicators that cover six broad aspects: a) voice and accountability; b) political stability and the absence of violence; c) governmental effectiveness; d) regulatory quality; e) rule of law, and f) control of corruption. One could expect that if a state has good governance in the sense suggested by the World Bank, it is

¹⁸ For example: "Governance is the quality of a political community such that governmental institutions act effectively within their sphere of responsibility in a way that is considered legitimate by citizens, thereby permitting the free exercise of the political will of the executive through the obedience of the people" (Arbós and Giner, 1993).

¹⁹ Taken from <http://info.worldbank.org/governance/wgi/index.asp>.

²⁰ World Bank, "Governance and the Fight Against Corruption." See <http://go.worldbank.org>

more likely that its SOEs would obtain better standards of corporate governance. But this is not guaranteed. Because of this, the intention of this paper is to differentiate the notions of (general or political) governance, and corporate governance: to reserve the first for general state institutions, and to use the second for businesses that comply with the criteria of being large in size, with complex business lines and a separation of ownership and control, in such a way that they are exposed to CG risks, and agency costs controllable through appropriate practices.

3. REVIEW OF EXPERIENCES

This section examines the cases of implementation of good CG practices in some operations of the IDB in the Andean region and Brazil, with the goal of exploring if the recurrent and most influential themes in these experiences are consistent with the analytical framework set forth in the previous section. Its objective is to contribute to the identification of the essential components of a plan for implementing CG in PUEs, of the mechanisms of oversight and delivery of results, as well as the difficulties and risks involved in implementing such CG plans. This evaluation is supported by the seminars carried out in relation to the project, the interviews with executives and other industry's relevant actors, and the review of documentation on websites and other public domain information. Even though the author has direct knowledge of some of these cases, he has not used any confidential business information.

COLOMBIA: THE EVOLUTION OF EPM

The IDB has recently approved six projects in support of the water and sanitation sector in Colombia.²¹ The Public Enterprises of Medellín (Empresas Públicas de Medellín, EPM) may be the most interesting case of CG in this country due to the size of the enterprise, the volume of resources involved in the project, the existence of a network of investments in corporations, the degree of commitment of the owners and administrators for advancing CG, the duration of the monitoring of this process, and because the gradual advances in CG have been made without resorting to changes in regulations, contractual arrangements or the legal framework. For these reasons, the case of the CG of EPM will be considered in detail.

EPM is an industrial and commercial business owned by the Municipality of Medellín, capital of the Department (State) of Antioquia. It was created in 1955 when the main public services were separated from the direct management of the municipality. The telecommunications business was split into a subsidiary company in 2006, so EPM maintains

²¹ The projects were CO-L1006 (Water of Manizales); CO-L1028 (EMPOPASTO); CO-L1034 (Río Medellín); CO-L1066 (Reform of the Sanitation Sector); CO-L0270 (Reform of the Public Sector) and CO-L1005 (Porce III).

two large strategic business groups, water and energy, whose natural market is the Aburrá Valley, a territory that includes Medellín and nine neighboring municipalities, with a population of 3.3 million inhabitants. It also provides energy services for nine neighboring municipalities to the hydroelectric power plants of the firm. In 2007 EPM absorbed the Empresa Antioqueña de Energía, thus becoming the provider of electricity for 101 more municipalities in the Department. EPM is the holding of a business group that controls 14 companies and has shareholder participation in eight others in the telecommunications, energy, gas and water industries. It is present in some regions of Colombia and has started to get involved in international markets with block energy sales, operation and engineering services, and direct investment. Urban coverage in energy is 99.99%, water 100%, sewage 95.49%, and residential gas 77%. It produces 306 million cubic meters of water per year in 11 plants and serves 874,000 customers. With respect to electricity, it has 29 power plants (27 hydroelectric), and is responsible for 20% of the total sales of electricity in Colombia. Electricity coverage is almost 100% in the metropolitan area of Medellín, 98% in urban centers of other municipalities, and 80% in the rural areas of these municipalities. EPM also distributes natural gas for 309,000 customers. The MEGA (equivalent to English BHAG, “big hairy audacious goal”) of the EPM Group for 2015 is to report US\$5 billion in sales, with a considerable amount earned outside of Colombia, which will require sustained growth considering that total sales in 2007 amounted to US\$1.5 billion. Between 2005 and 2009 the big investment in hydroelectric generation was on the Porce III project, for a value of US\$1.1 billion, financed with a \$200 million loan from the IDB. This is a continued development of the major competitive strength of EPM: the hydroelectric generation potential of the mountains of Antioquia. The enterprise faces growth limitations in electricity distribution because of the dominant position it has obtained in several markets. The next major investment in water is the Bello treatment plant, financed with an IDB loan of US\$450 million, which amounts to 74% of the investment value. In water, growth should be obtained through the expansion of the system to reach the market at the east of Antioquia, and through investment as partner or operator in regional water companies in Colombia.

Table 4

EPM - FINANCIAL INDICATORS 2006 - 2007								
Values in billions of Colombian pesos								
	Return on capital		EBITDA		Margin EBITDA		Employed Capital	
	2007	2006	2007	2006	2007	2006	2007	2006
	%	%			%	%		
Water	9.0	12.0	307.9	296.1	54.7	58.3	2,068.8	1,598.1
Energy	9.5	8.7	1,098.7	1,031.0	41.9	46.5	8,198.6	6,138.9
Generation	10.1	9.3	723.2	681.9	51.1	58.3	4,855.4	3,657.2
Distribution	8.7	7.4	352.1	326.8	27.4	29.1	2,933.3	2,202.5
Gas	3.6	11.5	23.4	22.3	11.0	11.1	409.9	279.3
EPM Total	9.4	8.9	1,406.7	1,528.5	44.7	50.1	\$10.267.4*	\$7.737.1*

*The consolidated values are \$10.026.8 and \$9.776.11, respectively.

Table 4 shows that EPM generates a moderate economic rate of return and liquidity in all its strategic businesses. Individual businesses do not seem to provide funds for others, at the aggregate level. If the current tariff structure is affordable for customers and profitable for the group of companies, one can infer that consumer and worker’s interest groups do not raise special conflicts for CG. The table also shows that the size of the energy business is four times the size of the water business, both in terms of earnings before interest, taxes, depreciation and amortization (EBITDA), as well as in terms of capital employed. Both large businesses have important investments ahead that the Municipality of Medellín is not going to finance with fresh capital, and both businesses have long-term borrowing capacity. Thus, the central interest of EPM in CG revolves around maintaining an excellent rating as a borrower and issuer of long-term securities in local and foreign currency.

EPM has undergone a significant evolution of its CG practices between 2001 and 2008. The formal work in this area began in 2001 when the body regulating the issuance of securities (Superintendencia de Valores) demanded that those enterprises issuing securities adopt codes of “good governance” (res. 275/01) as a condition for their bonds to be acquired by pension funds.²² With a level of indebtedness of 26% at that time and an active

²² Resolution 275/01 was the first Colombian regulation to introduce CG practices. However, it was an imprecise regulation in regard to the standards that codes of good governance should include; as a result, the majority of the codes that were then adopted by security issuers were limited to replicating the company law.

participation in the internal capital market due to costs, term and risk, EPM proceeded, as an issuer, to provide the first code of good governance (CGG, Decree 273/01 [Dec.] JD), that included notes about the history of the firm and descriptions about what the enterprise had already done in organizational matters. The commitment was to comply with a new requirement. However, the CGG did not have the equivalent stability of a statutory charter, required by the regulatory body.

After a consultation with the Superintendencia de Valores, the board of directors issued an “internal statute of corporate governance” (Decree 179/02 [Sept.] JD) which constituted a unilateral commitment of the EPM before all the holders of internal debt securities issued and placed by the firm, able to be incorporated in the respective contracts with the bondholders’ legal representatives. The obligations assumed then by EPM referred mainly to practices for reducing the asymmetries of information for the securities’ investors, including disclosure of financial statements, special external audits if they were requested, annual review of risk ratings by an independent agency, information meetings with investors, etc.

In 2003 the report of the risk rating agency Duff & Phelps indicated some concerns with respect to EPM’s CG based on board decisions over the relationship between the firm and the Municipality of Medellín administration, that could increase political risk, such as the percentage of “transfers” (dividends) paid on earnings, and the transfer of EPM’s headquarters building to the municipality in 2002.

The IDB evaluation teams in charge of preparing the loan operation for Porce III thought it was important to state a CG risk that needed to be addressed before approving the operation. They pointed out that:

“2.9 The Municipality of Medellín owns EPM, whereof act EPM transfers²³ 30% of its profits earmarked to social investment and payment for street lighting. In 2003 this transfer

Efforts to introduce legal reforms of greater substance in subsequent years failed in the congress. Law 964 of 2005 was the next advance made, which motivated the recommendation of a “country code” of CG, based on an agreement between the financial regulatory body (la Superintendencia Financiera) and business associations in 2007. The practices of this “country code” are in general less demanding than the OECD principles of CG, and their adoption is basically voluntary, with a suggestion to issuers to annually respond a survey in which they report about the recommendations’ compliance.

²³ Acuerdo Municipal No. 069 from 1997. Footnote No. 2 from this text.

amounted to US\$50 million. One of EPM's strategic pillars for corporate development should be its strengthening through measures that protect it from negative political influences originating in the municipal council and the city government, and that direct its growth towards clearly defined goals. To guarantee that future administrations will direct their actions towards fulfilling principles of long term business profitability, it is very important to design, implement and formalize clear policies of good corporate governance that allow and assure greater long term transparency, both in the relationship between the enterprise and the municipality, and in each of the firm's internal processes."²⁴

EPM then proceeded to issue a new CGG (Decree 204/05 [Jan.] JD). It was actually a compilation of laws, agreements of the municipal councils, and previously issued internal rules, so it had a little of everything, from strategic planning and human resource management to social responsibility, from quality management to environmental policy, in addition to some CG practices. However, it did not include a review of the CG contradictions and conflicts stemming from these norms, such as a board of directors that could decide to invest but not disinvest, or the ambivalence between the BD's simultaneous roles of oversight and self accountability. Above all, there was the already quoted observation about the variability of the municipality's dividends, given EPM's structure of property and control.

In May 2005, the firm IAAG carried out a comprehensive consulting study on CG for EPM. Since that time, EPM has reoriented its efforts in corporate development to gradually and progressively match international standards for better practices. The loan contract IDB 1664/OC-CO of December 2005 included a component for corporate development which established, as special conditions for loan execution, the presentation of an annual report with the advances in the implementation of the corporate development measures and the results of the external evaluation, and requested a plan of activities for the first year of the loan term as a requirement for the first disbursement. The enterprise prepared a plan with a broad scope (January 2006) that included statutes reforms, a framework agreement between the

²⁴ See Porce III Hydroelectric Power Plant. Project Conceptual Document, 04-09-2004, page 4. Published in the IDB's website, in compliance with its transparency policy that requires documents of approved loans be published. <http://www.iadb.org/projects/project.cfm?id=CO-L1005&lang=es>.

municipality and the enterprise, board of directors regulations, adoption of CG practices and a new CGG. The execution of this plan would only be possible with support from the Medellín government, the board of directors, and the enterprise management but, in addition, would require a corresponding political response from the Medellín city council.

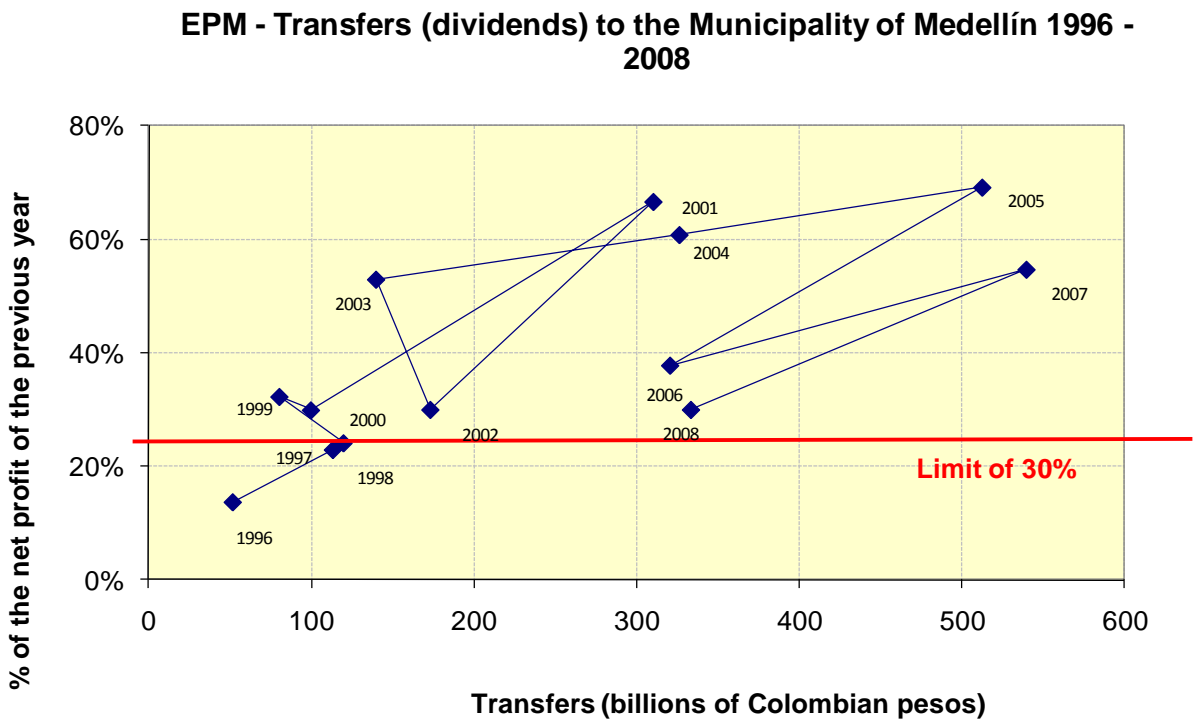
The enterprise issued comprehensive CG action plans for 2006 and 2007. The statutes were not submitted for reform to the Medellín council in 2006 in response to the local political environment, nor in 2007, a year in which mayors were elected, or in 2008. But the municipal government supported actions that began to produce a change in CG and in the municipality's ownership policy toward the enterprise. The framework agreement of governance between the municipality and the enterprise (April 2007) turned out to be a politically important instrument, with a set of visible and valiant commitments of the municipality directed at preventing abuse of the firm's economic conditions, and by EPM aimed at enhancing performance and generating economic returns for the owner. The agreement's limitation, however, was that it was not binding for the parties. The framework agreement would be fulfilled "subject to the conviction of the parties in relation to the principles that inspired them and the appropriateness of the dispositions in the contents as effective practices of corporate governance" (number 3.1). Thus, the greatest aspiration of the framework agreement is that of becoming a pedagogical exercise that aims for the citizens to become the defenders of a scheme of transparent relations between the municipality and the enterprise. The 2007 version of the CGG (Decree 237/07 [Oct.] JD) presents a greater unity of concepts of corporate governance and a clear development of three topics: the relationship with the enterprise's ownership, the board of directors as an organ of governance, and the disclosure of information. The adjustments to the regulation of the board of directors also reflect greater simplicity and consistency. Nevertheless, the external rules that restrict the corporate development of EPM were left untouched: for example, the board of directors, which acts sometimes as a board and at times as a shareholders' general meeting, is not accountable to the mayor since he is a member of the board, but instead the manager is accountable to a board that shares management responsibilities. A very important advance of CG obtained by EPM is its website, which publishes updated, complete, and relevant market information, following outstanding standards, even relative to the majority of

corporations and issuers of Colombian securities, and comparable to good international websites. The firm has prepared annual CG reports and has submitted the fulfillment of their annual CG action plans to audits. EPM has prepared itself to re-express its financial statements in terms of international financial reporting standards (IFRS), but probably will not do so until it becomes a formal legal obligation in Colombia.

