

# Best practices in regulating State-owned and municipal water utilities

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## Abstract

The fundamental lesson that emerges from this survey of regulating state-owned and municipal water utilities in developing countries is that sector regulation has to be embedded in an adequate and consistent institutional framework in order to have a positive impact on performance. Sector regulation, by itself, is no guarantee of performance improvements in the drinking water supply and sanitation sector. Case studies and empirical analyses suggest that without significant changes in the supporting institutions, the standard tools of regulation will not be effective. This conclusion is disturbing, especially for developing countries, since it means that the establishment of a regulatory agency might raise hopes, but ultimately, the agency's rules are unlikely to improve performance without additional, politically difficult initiatives. An industry observer said "to have effective regulation, you must have utilities that can, in fact, be regulated". The problem boils down to getting a broader set of institutions to support regulatory and managerial actions that promote good sector performance. This means getting the **governance structures** right (rules of the game) and the **substantive actions** right (play of the game). Conflicts usually arise in the politically-sensitive water services sector, so the regulator also needs to develop tools for conflict resolution. Thus, the conclusion that the institutional environment matters also provides a rationale for establishing a comprehensive set of governance reforms. These reforms may go beyond the jurisdiction or immediate responsibility of the regulatory agency itself. Nevertheless, an autonomous regulator can (in many cases) facilitate reforms that lead to lower costs, improved service quality, and greater network coverage. On the other hand, when both operations and oversight are part of the same organization (whether a ministry or municipality), pressure for strong performance is unlikely since reforms represent a public admission that past procedures were inadequate (at best) or corrupt (at worst). This study identifies best practice in regulatory governance and corporate governance of state-owned and municipal utilities. The **regulatory system** goes beyond the regulatory agency and the water utility to include stakeholders that are in a position to support, block, or blunt reforms that would improve performance. In particular, this study documents how domestic politics can limit the effectiveness of regulatory institutions. Greater transparency (for example, via benchmarking and accountability) and citizen participation (via public hearings, public consultation processes, workshops, and consumer advisory boards) represent two ways the regulator can gain leverage against those benefiting from current dysfunctional arrangements. Without broad institutional support, even a technically competent regulatory commission will find itself marginalized by political forces that are far stronger. If the local "regulator" is the municipal commission, lack of professional skills and political cronyism usually exacerbate the problem. Ultimately, a sound regulatory system requires coherence, creativity, real-time communication, collaboration, consultation, and credibility.



## I. Introduction

Numerous studies have addressed water utility performance in developed and developing nations. These studies recognize the importance of the institutional factors affecting those managing water utilities and those providing regulatory oversight: social structures (the political and cultural context), formal organizations (regulatory commissions and government ministries), and support systems (including political patronage and civil service). These external factors affect how conflicts are resolved regarding resource allocation, pricing, and access to water services. In addition, these issues influence the internal governance of state-owned enterprises (SOEs). By publishing key performance indicators (KPIs), the regulatory body can contribute to greater transparency. In addition, the information stimulates participation by stakeholders, including minority groups and those receiving rural water services. Favours to special interest groups that could be revealed by business plans are more likely to be brought to public attention when governments open their books. Ultimately, in conjunction with incentives established by regulators, external factors determine managerial objectives and actions. These objectives include financial sustainability (via cost containment, improved collections, and reducing non-revenue water), better service quality, and network expansion providing access to the poor through affordable tariffs (or targeted subsidies when necessary); alternatively, managers might focus on delivering favours to special interest groups, including contractors, employees, or politically-connected constituencies. The key issue is how to design an institutional system that reduces the likelihood that the latter actions prevail since they lead to capture, corruption and low levels of utility performance.

### A. Standards for measuring performance

Competitive markets have two key features: (1) informed consumers make choices from among a variety of products (of different qualities); and (2) those providing capital allocate funds to a large number of firms that are meeting those demands at least cost. In competitive markets, prices are signals to both producers and consumers: increases in demand lead to short term above-normal profits, causing firms to expand output. Initially, the higher prices lead to less consumption than would otherwise be the case, but entry further increases output and reduces price. Similarly, when production costs rise (causing prices to increase) quantity demanded falls. On the other hand, competition leads to lower prices when production costs fall (as a result of improved technologies or lower input prices).

Industry performance is evaluated in terms of consumer satisfaction, the absence of long term excessive profits, the adoption of cost-reducing innovations, new product introductions, workplace safety, service quality, and an absence of negative environmental impacts.

When there are substantial scale economies, a single provider of the product is the least-cost way to organize production: a natural monopoly. However, an unregulated (privately-owned) natural monopoly has very different performance from what one finds in a competitive market: consumers face high prices and low quality, and the monopoly obtains excessive profits. Regulation can bring price in line with cost, and (with proper incentives) promote cost containment for a product or service, at a quality that is valued by consumers (Berg and Tschirhart, 1988).<sup>1</sup> In the case of water and sanitation utilities, additional public interest concerns regarding health and access by the poor have resulted in state- and municipally-owned utilities in most nations. However, the objectives (and institutional context) for these utilities differ from those of privately-owned monopolists.

Eisendrath (2012) underscores the differences between privately and publicly-owned utilities: “When a regulator regulates a privately owned utility, [the] main concern of the shareholders is their return on equity, their free cash flow and their dividends. Under rate of return regulation ..., the regulator has a benchmark ... [return on equity] that they will build into the revenue requirement and tariff order. Under incentive-based regulation, ... the regulator also sets a framework for allowed equity return. In either case, the shareholders are very interested in their equity returns”. Thus, Eisendrath emphasizes the role of capital markets as placing discipline on a regulated utility that is separate and independent from those pressures placed on the firm by a sector regulator. Investors monitor both managerial actions and the regulatory climate, where the latter is evaluated in terms of regulatory consistency and predictability. Those providing capital consider whether regulators