With respect to the reality of the compensation between the enterprise and its owners, Figure 3 indicates that the Municipality of Medellín has not made consistent decisions with respect to profits' distribution. This figure indicates that between ordinary and extraordinary dividends, the share of annual profits transferred varies greatly (between 30% and 70%), especially in years of greater political importance. For EPM, the obligation of contributing in a substantial way to the financing of the Municipality's Development Plan is a political decision of the owner. This creates the need to only undertake projects with positive net present value (NPV), to review areas of low profitability, put forward active financial management practices that allow continuous contributions to the enterprise's investment plan and to obtain sufficient flows of resources to guarantee both the debt service as well as the municipality dividends. The dividends' distribution supposes that the enterprise is capable of creating value in a sustained manner, which means that it is capable of paying the cost of debt and of remunerating the owners so that they can comfortably cover their own capital costs. The cost of the municipality's public debt can be greater than or comparable to the profitability of the firm. As a consequence, it is crucial for the municipality that EPM generate distributable economic returns, as well as to preserve the mayor's control (in the sense of a decision-making majority) at the board of directors, so that its decisions are always consistent with the municipal budgets. In time, the projected fiscal needs of the municipality could lead the firm to consider ways to optimize its capital structure and improve its economic returns; for this to happen, sooner or later EPM will have to adopt the legal structure of a corporation, even if it continues to be an SOE. As the growth of the markets of the EPM Group is displaced to other regions and foreign markets, and the earnings and EBITDA start to derive more and more from these areas, the importance for the municipality of its role as owner will be greater than that of guardian of the quality of public services in its

territory. In this sense, there may be a convergence of interests with the other providers of capital in the enterprise.

Figure 3



In sum, the evolution of EPM, with four codes of CG adopted between 2001 and 2007 confirms that in this aspect, the process, lessons, and sense of direction, are much more important than maintaining the pretense of continuity with respect to any code or set of rules. On the one hand, the enterprise has had to navigate within the political imperatives and conflicts of a municipality averse to having its flagship institution adopt the form of a corporation, and therefore prone to imposing non-commercial practices. On the other hand, EPM has had to respond to the expectations of agents in domestic and international capital markets as issuer of securities and debtor, adopting behaviors that allow it to maintain its good risk ratings and strong reputation. Its framework agreement is an innovation in CG with a reach almost equivalent to a majority shareholder’s declaration, which hopefully will attain binding power in the near future.

In addition to the case of Medellín, the IDB has broad experience in the last several decades financing PUEs projects in Colombia, some of which are completed, restructured, or in progress. These include projects in Manizales, Pereira, Bucaramanga, Cartagena, Barranquilla and Cali. Other projects supported sector reforms in water and sanitation. This paper will not try to review each and every one of the cases and the lessons learned. Frequently, the presentation of projects for multilateral financing provides an opportunity to profoundly revise the functioning, management and structure of the companies, as well as the evolution of regulatory frameworks, the institutional architecture, and contractual arrangements. The examination of these cases suggests that there is a greater probability of obtaining results when the proprietary municipalities have sufficient political will to undertake substantial reforms – not merely formal – to the PUEs' CG. In the case of SOEs, that political will arises naturally in the context of an imminent crisis, from a major change in the structure of property, from an important investment project that requires financing, or at the beginning of a mayor's term in office. In other instances, it is more likely for CG reforms to be minor or not to occur at all. Various companies have learned that the adoption of CG practices, as difficult as it may initially seem, turns into a valuable shield against political pressures. The PUEs have little power to preserve their business autonomy from mayors, who usually appoint the members of upper management and the board of directors. The mayors should learn how to make the fulfillment of their electoral programs compatible with the preservation of the public resources invested in the companies and the infrastructure dedicated to water and sanitation. A recent tendency that has come to reinforce the consolidation of more efficient structures of water and sanitation's operations is a set of departmental plans, supported by the Colombian government with fiscal resources (CONPES Document 3463 of 2007), oriented towards having companies with greater levels of efficiency and economies of scale provide services in small, neighboring municipalities. This initiative, when implemented, would represent an important change, since it would permit small, associated municipalities to significantly reduce the risks to CG to which they are exposed because of the local politicization of the service. At the other extreme, 676 municipalities have still not formed a local public utility.

In Colombia, the Water, Sewage and Sanitation Company of Barranquilla (Sociedad de Acueducto, Alcantarillado y Aseo, AAA) is one of two companies of this type in Latin America that is active internationally. It operates in Colombia, Ecuador, and the Dominican Republic. It does not have a capacity to significantly increase the volume of local capital. 60% of the AAA's capital comes from Canal Isabel II, a Spanish public operator (Lobina and Hall, 2007). Four water and sewerage utilities in Colombia are registered in the local stock market: AAA; Water and Sewage Enterprise of Bogotá (EAAB); Municipal Enterprise of Cali (Empresas Municipales de Cali, EMC), and EPM. In Colombia local and international private operators are involved in providing services. EAAB, EPM and Aguas de Manizales, which are owned by municipalities, are trying to expand their markets. For some time EPM, together with its Employees' Fund, operated a management contract in Bogotá and has been interested in working in Peru (Lobina and Hall, 2007). As indicated above, in Colombia, the process of legal transformation of water and sanitation companies has been very slow. Most PUEs are far from capital markets and are financed only through governmental credit lines and budgets.

In the seminars carried out for this project there was a consensus on the feasibility of making advances towards good CG, that such progress requires continuity, that it should generally be a gradual process -by stages-, and that, to the greatest extent possible, it should effectively involve forces interested in the adequate provision of services. In Colombia, the National Council of Economic and Social Policy (Consejo Nacional de Política Económica y Social) (CONPES document 3384 of 2005), recommended this approach in CG practices. These policy guidelines are aimed mainly at PUEs with majority state ownership. For example, in the composition of the boards of directors, persons proposed by the chambers of commerce, universities, professional associations and unions may be included in the list of candidates. However, a problem that still needs to be to be solved is that, since effective contributions to the capital resources of the enterprise are not being made, these forms of representation in the boards, as well as that of the spokesmen of customer's committees will be unlikely to be affected by the results. That is, it is not easy to solve the problem of apathy in the collective action mechanisms. Mayors should recognize that they do not act as

permanent owners of the companies but as custodians or citizens' delegates during their term in office.

In relation to financial discipline, the creation or destruction of economic value on the part of each PUE for which an assessment of CG is carried out is frequently a sensitive subject for managers. When the shares of a PUE are bought and sold in the stock market, the EVA (economic value added), the change in EVA, and other similar indicators, in addition to those that relate the book value with the market price, tend to be considered as confidential information. It is common for such indicators not to yield positive results. Various companies have expressed the view that the large amount of water and sanitation's infrastructure assets makes it very difficult to obtain profits greater than the cost of capital. However, it is possible for a negative EVA to be the result of different phenomena, some of which can be associated with current or historic decisions of the companies (e.g. oversized infrastructure, tariffs that do not keep up with costs, suboptimal contracting of works, high labor and employment allowance costs, inclusion of expenditures not strictly related with social goals, poorly evaluated projects), while in other cases it could be due partly to deficiencies in the bookkeeping plan, the regulatory framework, or the impact of legislation on taxes charged on infrastructure assets. What is certain is that progress directed towards creating economic value is one of the most difficult and prolonged tasks that a PUE administration can undertake, and that in this field, results are not obtained rapidly, except with radical decisions that challenge the companies' power structure. Tenacity, firmness and patience are required from the owners as well as the boards of directors, and the chief executives.

The following conclusions are proposed from the review of the Colombian experiences of CG: a) regulatory and CG schemes should not be transplanted without taking into account the local conditions of civic capital; b) the initial changes of CG should be feasible so that they are not exposed to obstruction by existing coalitions; c) changes in CG should be carried out simultaneously with changes in complementary institutions; d) it is important to seek structures of CG that are based on the alignment of incentives among partners, with some component of participation of the private sector, and some counterweight from civic groups for the public interest defense; and e) the combination or 'package' that includes high-powered regulation, private or mixed ownership of the PUE, and an adequate CG for the

requirements of public stock markets, would function better in situations in which civic capital is high, customers demand high quality services and are willing to pay for it, and the fiscal set-up is appropriate.

PERU: GAINING SUSTAINABILITY IN 50 PUBLIC UTILITIES

In 2007 the IDB approved the programmatic loan PE-L1025 for US\$200 million to finance the sanitation sector reform, with co-financing from the German Cooperation Agency (KfW) for US\$25 million. The objective was to improve the unsatisfactory results of the WSEs (Table 5). Water and sanitation services in Peru were traditionally the responsibility of the national government. The WSEs were “nobody’s children” since they had to answer to many parents (superiors). In the 1990s management was transferred to the municipalities, the Ministry of Housing, Construction and Sanitation took charge of sector policy-making, and economic regulation and service quality remained a responsibility of the National Regulatory Body of Water and Sanitation Services (SUNASS). The largest WSE is the Water and Sewage Service Company of Lima (Servicio de Agua Potable y Alcantarillado, SEDAPAL). After this one, there are 45 WSEs (recognized) that serve middle-sized cities of more than 30,000 inhabitants. In small towns services are ascribed to municipalities and in localities with fewer than 2,000 inhabitants administrative boards predominate.

Table 5

Perú - Performance indicators of WSE				
Indicator*	2000	2003	2006	MDG**
Potable water coverage %	82.4	83.6	82.8	91.2
Sanitation coverage %	73.8	75.3	75.0	86.9
Treatment coverage %	16.9	22.9	23.7	58.5
Service continuity (Hrs./day)	16.0	18.2	19.2	20.0
Unaccounted for water %	46.4	45.5	42.9	n.a
Micro-metering %	48.3	53.9	49.3	n.a
(*) Data from SUNASS.				
(**) Investment required to reach MDG: USD 4.1 billions (DNS)				

The programmatic loan included the formulation of a ten-year plan (2005-2015), for universalizing the service in an efficient and sustainable manner; an extensive reform in the legal, regulatory, tariff, contractual, and master plan frameworks of the WSE; and three measures affecting their CG: the restructuring of liabilities with the National Housing Fund, the authorization of SUNASS to establish service tariffs including differential tariffs by consumption, and the restructuring of the companies' boards of directors to include members of civil society and regional governments. The entire program depends on a high degree on the success in increasing the quality of the companies' management, therefore the importance given to corporate governance practices, the service's sustainability, financial viability and private sector participation in the 13 largest WSEs (that serve 5.5 million inhabitants).²⁵ The plan identified 14 broad problems in the sphere of national laws and institutions in the water and sanitation sector: planning and budgeting; contractual arrangements between the municipalities and the companies; and corporate governance and managerial and administrative capacity. In particular, from the point of view of CG, two problems created serious difficulties: the absence of a definition of rights and obligations between the provider and the municipalities, or in other words, the absence of a clear ownership policy on the part of the municipalities, and the interference of political forces in the management of the companies. These political forces included: "frequent turnover of management officials, a short horizon for decision-making without strategic planning, and a limited application of business criteria."²⁶ The performance ranking of 50 PUEs carried out by SUNASS in 2007 showed the following grades: three firms with a grade of A, 28 with B, 18 with C and one with a D.

The Minister of Housing, Construction and Sanitation issued an *exploitation contract model* (res. min. 425/2007) between the PUEs and the municipalities. Some relevant aspects of this model are the following:

a) PUE contractors are corporations, governed by the general law of corporations, whether they are public, private or mixed. In almost all cases, the municipalities received the

²⁵ Peruvian authorities think that the private sector can contribute to increase management quality without necessarily making investments. However, they recognize that initiatives of that type provoke hindrance from public opinion, especially in the provinces.

²⁶ See IDB, 2007.

PUEs' shares from the national institution SENAPA. When there was more than one municipality for a single enterprise, ownership was distributed in proportion to the population. The stocks of the municipalities are not transferable.

b) The companies apply the tariffs defined by SUNASS, based on the company's respective Optimized Master Plan (OMP), a 30 year program of investments and cash flows, with the apparent intention of impeding SOEs controlled by the municipalities from freezing tariffs and thereby undermining the enterprise financial viability; in practice, the constraint to this model of self-sufficient financing over the long term is the existence and quality of OMPs. In 2008, among the 50 PUEs recognized by SUNASS, there were already about 15 OMPs with tariff formulas, and plans for OMPs in 16 additional companies.

c) The exploitation contract defines multiple obligations for PUEs with respect to the fulfillment of external economic, technical, legal, environmental and social norms, but this management model has a paternalistic style since it removes the board of directors' and the companies' upper management their economic responsibilities and transfers them to SUNASS or other national agencies. The same occurs with tariffs: to ensure sustainability and the capacity to cover capital costs, SUNASS does the financial analysis, studies the capacity for investment and borrowing, and judges external credit operations for PUEs. This also happens with salaries, which are approved by the Ministry of Economy and Finances, and tend not to be competitive, so that the best-qualified managers tend to not stay long in the PUEs.

d) The exploitation contract model proclaims principles of transparency, management autonomy, business sustainability and other types of sustainability, efficiency, productivity, good corporate governance, accountability, participatory democracy, integration, compliance with laws, corporate social responsibility, and independence in the management of economic and financial resources between the POE and the municipalities; all of which are actually statements of intents.

e) National government officials believe that the majority of the PUEs are not sustainable: the investment that they make is subsidized by the state through the program "Water for All." KfW's technical cooperation has supported projects for improving

management so that the companies may obtain positive operational cash flows in a difficult context. For example, the contract model prohibits political interference in the companies' management and creates mechanisms for seeking compensation if the municipalities infringe this requirement. The national government reformed the composition and duration of the PUEs board members (decree 0010/07): there are now five members, including two representatives from the municipalities, one from the regional government, one from the chambers of commerce, and one from the professional associations, and their term is for three years with the possibility of reappointment. Even so, the mayors and the council members still exert important influence over the directors' decisions. Many of these principles contribute to the possibility of forming a power structure that avoids the greatest risks of CG for state owned companies.

f) Although the exploitation contract model represents a significant change in comparison to the previous legal framework, it still does not explicitly specify under whose titling the exploitation is being made by the enterprise. Apparently, this was done so that other laws could define the scope of the concession or other type of contractual arrangements allowed by Peruvian legislation, including: whether the infrastructure and water and sanitation networks, and the rights over water to be treated and for the discharge of rain and polluted effluents, will be contributed by the municipalities to the equity of the PUEs; or if these will have to pay some type of compensation (rate, rent, royalty, etc.); whether after a predetermined period of time, the investment reverts to the municipality or remains in the enterprise as a part of its equity, etc.

g) The contract mentions some economic incentives that the national government can offer for companies that comply. These incentives do not establish a precise condition for donations, subsidies or transfers, whether for customers or for profit seeking PUEs.

It seems then, that in the general exploitation contract model there are several open issues. Therefore, the possibilities of obtaining dynamic participation from the private sector will depend in each case on how those aspects are defined.

In addition, the Ministry of Housing issued the *CCG Model* (res. min. 426/2007), to be adopted by the WSE within the six months following September of 2007, as well as an

accountability model. The CCG Model is four chapters long, with 32 principles. Taken as a whole, the CCG Model seems like a good effort in adapting the OECD principles to local conditions. The following are some comments on the CCG Model:

a) The national regulatory agency keeps the power over the fundamental company's control tools. SUNASS approves the optimized master plans and tariffs structured on the basis of the OMP. The boards of directors are not appointed by the shareholders, but follow the rules indicated by the government's regulations (Dec. Sup. N° 023-2005-Vivienda), incorporating representatives from the regional governments and civil society. By contrast, with the exploitation contract model, the CCG Model is proposed for all PUEs, regardless of whether or not they are corporations and lack legal status as a stock corporation; thus the CCG Model speaks of "entities". In the end, the message that this type of framework sends, is that the residual risk, the risk of CG in the PUEs (failure to create firm value due to flaws in the structure of power of the companies, see section "Basic Concepts"), is not borne by the formal owners, the local governments or the private stockholders, but by the public finance of the national government, and that, therefore, the national government has to continue to exercise guardianship over key aspects in the PUEs' management.

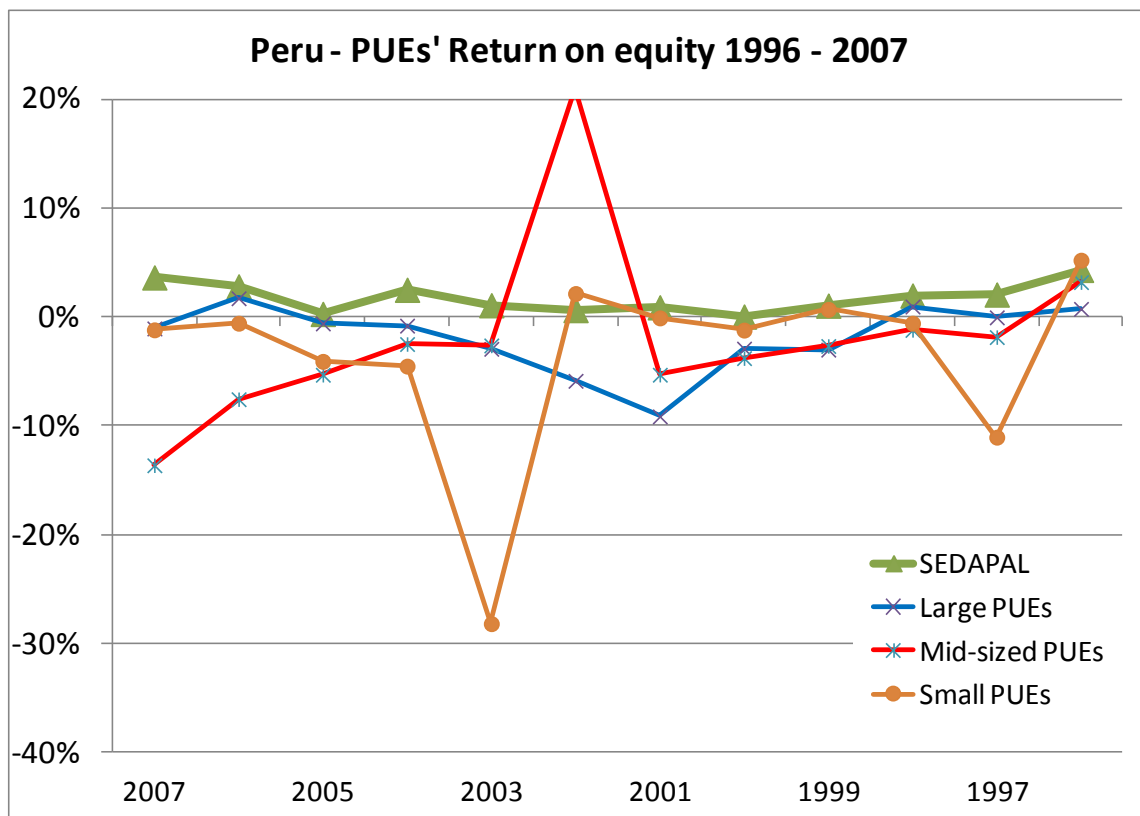
b) The CCG adopts a soft concept of CG, in which the relationships among all the groups with some interest in the entity are managed within a centralized control concept typical of the public administration. This entails the risk of losing the right structure of incentives. Recalling the ideas in the first section of this work, it would probably be preferable to reserve the instrument of CCG for the larger and more complex PUEs- those whose legal status is a corporation and in which the costs represented of the CG system are justified by the benefits they can obtain – and leave some basic and simple guidelines for the companies that, in practice, are not going to be controlled in detail by SUNASS. This would avoid contradictions such as that of regulating a general board of shareholders for "entities" that do not have shareholders.

c) The document instructs the board of shareholders not to intervene in the management of the PUEs (principle 2), but further on (principle 8) it assigns to the general board of shareholders a responsibility that should be assumed by the directors: authorizing the POE's level of indebtedness on the condition that it never devotes these resources to expenditures on

personnel or the acquisition of goods. This implies that the board of directors is limited to having an advisory role, as opposed to being in charge of the enterprise's management. In addition, principle 8 retains an outmoded concept of the public treasury that assigns rigid boxes for budgets of desirable productive investment and of unproductive and undesirable operations. Under these circumstances, it will not be easy for the PUEs to develop policies on the capital budget and the structure of capital so as to optimize their ability to generate value.

d) The annual report of CG and the annual evaluation of the board of directors and management, foreseen in the CCG, do not really seem to refer to the progress in CG, but to its effect – to the advance of management goals and of the OMP. This eagerness for results is understandable considering that in the current WSEs conditions the results are signals of short-term viability after a long series of operations that were run with deficits. Between 1996 and 2007, the profitability of PUEs' assets was close to zero or negative in almost all cases. Only SEDAPAL obtained positive nominal profitability (although low) as shown in Figure 4.

Figure 4



The first attempt at private sector participation within the reform program adopted since 2007 has been the WSE of Tumbes, in the form of a concession. The company was started without financial burdens the day after the bankruptcy of its predecessor was declared.²⁷ The consortium included an Argentine (Latinaguas) and a Peruvian (Concyssa) participant. The company applies KfW's standards of contracting, budgeting, monitoring and accounting. The state contributes counterpart investments on behalf of the three municipalities served by the company. The firm does not pay royalties or surcharges for using the assets. The cash flow from operations is sufficient to cover debt service. The concession was granted by open tender and began with a reduction of the initial assets inventory. These actions aimed to eradicate poor management and corrupt practices that included metering problems and tolerance of illegal consumers and, therefore, a high percentage of "unaccounted for water" The initial period's experience is that the project may work: the concessionaire exercises greater control with respect to the commercial aspects of service and collection, tariffs cover costs, and investments are in progress with external financing, even though the expectations around the project aimed at a more marked change in managements' quality. The government has recognized that there remain some voids in the concession contract, which could be taken advantage of by the concessionaire. Ex post, it has also acknowledged that it would have been desirable to obtain greater equity backing from the consortium. In turn, the operator has started to search for a way out of the country, warned about the risk of a new wave of politicization over time. In sum, the case of Tumbes can be considered a valuable effort, and one of the lessons learned from the concession type of contractual arrangement is that a greater coordination of the government agencies needs to be obtained by ProInversion²⁸ before granting the concession. Public officials, however, consider that the concession approach is valuable and that it opens opportunities and positive ways forward.

The structure of political incentives is difficult to resolve by means of CG only, and this contributes to indefinitely keeping the WSEs that run deficits in the vicious cycle of a "low

²⁷ Apparently other WSEs are technically bankrupt but no creditors are requesting that tendering procedures be opened for institutional reasons. It is frequent in such cases for the mayors to attempt to prop up the public utilities with foreign loans or credit lines from the government.

²⁸ The Peruvian government agency charged with promoting private investment.

level equilibrium.” SUNASS does not have powers to intervene in insolvent companies, and national officials must follow costly procedures to be able to make appropriate decisions. A realistic objective would be for WSEs to become formalized within a five-year period, complying with the regulations and reaching updated tariffs, in exchange for more satisfactory standards of service. Meanwhile, the Peruvian government will continue its effort to overcome the deficiencies in respect to infrastructure by using public resources to differentially treat the WSEs according to their size, and to ensure that they are capable of efficiently administering the investment.

BRAZIL: SABESP, INTEGRATED WITH CAPITAL MARKETS

The Basic Sanitation Company of the State of São Paulo (Companhia de Saneamento Básico do Estado de São Paulo, SABESP) is a mixed company, with open capital, whose controlling shareholder is the state of São Paulo (50.3% of the shares), and that acts as concessionaire for the provision of basic sanitation and environmental services for 366 of the 645 municipalities within the state (SABESP, 2008b). That is, it serves a geographically discontinuous zone. This company is responsible for the construction and operation of water, sewerage and industrial effluents’ systems, for approximately 68% of the urban population of the state of São Paulo. The city of São Paulo represents 50% of SABESP’s billing. The IDB has granted various loans to SABESP, aimed mainly at financing the stages of the Tieté river project, and has closely followed the progress of the company with respect to CG.

Financial and corporate governance evolution. SABESP was created in the 1970s combining the efforts and assets of the state and federal governments, as a product of a financial scheme devised by the National Sanitation Plan. Its creation addressed the need to manage and finance large projects to ensure supply of water to a growing megalopolis and improve its coverage and quality in the state of São Paulo. In the early 1990s, the company had small liquidity, was tightly controlled by the state of São Paulo, had deficient service standards, and was under financial stress. In 1994, a reorganization process created accounting, financial, reporting, and legal conditions that allowed it to issue debt without guarantee in the financial market: one to three year bonds, commercial papers in 1996 and

Eurobonds in 1997. Henceforth, the participation of SABESP in financial markets advanced hand in hand with the developments in CG.

In 1997 the company registered its stock in the Stock Market of the State of São Paulo (Bolsa de Valores del Estado de São Paulo, BOVESPA).

In 1999 it adopted the Generally Accepted Accounting Practices (GAAP), a United States standard. In 2000 it issued Eurobonds for the second time.

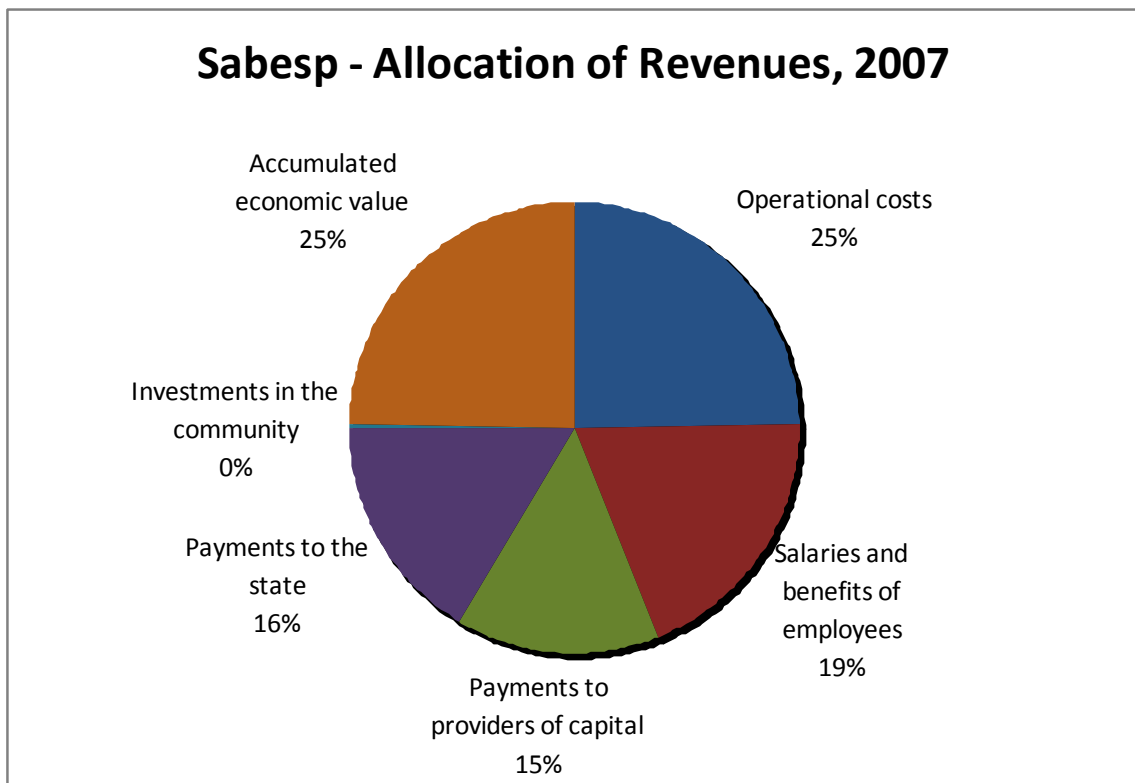
In 2002, SABESP incorporated the high CG standards of the Novo Mercado, including changes aimed at boosting market confidence such as the disclosure of relevant information, quarterly financial reports, maintaining a 25% minimum of the shares accessible to investors through the public market (*free float*), and guaranteeing equitable treatment to minority shareholders with conditions such as “one share – one vote”, tag along rights, and rules with respect to the composition and functioning of the board of directors, including the participation of independent members.

In 2003 it introduced significant internal audit activities and processes to ensure compliance with rules 302 and 404 of the Sarbanes-Oxley law from the United States, and initiated the publication of standardized information about the company (annual reports in the 20-F format to the Securities and Exchange Commission of the United States), thereby assuring access to the New York stock market. Indebtedness represented 50% of assets in December 2007, an amount that some observers consider high for a water and sanitation enterprise.

Large figures and interest groups. In 2007, the company obtained gross revenues of R\$6.4 billion, an EBITDA of R\$2.7 billion –with a margin of 45.2%– and registered a liquid net worth of R\$9.8 billion (exchange rate: R\$1.78= US\$1 on December 31, 2008; and R\$1.95=US\$1, average rate for 2007). SABESP serves 26 million people, of which 23 million directly, with a registry of 6.8 million connections for water service and 5.2 million for sewerage. 76% of the volume billed for water and sewerage corresponds to residential consumption, 9.2% commercial, 2.1% industrial, 2.7% public, and 9.5% is supplied wholesale to other companies and municipalities (figures are rounded). The company employs close to 17,000 workers. SABESP issued 13,786 contracts for R\$1.96 billion in

2007. Out of these, contracts for construction amounted to R\$1.16 billion in 333 contracts with 96% of these managed through concurrence methods and 3% through comparison of market prices. In the other contracts (materials, engineering services, and general services) the most common form of contracting is that of “pregão”, a sort of Dutch auction regulated by law N° 10520/2002. The division of revenues among interest groups is shown in Figure 5. Payment to “capital providers” includes dividends to shareholders, returns to bondholders, and interest to lenders, while payments to the state include taxes and duties.

Figure 5



Investment. The company plans to bring potable water coverage to 100% and increase sewerage coverage to 84% by 2010. It plans to invest R\$5.87 billion between 2007 and 2010. SABESP’s main investment project is the treatment of wastewater that flows into the Tieté river, the city’s largest catchment. Stage III of this project will invest US\$800 million, out of which US\$600 million has been requested as a loan from the IDB.

Capital structure. The company used 58% of the operational cash balance to service the debt. This shows how important it is for the company to professionally manage its finances, with a stable flow of revenues and with little vulnerability to economic cycles. SABESP has not sought nor desires a strategic partner. The minority shareholders simply seek a return on their investment, which is reflected in the behavior of prices: the market for control of SABESP has no scope (the state of Sao Paulo will always be the controlling shareholder) and the policy related to capital structure is focused on obtaining continued financing through the issuance of securities and new credits. Thus, financial management can aspire to reduce transaction costs and take advantage of the tendency for public and private capital markets to converge. As mentioned above, indebtedness represented 50% of the company's assets in December 2007, which seems high for a water and sanitation enterprise. The recognized advances made in CG facilitated its access to the market, even in situations like the current crisis, which would have been unlikely otherwise. The SABESP's credit ratings in 2007 were BB- for the international market (Standard & Poor's) and A+ for the national market (Standard & Poor's and Fitch Ratings). For the Eurobonds maturing in 2016, the rating assigned by Fitch was BB.

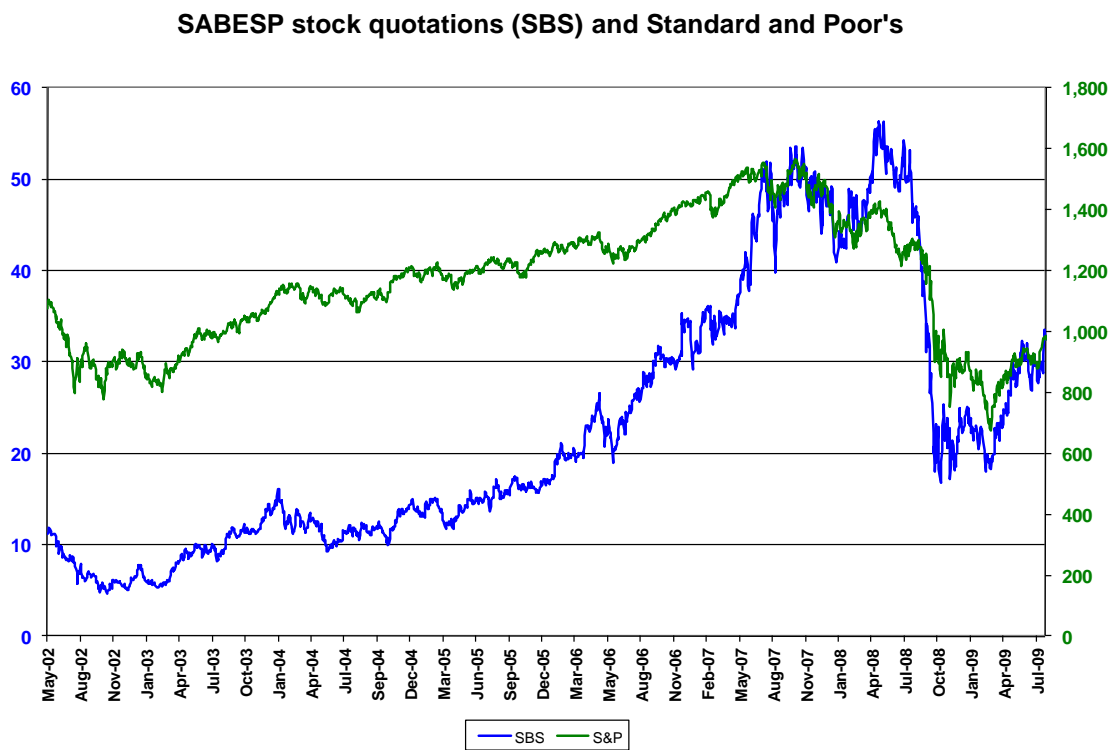
Property structure. Besides the state of São Paulo as controlling shareholder with 50.3%, there are around 2,000 shareholders. Selling additional shares is prohibited. SABESP stock is listed in Bovespa (Novo Mercado) and as ADR II (*American Depositary Receipts*) in the New York Stock Exchange (*ticker* in this stock market: SBS) with current approximate proportions of 27.2% and 22.5% respectively, at December 2007. According to a report of Yahoo Finance,²⁹ as of June 30, 2008, there were 146 non-Brazilian institutional and mutual fund shareholders owning 21% of the company, out of which the ten largest institutional investors owned 9% and the 20 largest mutual funds 3%.

Role of minority shareholders. The minority shareholders perceive that the controlling shareholder has respected the rules of the game for more than a decade and that overall, in the long term, the rate of return of SABESP stock compares favorably with that of other companies with majority governmental ownership in Brazil. The regulatory framework

²⁹ See <http://finance.yahoo.com/q/mh?s=SBS>, consulted October 21, 2008.

created in 2007 may favor progress in the harmonization of tariff criteria and a lower exposure to freezes or arbitrary changes on the part of the municipalities. On the other hand, the ownership structure among the minority shareholders can be affected by the reaction to the general ups and downs of the markets. As can be seen in Figure 6, the value of SABESP (SBS) stock was stable from 2004 to 2005 and then grew sharply after that until 2007. This growth was far superior to that of the Standard and Poor's (S&P) index. Then, recently, the stock fell markedly, and also sharper than S&P.

Figure 6



Legal framework and regulation. Brazil has had a constitutional duality in water and sanitation services with both states and municipalities exercising control, because of which regulation in the metropolitan areas was delayed. Half of the municipalities have handed over the provision of water and sanitation services in concession to state companies (in the case of SABESP this was the case for 57% of the municipalities of the state of São Paulo), while the rest continue to provide the service directly. The company has employed the strategy of

attracting municipalities that have let their old concession contracts expire and those that have continued providing services on their own. Traditionally, SABESP's share of the market was expanded through the acquisition of municipal infrastructure in exchange for shares. When SABESP entered the stock market, many municipalities were able to sell their stocks. In 2007 the company incorporated 170 municipalities to its network, but the resistance of those outside of the SABESP system in São Paulo is considerable, due among other reasons to the fact that in many cases they receive subsidies from the state for providing the service directly.

Conflicts within the state sector. Brazil does not have a federal or national agency in charge of modern tariff and non-tariff regulation in the water and sanitation sector. Instead, each municipality may regulate its tariffs; and even this is disputed in courts. No entity seems to have jurisdiction over the municipalities not affiliated with SABESP, even though these have a limited period until 2010 to decide if they will conjoin or not to the company system. The dominant reality is that of cross-subsidies between consumers and communities: tariffs increase according to the volume of consumption; industrial and commercial sectors subsidize residential consumption and large cities subsidize small ones. These conditions create incentives for large industrial consumers to provision themselves using wells, and for other consumers to resort to contraband or other illegal consumption (according to a 2005 tariff study financed by the IDB). Greater clarity is required in relation to the costs of service categories that should be covered with the tariffs. Important sanitation policy and sector reforms are expected to be discussed in 2009 (after the municipal elections of October 2008). Despite clear advances, the state of São Paulo has not been able to systematically resolve the conflicts arising from its three-way condition as: a) controlling shareholder of SABESP; b) higher authority of the sector regulatory agency, and c) territorial entity with responsibilities for supporting the municipalities. SABESP depends on decisions of the state of São Paulo with respect to the number of its employees, labor compensation rates, merit competitions, salary negotiations, and oversight for the management of external and internal loans, etc. Its investments must be included and approved in the state budget. SABESP is still a company that is extensively overseen by the state, and its administration council exercises some of its functions *ad referendum*.

The dominant conflict of CG in SABESP seems to reside in the relationship between the government and the company's administration, illustrated by the following examples: a) services or expenditures of SABESP not compensated by the state; b) investment projects with an internal rate of return inferior to the opportunity cost of capital for the company; c) unproductive assets or assets with low rates of return maintained by the company to settle accounts that obliged its controlling shareholder – the state of São Paulo– due to the existence of old pension obligations acquired by companies that were SABESP's predecessors; and d) effects of judicial decisions in lawsuits provoked by law changes. In many cases, these have to do with the remaining effects of agreements that seek to resolve and liquidate old accounts in favor or against the company. The interviews indicated that these issues reflect the transition from a corporation dominated by the state to a hybrid company that is making progress toward operating according to commercial criteria.

These circumstances have been identified by the company, and disclosed to the markets. Box 2 summarizes some risk factors in relation to the GC conflict indicated above.³⁰ Informed of such risks, contingencies and results, investors discount some business and country risk premiums in their supply and demand positions in the stock market.

Box 2

Risk factors of SABESP (Report 20F)

Relative to the state of São Paulo as controlling interest

- The interests of the state of São Paulo can differ from the interests of the firm and minority shareholders
- We have unpaid accounts by the state of São Paulo and other state entities whose collectability is not assured
- We can be ordered to acquire the reservoirs that we use that are currently owned by a state firm, or to pay substantial charges for using these reservoirs

Relative to decisions of state entities

- Uncertainty about the effects on the company from new legislation approved in January 2007
- We do not have formal concessions to supply water and sanitation services to the city of São Paulo and other municipalities; thus, our right to continue providing such services may be at risk

³⁰ For more information, see www.sabesp.com.br and the Edgar file of the SEC of the United States Government.

- The municipalities can terminate our concessions before their expiration, and the compensation may be insufficient to recover what was invested
- Due to pending litigation in the Brazilian Supreme Court, there is potential instability with respect to which governmental authority has the right to plan and regulate basic water and sanitation services in metropolitan areas

Board of directors. SABESP has two board levels: a) the administration council with 11 members, and b) the directorate - an executive committee made up of upper management (the CEO or President of SABESP and five functional executives, called directors). In the administration council there are independent members. The council, as the locus of SABESP's CG is in the middle of a complex organizational structure that includes recent innovations such as the audit committee, alongside outmoded entities like the fiscal council, with mixed lines of dependence and authority. Controls common to corporations that issue securities in the bonds market are superimposed with traditional controls of the public treasury. The "lower level" board, or the directorate, exercises strong executive authority. Even though it is not explicit, in SABESP a member of the administrative council does not qualify as independent if he is a representative of the state. The pressure to attend to the interests and priorities of interest groups persists. The audit committee of the administration council operates regularly and is composed of members that are independent, qualified, and experienced in financial and accounting matters. In time, it may be possible for public officials to acknowledge that the coexistence of the audit committee of the administration council, and fiscal councils implies a duplication of agency costs, without clear benefits for good corporate governance.

Conclusions of the SABESP case. The company fulfills a high proportion of the CG recommendations for the majority of the usual categories proposed by the OECD guidelines. Its advances have been relatively persistent and consistent compared to other WSEs in Latin America. Among large companies of this type, it may be the one that has advanced the most in its own process of corporate governance. However, in this case it is also evident that agency conflicts are never totally resolved because the incentives of each agent and information asymmetries are part of the nature of organizations and contracts. Remember, there is a risk to CG when the systems and rules of management and control are not able to fully prevent losses originating in internal factors. The formal fulfillment of CG practices,

high and commendable in SABESP, should be reflected in the effective mitigation of the principal agency costs, in order to claim that CG fully achieves its goals. Some of the issues that arose in the review of this case could be addressed from the perspective of CG, others relate to different domains: contractual arrangements, regulation, division of power and responsibilities, and evaluation of rate and financial risk. Significant progress with respect to CG entails the creation of self-enforcing incentives on the part of different principals and agents, including the state of São Paulo, the administration council, the directorate and upper management, among others. It also entails the company willingness to allow the market to observe its actual fulfillment of conduct guidelines. The SABESP case is a reference of great importance to other WSEs in the region. It demonstrates that the approach of progressive development in this area is possible, and that much can be learned and written about the complex management of the relations between a controlling state shareholder and a financial market, which needs to be inspired confidence and to which it is necessary to turn in search of capital.

Next steps. The company recognizes the advisability of working on more demanding activities, like the annual evaluation of the administration council and the president, an explicit policy for transactions with related parties, the formalization of the link between internal audits and the auditing commission and administration council, the disclosure of the salaries of individual directors, the definition of a prudent, variable compensation policy, and more specific mechanisms for receiving and taking into account recommendations of minority shareholders. Another important challenge is to obtain consistent results in the creation of value.

CORPORATE GOVERNANCE AND PROPERTY RIGHTS

The general frameworks of corporate governance in Latin America reflect uneven advances. The legislation for protecting shareholders and investors is weak and the institutional context is fairly inefficient for enforcing the laws that are in place (La Porta et. al., 1999a; La Porta et. al., 2000; Chong and López de Silanes, 2007a, among others). This restricts the possibilities for private sector participation in self-reinforced contracts or excessively protected with sovereign guarantees, particularly in the water and sanitation

services. Some authors find that, in this sector, corporate governance cannot substitute for the weaknesses of the judicial system in protecting the property rights of shareholders. In this sector one should expect private investors take a control position and not be enthusiastic about “share democracy”. In water and basic sanitation, the experiences of private investment and sector public policies are varied. A number of reverses with respect to property arrangements have occurred including re-nationalizations and repossessions by municipalities (in several of such cases the participation of the private sector through contractual arrangements or partial privatization may have failed by overlooking economic, political and budget constraints). There is a tendency for investors foreign to the region to sell their assets. The majority of private operators in water and sanitation are domestic, which can be an indication of the need to build “relational capital” in order to minimize the risk of expropriation. Chile stands out as a country open to foreign investment, which shows confidence in its institutions. This tendency is documented in a study of 14 cases in five countries in Latin America carried out by Ducci (2007). This study highlights changes in sector policy orientations, difficulties in raising tariffs, and lack of transparency for awarding contracts, as causes for the departure of international operators from the region.

Lobina and Hall (2007), in their study on the processes of privatization and restructuring of water companies in Latin America, mention that in cities like Guayaquil (Ecuador) and Córdoba (Argentina) campaigns against the privatization of water have been launched based on concerns about increases in the tariffs for service; there have also been protests led by customers and unions. In Guayaquil, however, the concession was the product of joint work between the central government and the municipality. The board of directors of the Empresa Cantonal de Agua Potable y Alcantarillado de Guayaquil (ECAPAG) had as its president a director appointed by the President of Ecuador, as vice president a director appointed by the mayor, and included representatives from the universities, the professional association of engineers, and the chambers of production. ECAPAG moved from being an operator to “regulator of the concession contract,” so even though the operator is private, it is still conditioned by the regulatory decisions of ECAPAG. It is possible that protests have more of a political content than a pragmatic one since they coexist with an approval rate of service users exceeding 80% according to surveys. In the case of Cordoba, Lobina and Hall indicate

that the protests against privatization carried out by the provincial government have not led to a reversal. In Peru, intense protest campaigns against privatizations took place and investment fell to very low values (Calderón, Easterly and Servén, 2002). The majority of the local private operators in Latin America are in the hands of domestic investors (Lobina and Hall, 2007). In the state of Paraná (Brazil), the company SANEPAR, which serves 8.8 million people for water and 5.5 million for sanitation in 344 municipalities, belongs to the state of Paraná (52.5%) and to Dominó Holdings S.A. (34.7%), a subsidiary of the French group Veolia. For several years, the two shareholders have fought for control of SANEPAR in episodes that have included the freezing of tariffs, the challenging of decisions of the assembly in civil courts, and a negative impact on the risk rating for the debt of SANEPAR in bond convertible to shares. That is, not only the framework of corporate governance, but also the functioning of the exploitation contract and the quality of regulation have been affected by the state being a judge and an involved party. In Argentina, the company LATINAGUAS is one of two Latin American companies that is internationally active (it operates in Argentina and Peru). Its revenues depend largely on the public budget and it is not compelled to expand the market it serves (Lobina and Hall, 2007). The Roggio Group, traditionally a construction company, has been one of the main participants in Argentine privatizations of roads, trains, and telecommunications. The Roggio Group participated in Aguas Cordobesas as a part of the consortium led by Suez/AGBAR. In December 2006, in a new negotiation, Roggio acquired control of the private concessionaire (Lobina and Hall, 2007).

4. METHODOLOGY FOR EVALUATING THE APPLICATION OF CG PRACTICES

Concentrating the variety of attributes of CG in one index is an old idea with precarious results. The weighted or “structured” CG indices that have been attempted by risk agencies, stock exchanges, and other institutions as well as academic papers, face heavy methodological information demands, heroic assumptions of comparability and, as has been expressed in critical academic essays, are vulnerable to manipulation.³¹ A better idea is to use annual surveys directed to specific groups: surveys about the compensation of executives, the methods of self-evaluation of the boards of directors, the active involvement of institutional investors relative to the boards of directors, or the percentage of fulfillment of the measures in CG codes, etc. Such surveys have an informative value and a pedagogical effect. The securities commissioners or equivalent authorities of some countries have begun to promote extensive surveys to be completed by companies with registered securities in the stock market, so that it is publicly known that some companies have decided to fulfill some of the recommendations of the CG code, and that they have decided not to take others, explaining the reasons for this decision. The goal is to turn these annual surveys into a competitive reference for CG.

This section proposes a plan of action for CG in the WSEs, taking into account the lessons on the advances and difficulties in the WSEs of Latin America and, in particular, the cases studied through the Water and Sanitation Initiative of the IDB. The methodology of the plan of action in CG includes the mechanisms of accountability and its results, as well as their institutionalization to guarantee the enterprise sustainability. Furthermore, it identifies penalties and incentives in accordance with the non-fulfillment or fulfillment of the plans.

³¹ Anecdotically, to illustrate the use of a condensed indicator of good CG practices, Standard & Poor’s chose the case of Fannie Mae, which was given a very high rating on the indicator Corporate Governance Score, prepared in 2003. It obtained 9.0 out of a maximum possible score of 10.0 distributed according to factors in the following way: property structure and external influences, 9.0; rights of shareholders and relations with interest groups, 8.7; transparency, disclosure and auditing, 9.0; structure and effectiveness of board of directors, 9.3. See Dallas (2004: 528–554). Fannie Mae fell in 2008 due to its persistent GC pathologies. This pathetic case teaches that it is not sufficient to focus on formal practices if the performance outcomes do not support them.

For this purpose, an observation of Vives in a recent publication (Ducci, 2007) should be taken into account. He asserts that “the majority of the international operators have left the region, a large number of services have been returned to state ownership, and the regulatory entities have stopped exercising their functions” and, in addition, that “the political realities of the region point to the preponderance of the action of public enterprises in the sector, such that their strengthening should be the focus of the strategies to follow in the coming years...” and that it is “necessary to deepen the adoption of measures that limit political interference in business decisions.”

There are various sets of CG recommendations focused on SOEs that should be taken into account. The first set of proposals are the guidelines of the OECD for the governance of SOEs (OECD, 2005a) that address the following topics (see Table 3 above): 1) guarantees of an effective legal and regulatory framework; 2) performance of the state as owner; 3) equitable treatment of shareholders; 4) relations among the companies and their interest groups; 5) transparency and disclosure; and 6) responsibilities of the boards of directors. Unlike the general CG principles of this organization for corporations, the document for the SOEs concentrates its recommendations on the way in which state agencies should organize the control of these enterprises: separation between the ownership policy and the regulatory and supervisory functions; the degree of equality for state and private enterprises in obtaining access to special lines of credit; the degree of equality in the treatment of both types of enterprises by anti-trust policy; the need for the state to avoid interfering in the administration of SOEs; and the way in which the members of the boards of directors are appointed, etc. All these aspects are more external than internal; they have to do more with the state as shareholder, than with the internal architecture of the relations of power and information within SOEs.

The second group of CG proposals comes from the criteria suggested by the IMF for evaluating if SOEs are effectively “commercially run” businesses. These criteria are grouped in the following categories: management or administrative independence (tariff and employment policy); relations with the government (subsidies and transfers, and regulatory and fiscal regime); financial conditions (profitability and payment capacity); and governance structure (registry of stocks in the stock exchange, external audit and annual reports, and

shareholder rights). This approach is focused on observing if SOEs are the object of privileges or discrimination on the part of the government in comparison with the treatment of similar private enterprises, and if they have a basic organization like that of a corporation. This approach is concerned with ensuring that the SOE generates value and does not transfer it to third parties, except in the form of dividends to its owners.

Finally, the progress matrix model of CG for SOEs adopted by the International Finance Corporation (IFC) includes contributions from the two previous sources, with a gradual perspective and with a practical spirit of turning it into an instrument of dialogue with the company and for communicating systematically, yet simply, the principal practices in each SOE. The methodology of the progression matrix reflects the long experience of the IFC with all the types of companies in which it has invested or carried out financing schemes (including SOEs). This matrix serves as the foundation of the action plan tool for corporate governance that the IDB will recommend to the WSEs in its work on loan and technical cooperation projects. Some adjustments were made to this tool taking into account the recommendations from the seminars carried out with groups of CG experts and WSE executives in Bogota (September 29 and October 15, 2008) and Washington (October 30, 2008).

This technical note intends to use the matrix in the manner of a traffic light of CG practices for the WSEs in four typical situations: *green*, for those practices that the enterprise has incorporated and applies completely; *yellow*, for those practices that the enterprise does not apply comprehensively, but that it intends to adopt in the following year (if the action is considered to be very demanding, this time frame can be extended, taking into account that some additional steps in good CG practices require approvals or ratifications external to the enterprise; in any case, a proximate goal is set and a commitment is made that implies initiating activities rapidly); *red*, for those practices not embraced by the enterprise and that are not going to be implemented during the subsequent year; and *white*, for those practices contemplated in the matrix that in a specific case are considered not applicable to the particular enterprise. As indicated in the attached file *GC Tool SOE.xls*, this application can be used in various ways:

- The format of response can be used by different key agents of the public utility, including: owners' representatives, members of the board of directors and of upper management. In this case, the tool helps inform about the degree of *subjective consensus* about CG advances in a enterprise and thereby helps prepare the dialogue of the action plan.
- The format can be used in an external evaluation of CG, concentrating on the “yellow” practices, that is, those that could be implemented in the following year. In this case, it is used as a *diagnostic and negotiation tool* of the action plan.
- The format can be used for companies that are comparable to each other in terms of a valid attribute: e.g. the same size, from the same country, with the same property structure, of the same legal form, etc. In this case, it is used as a tool for the comparative identification of factors facilitating the advance of CG, or of critical barriers to progress in CG, and their impact on the performance of the enterprise. It would also serve as a basis for dialogue with national public officials.

Regardless of how the tool is employed, the traffic light of practices is oriented toward specific commitments, located in a time line, with sequences, and with extensive possibilities for breaking down activities and results. In each annual review it is possible for an enterprise with previous advances to find that in the updated matrix chart new “green” zones have appeared, that the “yellow” zones have been displaced toward the right of the matrix chart and that the “red” zones have become fewer in number. The principal agency problems of SOEs are not always the effect of the bad will of governing politicians, directors and managers, but an understandable consequence of the interests –and utility functions- of those agents in the context of multilateral negotiation, with uncertain and asymmetric information. Significant external and internal barriers hinder changes in CG, so it is naive to pretend that the direction of movement in the respective matrix will always be toward the right, when comparing an enterprise's status from one year to the next. It is common to find two key moments in which the officials who manage the enterprise are eager to adopt good CG practices: a) at the beginning of administrations, when there is political capital to spend and time ahead to recover it if the companies perform well, provide a better service, and, in

addition, generate a positive fiscal impact relative to the previous situation; and b) in times of crisis, when delay options have been exhausted, and the adoption of a well-defined action plan appears urgent, especially if it is accompanied by complementary measures on the part of financial institutions or national governmental agencies.

THE CG PROGRESSION MATRIX FOR SOES

The CG progression matrix for SOEs is presented below, as well as an index of abbreviations used in the matrix. In its background the 89 possible practices included are corporate governance decisions that define the structure of power of the enterprise. The criteria to determine whether or not a given CG practice is fulfilled in the firm, is left open to the consideration of whoever fills out the survey, based on the principle of good faith and the desire to do well. The previous sections of the paper suggest guidelines in this respect. The practices are ordered in the following six sections:

- A. *Commitment to corporate governance.* It comprises 17 characteristics or practices that derive from legislation, decisions by owners, the general assembly or upper management, grouped as mentioned above in four progressive degrees of demands.
- B. *Structure and functioning of the board of directors.* It verifies if the board fulfills or not 21 characteristics or practices, also ordered by degrees so as to note the efficacy, efficiency and independence of the board.
- C. *Environment and Control Processes.* Five important audit practices.
- D. *Transparency and disclosure.* 13 practices of the firm and its agents to inform the principals, so that these can make decisions with substantive knowledge.
- E. *Treatment of minority shareholders.* 15 practices scaled by levels of respect to the rights of non-administrators and non-influential shareholders. It is only applied when the SOE has more than one owner.
- F. *Financial discipline.* 18 practices that indicate the extent to which the SOE adopts or not decisions oriented to its sustainability as an autonomous commercial business, financially separated from the owner's other resources.

Table 6

CG PROGRESSION MATRIX FOR WATER AND SANITATION PUEs (PRIMARILY STATE-OWNED)

(Adapted from the Methodology of the IFC © 2006, with authorization)

Consult the index of abbreviations below



Degree of Progress				
Attributes	1	2	3	4
A. COMMITMENT TO CG	1. The enterprise has a legal status different from that of the Government, and the statutes are valid and legal.	1. The enterprise has an articulated and public plan to improve its CG practices.	1. The enterprise complies with all applicable recommendations of the voluntary code of good CG practices of the country (if one exists)	1. The enterprise is a national leader and is among the global leaders of CG among State-Owned and Private Water and Sanitation Enterprises.
	2. The enterprise is subject to the general business legislation and that of corporations with respect to the shareholders' and creditors' rights.	2. The enterprise has a written set of CG policies that cover, at the very least, the rights and treatment of shareholders, the role of the board of directors, transparency, and disclosure.	2. The board has a governance committee, with majority participation of independent directors.	
	3. The functions and attributions of the different CG entities, such as the Government, the GSM or equivalent, the board of directors, and management, are clearly defined in the statutes.	3. The enterprise periodically discloses its CG or CCG policy to shareholders, the degree in which CG practices are effectively applied, and the extent to which such practices correspond to the country's voluntary codes of good practices.	3. The enterprise has designated an official charged with overseeing the development and fulfillment of the CG policies.	
	4. The enterprise does not have any regulatory functions.	4. Neither the enterprise, nor its controlling owner, have regulatory functions.	4. The GSM and the board of directors are distinct bodies in their composition and functions.	
	5. The enterprise intends to improve its CG practices.	5. The enterprise's CG organs cannot approve commitments to transfers, subsidies, or deviation of assets in favor of owners, investors, or other interest groups.	5. The functions of ownership and regulation over the utility enterprise are exercised by distinct authorities.	
	6. The enterprise has a written code of ethics, approved by the board, and a designated official responsible for its fulfillment.			



CG PROGRESSION MATRIX FOR WATER AND SANITATION PUEs (PRIMARYLY STATE-OWNED)

(Adapted from the Methodology of the IFC © 2006, with authorization)

Consult the index of abbreviations below

Degree of Progress				
Attributes	1	2	3	4
B. STRUCTURE AND FUNCTIONING OF THE BOARD OF DIRECTORS	1. The BD includes at least one independent director.	1. The BD includes two or more independent directors.	1. The audit committee is composed entirely of independent directors.	1. The BD is composed by a majority of independent directors.
	2. The BD's role and processes are clearly defined and understood within and outside the enterprise.	2. The BD has an audit committee with a majority of independent directors, that recommends the selection of external auditors to the GSM or equivalent, examines and approves reports of the external and internal auditors, follows the reports of state auditors and supervises the action taken in response to the recommendations of the auditors.	2. A committee of the BD, composed exclusively of independent directors, must approve all material transactions with related parties.	
	3. The BD meets periodically and observes the formalities of good practices (for example, an agenda, minutes, quorum, votes)	3. The positions of president of the BD (Chairman) and chief executive officer (CEO) are not held jointly by the same person.	3. A specialized committee of the BD handles technical issues, or possible conflicts of interest (such as acquisitions, compensation, and risk management.)	
	4. The members of the BD have sufficient, adequate and timely information for analysis and deliberation allowing them to exercise their supervision, management and strategic planning functions thoroughly for the development of the enterprise.	4. The BD has the exclusive responsibility of evaluating, appointing, and firing the manager or president.	4. All the BD is elected annually; or alternatively, the terms of the independent directors do overlap with those representing the controlling state-owner (major, his delegates, etc.)	2. The contracting (if this function belongs to the BD), compensation, and nomination committees, are composed exclusively of independent directors.
	5. The Directors are required to be loyal to the enterprise, and accountable to all shareholders, so that they not represent only the interest of the shareholders that nominated them.	5. Minority shareholders obtain effective representation by means of accumulative vote or similar mechanisms.	5. The definition of independent director also entails political independence from the chief executive of the state entity in charge of the PUE. There are mechanisms to ensure that consumer representatives within the BD, when there are such, are held accountable for their participation.	
	6. The participation of the Government in the appointment of Directors is explicit and disclosed to the public.	6. The BD has a committee charged with selecting and nominating director candidates, to be appointed by the assembly, composed by a majority of independent directors.	6. The BD carries out an annual self-evaluation. There are mechanisms in place to allow directors to internally review the BD's performance.	
		7. The presentation of candidates is institutionalized and has transparent processes that guarantee the mix of adequate capabilities and skills allowing the BD to perform its functions of supervision.		



CG PROGRESSION MATRIX FOR WATER AND SANITATION PUEs (PRIMARILY STATE-OWNED)

(Adapted from the Methodology of the IFC © 2006, with authorization)

Consult the index of abbreviations below

		Degree of Progress			
Attributes	1	2	3	4	
C. CONTROL ENVIRONMENT AND PROCESSES	<p>1. The enterprise has put in place an adequate system of internal controls and internal auditing.</p> <p>2. The internal auditor interacts regularly with the independent external auditor and answers to the BD.</p>	<p>1. The internal auditor and the internal control systems are consistent with national regulations and the highest quality standards.</p>	<p>1. The enterprise prepares and presents its financial statements, complying with the International Auditing Standards.</p>	<p>1. The enterprise's internal control and internal auditor satisfy the most demanding international auditing standards.</p>	
D. TRANSPARENCY AND DISCLOSURE	<p>1. The enterprise prepares its financial statements in accordance with the national accounting standards and these are audited by an external, recognized, and independent institution.</p> <p>2. The enterprise's financial statements, along with its notes, are annually disclosed to the owners, investors, control entities, and the public.</p> <p>3. The enterprise explains to the public the tariff scheme being applied, as well as its results in terms of water quality, investment plans, and the expected effects of such investments on services and tariffs.</p>	<p>1. The enterprise's financial statements are prepared or re-expressed according to international accounting standards, and are audited by independent and recognized auditing firms.</p> <p>2. All information and communications relevant to shareholders and investors are published in the website on time.</p> <p>3. The enterprise holds its GSM or equivalent open to the public, even if all its capital is owned by the Government.</p> <p>4. The enterprise discloses in its yearly management report its ethics' code, the main measures for enforcing it, and the degree of fulfillment reached.</p> <p>5. In addition to D.1.3., the enterprise has a segmented information system and an area devoted to handling community and customer needs.</p>	<p>1. The enterprise prepares and presents all of its financial statements in accordance with the IFRS or the US GAAP.</p> <p>2. The enterprise publishes quarterly financial reports, broken down by business units, and with results per share. These practices go above and beyond the local list of Government requirements.</p> <p>3. The summary of all contract's information is disclosed to the public.</p> <p>4. In addition to D.2.5., the enterprise carries out, at the very least, annual customer satisfaction surveys, and takes the results into account in its action plans.</p>	<p>1. The financial and non-financial disclosure practices are consistent with the highest international standards.</p>	



CG PROGRESSION MATRIX FOR WATER AND SANITATION PUEs (PRIMARYLY STATE-OWNED)

(Adapted from the Methodology of the IFC © 2006, with authorization)

Consult the index of abbreviations below

Degree of Progress				
Attributes	1	2	3	4
E. TREATMENT OF MINORITY SHAREHOLDERS AND SECURITY HOLDERS	1. The enterprise is a corporation with autonomous minority shareholders, different from mere state-facilitator partners. Or it is an ICSC with clear obligations relative to holders of securities issued by the enterprise.	1. Minority shareholders receive notifications and agendas of all shareholder's meetings, and are allowed to participate and vote. The process used to summon and hold shareholder's meetings gives reasonable access to all minority shareholders.	1. The enterprise has effective shareholder voting mechanisms to protect minority shareholders.	1. The enterprise's history regarding equitable treatment of shareholders corresponds with international market's expectations.
	2. The enterprise treats equitably all shareholders of the same class and holders of securities, with respect to voting rights, subscription rights, and transfer rights.	2. The enterprise has clearly articulated compulsory policies regarding the treatment of minority shareholders when there are changes in control, such as privatizations, renationalization, or repossession by the state.	2. Information that summarizes all transactions with related parties is disclosed to the public.	2. There are no special-type stocks (for example "golden shares") owned exclusively by the Government.
	3. The shareholders or security holders have precise and timely information regarding the amount of all types of stocks and securities owned by the Government and other shareholders and important investors; or, alternatively, the public knows how control is exercised by the owning Government entity and what restrictions exist to protect holders of securities issued by the enterprise.	3. The annual report of the enterprise discloses the main risks for minority shareholders and state-related security holders, as majority shareholders or owners, and any difference between shareholders, voting rights, and the global equity of the enterprise.	3. The state controlling entity is committed to avoid making decisions that a enterprise managed with business criteria would not have adopted.	
	4. All holders of securities issued by the enterprise receive equal treatment in relation to the disclosure of information.	4. The enterprise discloses thoroughly and timely all transactions with the Government and its affiliates, other large shareholders and their affiliates, and directors or executives.		
	5. The enterprise is publicly accountable to the GSM, or is an ICSC that discloses in its web page and in public sessions all the information and the adopted decisions made by the GSM.	5. All shareholder's agreements and decisions of similar scope, that may affect minority shareholders or security holders are disclosed thoroughly, precisely and on time.		



CG PROGRESSION MATRIX FOR WATER AND SANITATION PUEs (PRIMARILY STATE-OWNED)

(Adapted from the Methodology of the IFC © 2006, with authorization)

Consult the index of abbreviations below

		Degree of Progress			
Attributes	1	2	3	4	
F. FINANCIAL DISCIPLINE	1. The enterprise's business and non-business (public policy) objectives are articulated and disclosed to the public.	1. The costs derived from fulfilling the objectives of public policy (that is, non-commercial objectives of the enterprise), are valued through internationally accepted accounting, financial, and economic techniques, and are disclosed separately in the financial statements.	1. Subsidies are focused and clearly defined for the beneficiaries. The costs for the enterprise, derived from fulfilling public policy objectives, are covered separately by the Government.	1. The enterprise's objectives are exclusively commercial.	
	2. The costs and the sources of financing are transparent.	2. The financial statements of the enterprise provide separate information about the impact of any kind of Government-granted benefits, such as concessional financing (including guarantees) for its commercial activities.	2. The enterprise has a compensation system tied to performance and aligned with its objectives.	2. The enterprise has its shares valued in the stock market.	
	3. Bank financing is obtained through a competitive process.	3. There exist current policies regarding capital structure and dividends, adequate for the sector and oriented according to commercial criteria.	3. In addition to F.1.5., F.1.6 and F.2.6. the enterprise has explicit goals for the creation of value over the medium term in its strategic plan, and fulfills them. Or the enterprise obtains market capitalization that exceeds the book value.	3. The enterprise has an optimum mix of bond and bank financing.	
	4. The enterprise has assured sustained income: it covers its costs of operation and maintenance with revenues from tariffs, and the Government covers the imbalance resulting from tariff policy through fiscal transfers.	4. There is a system in place for rating bonds, and the enterprise has issued corporate bonds.			
	5. The enterprise creates economic value or has goals to reduce the destruction of value over the short term and fulfills them.	5. The enterprise comprehensively applies the regulatory framework for tariffs, including periodic adjustments for inflation or costs recognized by the regulator; or alternatively, these are self-regulated with the goal of covering costs and reducing differences in tariffs with those of neighboring territories.			
	6. The enterprise does not invest in projects with negative NPV.	6. The enterprise restructures or disposes of assets or investments that do not generate economic value.			

ABBREVIATIONS

BD: Board of Directors.
CCG: Code of CG
CEO: Chief Executive Officer of the enterprise (General Manager, Legal Representative, Managing Director, President of the enterprise), whether or not a member of the BD.
CG: Corporate Governance
Chairman: President of the Board of Directors
Director: Member of the BD
GSM: General Shareholders' Meeting
ICSC: Industrial and Commercial State enterprise, or a enterprise legally created but not regulated by corporate law
IDB: Inter-American Development Bank
IFC: International Finance Corporation
NPV: Net Present Value
PUE: Public Utility Enterprise
SOE State-Owned Enterprise

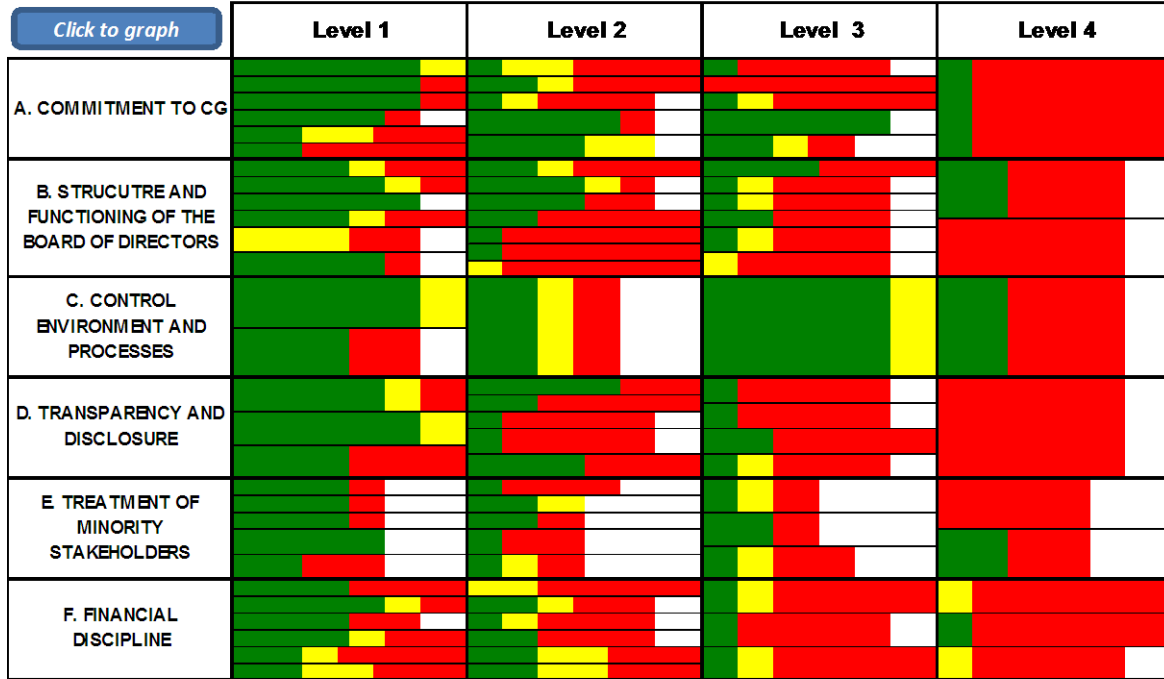
THE TOOL

This paper is accompanied by a Microsoft© Excel file with the HPAGC.³² The best way to understand the scope and ease of use of this devise is to open the file, go to the red tab called “Begin,” and follow the simple instructions provided.

³² The file is called *GC Tool PUE.xls*.

Diagram 3

Traffic light for the CG progress for a PUE with state majority shareholding
Assessment and action plan matrix



- Practices that are being carried out.
- Not currently practiced, but it will be next year.
- Not currently practiced and is not a target for next year.
- Not applicable

Diagram 3 shows the result of a demonstration exercise carried out in one of the consultation seminars with a group of six heterogeneous PUEs from different countries. Even though their conditions vary, one can see that the majority of the practices that these companies already comply with are located in level 1, which is why they appear in the “green zone.” The CG practices in the “yellow zone” are those that the companies are not already implementing, but have the intention of complying with very soon. These are split between levels 1, 2, and 3. This “yellow zone” in each SOE determines the main components to take into account in a GC action plan. The practices and characteristics that the SOE does not want to adopt or that it cannot obtain in the immediate future, located in the “red zone,” are commonly found in levels 3 and 4.

5. CORPORATE GOVERNANCE INDICATORS IN PUBLIC UTILITY ENTERPRISES

OBJECTIVES

An indicator is a measure of process' control. In the case of the PUEs, it is desired to control the implementation of CG principles and criteria. The indicators are different from CG practices. To find out about CG practices means to ask for the rules or standards to which the organs and actors of an enterprise are committing themselves to, and the effective execution of the actions for fulfilling such rules. By contrast, the indicators should show or give clues about the results of those practices. An enterprise can formally comply with the best CG practices, but if it does not mitigate its most important agency risks it will be losing its time and effort. Incurring high agency costs implies destroying value or expropriating resources from those that invested equity in the enterprise. The previous section focused on CG practices by explaining in detail the HPAGC. This section proposes a few CG indicators.

The aim has been to identify indicators that are simple to understand, relatively easy to calculate, and whenever possible, developed on the basis of quantitative and operational information in the public domain, in websites of the WSEs or in regulatory and oversight agencies. The goal of the indicators is to help in the assessment of CG, that is, to set forth hypotheses about where to find the major problems and agency costs, since the real-life situations may vary a lot from one enterprise to another. The indicators of CG can also support the comparative study of different enterprises.

CRITERIA

The following design criteria are considered (Beltrán, 1988):

- i. The indicators should measure the quality of CG: they do not evaluate management.
- ii. The indicators should anticipate (alert about an event likely to happen: “ex ante”) or help confirm an event (“ex post”).
- iii. The information should ideally be calculated with published information or accessible to the public.

The indicators should be an independent measure of the occurrence or non-occurrence of an event, and in some occasions, of the degree in which an event is present. The indicators are not designed to be part of a composite indicator. They measure the scope and achievement of a CG mechanism, independent of what happened with respect to other mechanisms.³³

Attention should be given to the degree of protection given to the equity providers of the enterprise.³⁴ Some indicators will show costs that affect investors as a whole, or that by contrast seem to be favoring upper management, controlling shareholders or contractual or extra-contractual counterparts of the enterprise.³⁵ Similarly, other indicators aim to value the action of CG mechanisms to mitigate agency problems.

SUMMARY

1) The first large group of principles proposed by the OECD consists of *ensuring the foundation of an effective CG system*. In this area two indicators are proposed: a) the management of legal risk, which measures the impact on the enterprise of lack of fulfillment of all types of contracts; and b) the fiduciary rights of the controlling shareholders, on a scale that considers the degree of responsibility of the majority shareholders relative to the minority shareholders according to the enterprise's applicable laws. Whenever the equity value of the enterprise is not threatened by lawsuits and whenever the controlling owners – including the state – rigorously respect their fiduciary duties of care, loyalty, and accountability, there is a good foundation for corporate governance.

2) *The rights of the shareholders and the key functions of ownership*. Three indicators are recommended: a) the structure of ownership, the *who is who* among shareholders; b) the concentration of ownership, which compares the relative sizes of ownership among individually considered shareholders and voting blocks, and c) the equality of treatment in

³³ Independence among the governance mechanisms does not exist, since all seek a common objective and complement each other individually and by sub-groups. However, a composite indicator faces problems of measurement and comparability between companies and industries, which makes it less useful as a control signal.

³⁴ Equity providers are shareholders and long term creditors, which will be called investors (*stockholders*).

³⁵ Collectively, groups that have an interest around a company (*stakeholders*).

the enterprise towards shareholders of different sizes / types. If ownership is concentrated, more attention has to be paid to the behavior of controlling stockholders; if ownership is diffuse, management and the bureaucracy have to be monitored more closely; and between these two extremes there are many possible combinations that suggest closely watching the transactions with related parties, the management of conflicts of interest (inside and outside the board of directors), and the relations with subordinated companies and owners' groups.

3) The indicators proposed for *social interest groups* are: a) the salary gap between enterprise workers and the job market; b) the concentration of enterprise contracts among its providers and contractors; c) the customers' service satisfaction; d) the quality of financial information, and e) the market disclosure of relevant enterprise information. In older companies it is common to find an accumulation of labor privileges with a strong impact on the costs and liabilities' structure, leading to restrictions on the capacity to obtain efficiency gains and affordable tariffs for customers. There is a lot of room for maneuvering in the way operational results are presented, derived from the accounting regime applied by the enterprise, e.g., while more strict regimes account certain outlays as expenditures or expense estimates as part of the operational financial statement, other softer regimes account those outlays as deferred assets. In general, there tends to be less CG risk in companies that systematically disclose information and that are subject to market scrutiny of figures and reports and by auxiliary specialized agents, such as independent external audits or risk rating agencies.

4) With respect to *responsibilities of the board of directors* it is proposed: a) the participation of independent members in the board of directors; b) the functioning of the board; c) the authority of the board over management; d) the oversight role performed by the board. The quality of the work of the board is essential for CG: the results of a formalistic board, adhering to procedural details, and vulnerable to perks, are very different from those of a well integrated and informed board, that is focused on the broader goals, and that is prudent and independent.

5) *Financial discipline* includes the following indicators: a) the impact of assigning enterprise's resources to non-commercial objectives; b) economic value added (EVA); c) the

excess of management expenditures, and d) the payment of cash dividends. These indicators are not an automatic sub-product of accounting, nor do they provide direct information about the agency costs of an enterprise: they have to be constructed with care and caution within the management information system, and need to be used with restraint. The four types of indicators of financial discipline provide high-powered information for the assessment of CG. Up to what point are refinement, good taste, ample working space, art works, and beautiful views in corporate offices reasonable? Up to what point expenditures on philanthropy or the allocation of resources for public works of general benefit, which could be covered by the public budget? Would a management report which emphasizes the social benefits of a PUE to different interest groups, but also discloses high amounts of unproductive assets and destruction of economic value, be justified? Is a PUE responsible for generating employment in its area? Or is a PUE responsible for granting subsidies to the poor, at the expense of its own resources? On the contrary, is a PUE that omits making reasonable investments for taking care of the pollution that contaminate water bodies, following good GC? The indicators of this section certainly do not address questions of this type, but they aid in thinking in the right direction.

Table 7a

CG Indicators in Water and Sanitation Companies				
Indicator Name	Definition	Calculation or Indicator Value	Variables	Source of Information
Guaranteeing the foundation of an effective CG framework				
Management of Legal Risk (MLR)	Impact of contractual controversies on public service enterprises and their shareholders. Indirectly measures the alignment of interest groups with the company. Litigation should be the last resort for resolving differences between interest groups and the enterprise.	$MLR = \frac{(PLC + LE) * \frac{LS_i}{LS_{i-1}}}{A} * 100$	PLC: Provisions for litigation and contingencies LE: Legal expenditures A: Assets LS _i : N° of law suits in process at December of previous year LS _{i-1} : N° of law suits in process at December of two years before	Financial statements. GSM minutes.
Fiduciary Rights of Controlling Shareholders (FRCS)	The enterprise has rules so that the controlling owners (or the state) respond to the minority shareholders in relation to the risks of asset's diversion, enterprise's opportunities being taken advantage of and manipulation of minority shareholders' property rights.	There are no minority shareholders = 0 The enterprise's applicable laws do not make the majority owners responsible for fiduciary rights of minority owners = 1 The enterprise is governed by general corporate law and the stock markets' laws = 2 The enterprise is governed by its own rules that are more demanding than the law with respect to majority's owners fiduciary responsibility of minority owners = 3 The CG organs review the fulfillment of these rules and inform the public = 4		Management reports Annual report of survey of CG Statutes, Codes of CG, declarations of majority shareholders, municipal governance agreements with PUE, business ethics' code, prospectus of issuance of stocks or bonds. BD regulations.
Shareholders' rights and Owners' Key Functions				
Property Structure (PS)	Shows the distribution of the number of owners and their ownership' shares, by type of share.	Frequency distribution of owners and stocks or ownership' shares.		Shareholders' registry and related records Stock market's reports
Property Concentration (Gp)	Shows how the enterprise's ownership is distributed among owners of different sizes, for each class of shares. The computation should include those shares owned directly or indirectly.	$Gp = 1 - \sum_{i=1} (Y_{i-1} + Y_i) * (N_i - N_{i-1})$	Gp: Gini Coefficient for Ownership. Y _i : Cumulative Percentage of Participation in ownership. N _i : Cumulative Percentage of Number of Owners. i: owners' groups ordered by ownership size.	Shareholders' registry; statutes, prospectus of share's issuance.
Equality of Legal Treatment (ELT)	Shows if there is a favorable treatment of PUEs in law, whether with respect to labor laws, tax laws, government's guarantees of non embargo of funds, exemptions with respect to bankruptcy law or business laws.	Does not exist = 0 Exists = 1		Legal reports. Annual CG reports.

Table 7b

CG Indicators in Water and Sanitation Companies

Indicator Name	Definition	Calculation or Indicator Value	Variables	Source of Information
Social Interest Groups				
Salary Gap (SG)	Capacity of negotiation of public utilities' enterprises with respect to workers. It is the margin by which a PUE employee's salary exceeds that of the average market salary for similar job.	$SG = \frac{ACS - RS}{RS} * 100$	ACS: Average contracted salary RS: Reference market salary	Enterprise's social responsibility report Labor statistics Statistics of regulatory or oversight agencies.
Contract concentration (Gc)	Measures the concentration of contracts assigned by the enterprise to its contractors or goods and services' providers.	$Gc = 1 - \sum_{i=1} (CP_{i-1} + CP_i) * (M_i - M_{i-1})$	Gc; Gini coefficient for contracts CPI = Cumulative Percentage of the contracts' value. Mi = Cumulative Percentage in the number of contractors. i = contractors' groups ordered by size of contracts.	Contract's listing in the enterprise's web page.
Customer's Satisfaction (CS)	Diverse indicators of customer satisfaction and service quality.	According to the indicator used		Enterprise's social responsibility report Customer's satisfaction surveys Water quality reports Coverage reports Requests and complaints statistics
Financial Information's Quality (FIQ)	Progress in the implementation of International Financial Reporting Standards (IFRS); or in the re-expression of financial statements complying with local laws to IFRS.	No action = 0 The project exists = 1 It is in development = 2 IFRS are being applied = 3		Notes to financial statements External Audit's Reports Management's Reports
Information Disclosure (ID)	Degree of public disclosure of relevant enterprise's information.	Information not current = 0 Only available to public control entities = 1 In the Internet, but only available to owners and administrators = 2 In the Internet and conventional publications = 3		Enterprises' web page. Oversight and regulatory agencies' web pages. Statutes, Codes of good CG and prospectus of shares' issuance.

Table 7c

CG Indicators in Water and Sanitation Companies				
Indicator Name	Definition	Calculation or Indicator Value	Variables	Source of Information
Responsibilities of the Board of Directors				
Participation of Independent Directors (PID)	Shows the importance in the participation of independent directors in the BD.	None = 0		GSA and BD minutes
		Up to a third of the BD are independent directors; and there are ID as members of the auditing, CG and appointment committees = 2		
		The ID are a majority in the BD = 3		
		If the PUE is a SOE, and the ID in addition comply with being politically independent, a point is added to any of the previous grades.		
Functioning of the BD (FBD)	Diverse indicators: regularity of BD and committees' sessions; attendance to sessions; use of BD time by subject; BD and committees' organization; role of BD president.	According to the indicator used		BD and committees' minutes.
				BD annual self-evaluation
				Annual CG report
Authority of BD over Management (ABDM)	Shows the degree of effective authority of the BD over management.	BD does not select the CEO nor determines its remuneration = 0		Statutes; CG code.
		BD shares the CEO's selection and remuneration decisions with the state owner or GSA = 1		BD and CG committee's minutes
		BD is solely responsible for selecting and remunerating the CEO = 2		
		BD selects the CEO and applies performance-based remuneration = 3		Manager's reports
		BD nominates and decides on CEO remuneration, and co-manages = -1		
Oversight Role of BD (OR)	Shows the extent of BD's activity in its oversight functions.	The OR indicator adds one point for each of the following activities (total value between 0 and 5):		
		BD oversees the execution of strategic plans and major policies = 1		
		BD evaluates the management's performance = 1		BD minutes; Annual Management Report; Annual CG Report.
		BD evaluates its own performance = 1		
		BD's auditing committee oversees the internal controls and financial information's quality = 1		
		BD is accountable to the owners' assembly = 1		

Table 7d

CG Indicators in Water and Sanitation Companies

Indicator Name	Definition	Calculation or Indicator Value	Variables	Source of Information
Financial Discipline				
Impact of Non-Commercial Objectives (INCO)	Estimates the economic impact on the enterprise for assuming economic commitments beyond those that a PUE would accept if it were run exclusively according to business criteria.	$INCO = \frac{CNRS + TD + UNCE}{BV} * 100$	CNRS: Cost of non-reimbursable subsidies TD: tariff delays UNCE: non-commercial expenditures unreimbursed by the state. BV: Billing value	Management reports, BD minutes, oversight and regulatory agencies' reports.
Economic Value Added (EVA)	Measures the enterprise's creation of value, after deducting the cost of capital replacement.	$EVA = EBIT - (VIC * WAAC)$	EBIT: Earnings before interests and after taxes. VIC: Value of invested capital WACC: Weighted average capital cost	Management reports Financial statements including notes Manager's reports
Excess of Management Expenditures (EME)	Theoretically they are expenditures made by managers in excess of those strictly necessary for fulfilling the enterprise's commercial objectives. As a proxy for EME benchmarking is suggested.	$EME = \frac{AAC_{company} - AAC_{sector}}{AAC_{sector}}$	AAC _{company} : average administrative costs per subscriber in the operation of a water and sanitation enterprise. AAC _{sector} : average administrative costs per subscriber in the operation of a comparable water and sanitation enterprise.	Cost studies by regulatory and oversight authorities.
Payment of Dividends (PD)	Records the existence and dividends paid by the PUE. It indicates the recognition of the owner's rights to decide the destination of their investment's return, instead of being retained systematically in the enterprise.	$PD = \frac{DPC}{NP} * 100$	DPC: Dividends paid in cash NP: Net profit	Notes to financial statements. GSA minutes.

DESCRIPTION OF THE INDICATORS

GUARANTEEING THE FOUNDATION OF AN EFFECTIVE CG FRAMEWORK

Laws and formal rules of CG require a third party capable of enforcing the contracts between those involved, or that the different interests have developed incentive structures aligned with the company's general interests.

A complex network of obligations and rights is formed among the persons or groups that interact with the companies. In such a network there can be obligations that are impossible to fulfill or can only be fulfilled contingently. In addition, the inadequate drafting of contracts, the failure to follow regulations, the negligence or lack of attention to possible damages caused to third parties, etc., can lead to a loss of value for the company, because of inefficiency or disorder, with effects on the interest of shareholders. A special case is the relationship of the state enterprise with its controller. This relationship is complex because the SOE seeks objectives of a commercial and political nature (to allocate and spend public resources for obtaining "merit" goods through redistribution). The conflict arises when the controlling state entity does not set beforehand the compensation to be given to the company for the costs of non-commercial objectives. Political objectives should be pursued by charging the public budget, not the operational result of the state enterprise. Only when there is clarity on both sides, can the PUE serve as a good vehicle for implementing public policies and still be accountable for the management of social objectives, independent of the additional work that it does for the state.

Legal risk management. This indicator adds up the expenditures caused by lawsuits and claims against the enterprise and the expenditures on internal and external legal services, as a proportion of net worth. This result is modified with a multiplier that, if larger than one, shows a trend towards the increase of risk, and if less than one, shows a trend towards the reduction of risk. In essence, the indicator shows if the enterprise deals with a legal contracting framework in which there is a healthy respect for the rights of parties, or if the opposite is happening. In environments where the contracting of public works, labor,

financial instruments and guarantees systematically leads to controversial situations, the foundations of good CG are prone to being precarious.

Fiduciary duties of the controlling shareholders. It is a scale that grades the degree of commitment of good behavior in relation to minority shareholders, and the degree of control of that commitment, through internal enterprise rules, through the action of external supervision, or through claims before external arbitrators and courts. The indicator provides information about the extent to which there is a basis for having confidence in the mitigation of agency costs between majority and minority shareholders. If there are not any minority shareholders, this indicator is not relevant.

RIGHTS OF SHAREHOLDERS AND KEY FUNCTIONS OF OWNERSHIP

Ownership structure. The indicator for this concept is built on the basis of the shareholder's registry. It may consist of a table or chart that shows the relative importance of the major shareholders or owners, with the additional requirement of identifying and grouping "real beneficiaries" in the case when the registered shareholders are subordinate to or controlled by holding companies. This distribution is more useful if it is shown in the form of a frequency histogram that includes the different shareholder blocks that vote separately or jointly. This indicator is interpreted together with the rules for making decisions in the shareholder assembly and in the board of directors, as well as with the agreements of shareholders registered in the enterprise's general secretary.

Ownership concentration. The Cp indicator is a statistical measure that is applied to the whole distribution of cumulative relative frequencies of shares held, called the Gini coefficient, which has values ranging from 0 (where all shareholders have an equal number of shares) to 1 (where one shareholder has all the shares). The Cp indicator provides clues about potential and different CG problems, from an extreme of minimal concentration to an extreme of maximum concentration. It is an ex ante indicator. a) If concentration is high, the CG problems result from the temptation to use the enterprise for goals that differ from its social purpose, without sufficient compensation. b) When the rights of ownership are concentrated such that on one side there is a block of controlling shareholders and on the other a minority group of shareholders, a threat arises in that the interests of the first group

may prevail over the second group, another specific form of agency problem. It is possible for the controlling shareholders (*insiders*) to try and use their power in the enterprise to pursue benefits of control in a proportion that exceeds their share of ownership, at the expense of other investors. However, concentration can contribute to mitigate administrative agency costs: For-profit large shareholders have a greater incentive to assert their interest in maximizing the corporation's value or the flow of dividends, and therefore, to effectively oversee and monitor the managers. c) The SOEs constitute a common case of "failure of collective action" where the single or majoritarian owner is a state entity and the final owners (recipients of the ultimate impact of residual cash flows and of the value of the firm) are the citizens. This situation is equivalent to that of a corporation with a very large number of individual shareholders, in which the small shareholders (the citizens) confront costs of coordination and information that impede the exercise of control, which results in the apathy of the small investor (citizen). For these reasons, governance mechanisms catering to the special characteristics of the SOEs need to be designed, especially those characteristics that result from alternative organizational structures. Similarly, it is important to verify if the state grants privileges to an enterprise. The existence of preferential treatment is a symptom of the third type of CG conflict, between the enterprise and the public; indicated in the rents captured by the enterprise that represent agency costs for one or several of its interest groups or owners (customers, state, creditors, workers, etc.). It can imply that the state subsidizes in an opaque way and supports inefficient or not self-sustainable companies, or that it is actually granting implicit guarantees (rescue).

Equality of legal treatment. The IT indicator shows if there is a favorable treatment for the PUE in legislation, with respect to labor and tax laws, government guarantees, protection from seizures ordered by courts, or with respect to bankruptcy laws and commercial legislation. The indicator confirms if preferential treatment is given in legislation to SOEs when compared to ordinary legislation for regular corporations. It is common for the WSE's state owner that the tax, labor or commercial discrimination in favor of the SOE is "compensated" through other types of more onerous collection mechanisms.

SOCIAL INTEREST GROUPS

The concentration of key decisions or processes within a public enterprise facilitates the capture of economic rents³⁶ by interest groups. It is important to review the information that the enterprise puts out about its relations with interest groups and the extent to which such relations follow market practices in the respective products and services. A case of importance is in relation to workers. In addition to characterizing the degree to which contracting with interest groups affect the efficiency and competitiveness of the enterprise through eventual cost overruns, it is necessary to examine if the contracts signed with the interest groups affect the capacity of the enterprise to enforce basic decisions. The public is a heterogeneous interest group, especially the individuals that could contribute external resources for the enterprise. An important component for reducing the attempts at capture in this case is the quantity and the quality of information that the enterprise provides to the public and the type of processes that are used to purchase goods and services and to attract additional financing. In the case of the providers of equity, rudimentary, occasional and ambiguous information would ultimately mean losing sources of money derived from loans, joint ventures, and the placement of bonds. This is equivalent to raising the costs of capital; in such a case the investors are expropriated by an inappropriate and inefficient management of the enterprise.

Salary gap. This indicator aims to estimate the negotiating capacity of the enterprise in relation to its workers by measuring the degree to which the salary of an employee of the enterprise exceeds the average market salary for a similar job. If the indicator, for example, is expressed numerically as 0.20 this means that the workers receive a compensation which is 20% more than employees in similar positions in other companies. In using this indicator it is important to consider different labor regimes, job level, seniority, specific worker abilities, etc.

³⁶ The expression “economic rent” refers to the income received by the owner of a resource whose availability is fixed, or does not correspond to the price or compensation paid for the use of the resource. One speaks of economic rent when the income that the owner obtains from any production factor is above the opportunity cost of producing this quantity of the factor. If that condition is temporary, one speaks of “quasi rent.” In general there can be economic rent when the owner of the resource has obtained a negotiating position that blocks the competitive action of others disposed to offering the same resource for a lower price.

Concentration of contracts. The indicator is the same Gini coefficient used previously for shareholder's property, but in this case it measures the concentration of contracts between the providers and contractors of a PUE. It is important to take into account the scope of this indicator. First, concentration can be the natural result of a competitive selection process and does not have an unambiguous meaning by itself. The indicator provides information about the relative size of the incentives that are in play and the range that the function of corporate control should assume, including financial discipline and strategic monitoring by the board of directors over the administration. Second, the indicator should be analyzed jointly with other considerations, like the atomized contracting of goods and services (which is a justifiable practice if there is a competitive market of qualified providers and coordination costs are limited); the extent to which the contracts can be segmented by degree of exposure to sector regulation, long execution periods, different risk distributions between the enterprise and the contractors, and different degrees of uncertainty about the final result of the contract, etc. Therefore, one of the useful segmentations of this indicator of concentration is that related to the way in which claims, conflicts, disputes and new facts are resolved.

Customer satisfaction. The indicator measures how the enterprise relates to the customer. Given that the indicator refers to the fundamental objective of a PUE, one cannot separate this from a measure of management evaluation, even though the focus is on recognizing advances in CG matters. On this point it is recommended to work with a pragmatic orientation, and use enterprise sources. Some are subjective, such as satisfaction surveys carried out by the marketing, quality, or operations' areas; others are objective, such as statistics on complaints, and as typical industry indicators with respect to coverage, physical-chemical quality of the water and its impact on health, and interruption or service continuity, etc. This index can complement the measures of the acceptance of tariff adjustments on the part of customers.

Quality of financial information. This indicator is very important also, since it contributes to an adequate interpretation of the accounting, market and other types of information that are provided regularly to those who provide capital to the enterprise in the form of stocks of different classes, bonds, commercial papers and long term credit. The adoption level of the

so-called NIIF or international norms of financial information varies in the different Latin American countries, which impedes the comparability of several of the most important financial performance indicators. Included within the scale is a grade for the PUEs that cannot freely adopt the NIIF standards, but that accept re-expressing their financial statements according to NIIF standards.

Information disclosure. This indicator is a cumulative scale that indicates the degree to which the relevant information of the enterprise is publically disclosed. One point is granted for laws being in place with respect to the obligation of an enterprise to provide information to the respective authorities, in contrast with their non-existence. More points are given for disclosure of this information in the mass media and for the ease of consulting the information. This is one of the aspects in which one can appreciate the greater differences between companies with advanced processes of CG and those in which the information is opaque. Efforts to reduce asymmetries of information are central to good practices of CG. Likewise, a lot is revealed about the quality of the results of CG when the enterprise regularly delivers the equivalent of the reports known as “*proxy statements*”, established in the rules applicable to the companies registered in the stock markets of the United States and other countries. Such informative content includes indications about the risks that the enterprise confronts, their principal projects, their business units, ownership changes, the transactions with controlling and executive shareholders, as well as the so called “relevant information.”

RESPONSIBILITIES OF THE BOARD OF DIRECTORS

The board of directors is the central mechanism of CG. In the case of the public service utilities, it is the institution that can settle and ameliorate the typical conflicts between owners, controllers, and managers of these companies. The problems ascribed to the relations between controlling and minority shareholders are relatively infrequent and of limited importance given the fact that the state owns the majority of the companies in the sector. The board of directors should operate in an independent and relevant manner. Independence implies that each member of the board should promote and defend the interests of the company over the specific interests of the shareholder or group of shareholders that back

them in the election at the shareholders' assembly. In the case of SOEs, independence entails the need to protect the enterprise from the undue influence of purely political issues or political risk. The relevance of the board of directors implies that the participation of the directors should be stable and decisive within the period for which they have been elected. The difficulty of designing pertinent indicators of the results of the board of directors that are not confounded with the performance of the enterprise or with the management of the administration must be acknowledged.³⁷ The CG rules help but do not guarantee anything. Between two companies with identical charters, codes of good governance and board regulations, the first can have a board with a high level of performance and the second can have a mediocre board. The scrutiny of the curricula of the candidates for positions as directors raises a similar difficulty, since the board members and the chief executives do not always succeed in becoming integrated as a good team. The effective use of time and the quality of the discussions and the decisions are particularly difficult to appreciate from the outside. All of these aspects point toward the formulation of indicators that should be recognized as partial and insufficient.

Participation of independent directors. This indicator results from intense discussions that have had a strong influence on the recommendations for the composition of the boards of directors in the different laws related to CG. The notion of an independent director, in the economic sense, corresponds to that of a person whose well-being cannot be affected nor influenced by actions of other colleagues on the board of directors, or controlling shareholders, or of enterprise executives, nor directly or indirectly through close friends or from the organizations to which some belong to the point of influencing the decisions that that person makes on the board. There are different ways of reaching such requirements. A director who is not dependent on a controlling agent will always seek that which is best for the enterprise owners as a whole and, therefore, for the maximization of value of that enterprise in the long term. In the PUEs this same type of independent attitude should be

³⁷ A famous caricature published in 2003 illustrated that problem: it showed a professor in front of a blackboard in which he had placed the indicators that are most recommended for measuring the performance of different boards of directors: high level director experience, number of CEO and former ministers among the directors, hours of time devoted over a year to the work of the board of directors, number of independent directors, etc. All the companies on the blackboard of this professor obtain good scores, but the companies being considered were Enron, WorldCom, Tyco and other similar companies.

taken into account with respect to agents as powerful as a minister, a mayor, a CEO designated not by the board of directors but by a high level government official. In the case of state-owned PUEs, the broadening of the concept of independence to politics should also be considered, as discussed in the second section.

Operation of the board of directors. On this point there are a variety of aspects to consider, none of which completely satisfy the concept that is being sought. For some boards of directors it may be necessary to verify the attendance of each director and the role that substitute directors play in practice, while in other cases it would be worthwhile to identify the use of scarce time of the board, the greater or lesser extent to which time is used intelligently by the president, committees, its division of labor, the topics treated by the board, its strategic concentration, etc., but it is necessary to recognize that often what the board of directors deliberately does not do is as important or more important than what it does.

Authority of the board of directors over the managers. This indicator aims to capture the degree to which the board of directors of a public service enterprise effectively governs. In the public sector at times it happens that the boards of directors are stripped of effective power: in reality they cannot select the CEO or upper management, set their remuneration level or remove them, define their powers, discuss in an in depth manner the budget that they approve, or decide contracts. Their expected work is limited to the condition of being high level notaries. This stems from the traditional regimes of centralized public administrations and their resistance to delegate power, in which the minister's phone has more weight than 90% of the board of directors. Thus, this indicator is relatively open so that the reader chooses the combination that he considers more appropriate for the evaluation which is being committed to.

Oversight role of the BD. This indicator is also expressed in the form of a scale, but with additive attributes. It simply aims to capture the criteria that a board which does not control key aspects will also not have the means to know the result and degree of compliance of its decisions. And a point to especially emphasize is that a board that is not accountable to anyone lacks appropriate incentives. In the PUEs it seems to happen that the minister or

mayor is part of the board of directors or presides over it and therefore cannot have the necessary distance from it, for the accountability of the board to be an effective means of control. On the other hand, legislative institutions are so distant and so stained by political controversy that their control is also not ideal. Hence, what is left is the monitoring of the official governmental control bodies that tend to be more focused on procedures and small details and not oriented in relation to value.

FINANCIAL DISCIPLINE

If the WSE is asked to fulfill policy objectives that are different from the specific commercial objectives of their activity, the cost of such a requirement has to be defrayed by someone. The indicators of this section represent an attempt to quantify the aggregate effects of internal decisions, by the organs of power of the PUEs, or external decisions, by their owners, interest groups, on the financial condition of the companies and their economic sustainability.

Impact of non-commercial objectives. This indicator estimates the impact of assuming economic commitments beyond those which a utility would accept if it was managed exclusively according to commercial criteria. Such commitments stem from three types of decisions which have an impact on the financial statements of the enterprise: a) the subsidies that the firm grants to different interest groups or subgroups as a result of a political decision by the state or its agents made directly or through the board of directors or management. These are subsidies to the extent that the equivalent values are not reimbursed by the state to the enterprise. This does not presuppose any value judgment in relation to the policy justification of such subsidies, but simply assumes that the ultimate economic impact of the subsidies should be assumed by the public budget and not charged to the operations of the enterprise; b) delayed increases in tariffs, that is, the revenue that the enterprise does not receive in an accounting period as a consequence of the decisions to not apply the tariffs that compensate the average operational cost accepted by the regulatory authorities, and c) the non-commercial expenditures that are not reimbursed by the state, which is a form of using the enterprise as a second window of public spending, in spite of the fact that the firm was not created for this purpose. Each of these commitments is calculated as a proportion of

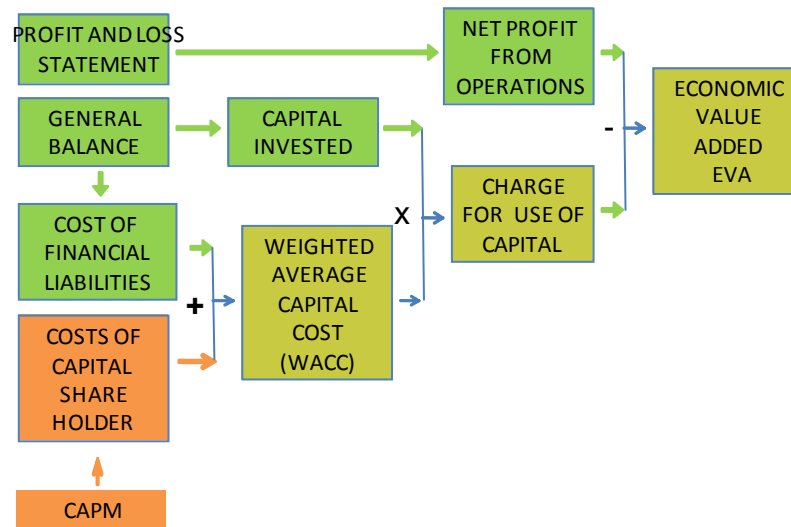
billing. In the calculation of the subsidies, the relations with other related or subordinated companies or with departments or divisions of the same enterprise should be made explicit. In this case it is possible that the commercial agreement implies transfer prices that are different from those that are set for the public or for the market, with the consequence of a flight of value for the enterprise or a capture of value created by other entities.

Economic value added. This indicator measures the creation of value on the part of the enterprise, after deducting the opportunity cost of the capital employed. This is probably the indicator with the greatest relevance over the long term for perceiving the positive impact of CG. The EVA is ideally calculated on the basis of information from market values of the debt and capital. Given that the majority of WSEs do not issue bonds or stocks of great liquidity to securities markets, accounting information is used in a subsidiary way. The generic components of the calculation of EVA appear in Diagram 4. An enterprise will be sustainable over the long run only if it is able to generate a profit greater than the opportunity costs of the structure of capital. It is not sufficient that the enterprise registers positive profits since if the charge for the use of capital is greater than the profits the enterprise would be destroying value and would be consuming the capital. This indicator is also of great usefulness for perceiving if the ownership policy of the state is effective. For example, a public service enterprise that begins with negative EVA in year i , but toward the end of year $i+4$ has reached a zero or positive EVA, will have demonstrated a consistent effort. Progress will be able to be measured each year through the “delta EVA” and the annual goal will be that of obtaining a positive delta EVA until the enterprise achieves the medium term goal of creating value. The exercise of setting absolute goals for the EVA, or of reducing by a fraction a negative value of EVA, can contribute not only to improvements in performance for the enterprise, but also the reduction of agency costs for the following reasons: a) it can induce the establishment of an explicit and concrete ownership policy by the controlling state agency toward the WSE; b) facilitate minority shareholders in obtaining competitive returns and thus remain in the enterprise; c) back efforts for limiting private benefits of control, self-contracting, and excess management spending; d) pressure the controlling state entity to concentrate public policy priorities in the official government budget and reserve the budget of the WSE only for operation and investment in fulfilling its social purpose or for paying

dividends to its state owners; e) accelerate the write-off of unproductive assets and help calibrate the size of fixed investment and to rank the set of projects according to performance; and f) make explicit the cost of state capital.

Diagram 4

Variables that comprise Economic Value Added



Excess of management spending. This indicator does not aim to make a normative judgment, but tries to capture the effect of some agency costs that are most difficult to measure even though they are very clear conceptually in the economic theory of the firm.³⁸

³⁸ See for example, Jensen (2000), chapter 4: “Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure” (coauthor of the chapter: W. Meckling). They study the way the value of the company is affected, and therefore the interests of the owners, with respect to different levels of management spending on “non-pecuniary” benefits (defined in note 17, page 461), as well as the relation between the value of the firm, management spending, and investment in auditing and control spending. Williamson (1964) set forth in a more extensive way the notion of the management preference for spending in the sense that the managers perceive profits as stemming from their discretionary spending decisions. Jensen and Meckling start from the profit maximizing behavior of neoclassical theory, analyzed in situations of information asymmetry, while Williamson employs the cost of transactions approach and uncertainty, in which opportunism and bounded rationality are key. These works do not refer to phenomena of corruption or legality, since all systems of CG leave an unavoidable space for discretionary management spending. From this reference point the importance of the practices of CG referring to the conflicts of interest and to transactions with related parties

The notion of an excess of management spending relates to the expenditures ordered by managers which are beyond those strictly necessary for fulfilling the commercial objectives of the enterprise. In accounting records a distinction is made between *cost* (outlays necessary for producing) and *expenditures* (outlays that do not depend on the level of production). For its part, expenditures can include: outlays necessary for the long term survival of the enterprise, and b) discretionary outlays, whose amounts can be more or less extensive. Both a) as well as b) are in the budgets, fitting in different registers and their desirability is defined through various levels of delegation and negotiation between the board of directors and the administration. The analysis of the preference for expenditures as a discretionary outlay suggests that in this category items can be placed as varied as the amount of human resources, the number of levels and the complexity of the organizational chart, the seniority, compensation and stability of personnel, the aesthetic appeal, level of decoration and comfort of the executive offices, meetings and conventions, business trips with special compensation, the set of elements and signs of executive power (*perks*), expenditures on public relations and image, philanthropy that has not been a decision of the owners but of the executives or of the board of directors, etc. These items can represent excess management spending to the extent that they amount to a previous distribution of the owners' earnings. However, they are not directly observable as such. Thus, this indicator is a simple approximation for comparative effects that aims to identify if a PUE has a greater level of average administrative cost per subscriber than other comparable enterprises.

Payment of dividends. This indicator is simply the rate of payment of dividends in cash as a proportion of net profit after taxes. It is an indication of the recognition given to the right to decide how returns on investment will be allocated instead of retaining such returns in a systematic way in the enterprise. This also is based in the theory of the firm, since an inclination that is almost generalized among utilities' managers leads them to traditionally propose the retention of profits with arguments that vary between a certain paternalism (the

can be understood. These economists seek to explain business realities, even though Jensen and Meckling conclude that the clash of interests between shareholders and managers of companies open to capital markets finally produces efficient results, while Williamson concludes that businesses with excessive management spending are inefficient, but that the effect on welfare depends on the net sum of lesser profits of the company (the owners) compared with the greater real income for the personnel (*staff*) and the managers.

message is: “this money is saved better in the enterprise, where there is more order than in the hands of the state, where the politicians waste it”) and a certain opportunism (the message is: “since it is so difficult for the legislature to approve fresh resources for investments, at least if they do not take away the money from profits, they remain here as retained profits in compensation for the expenditures and help that we have given them”).

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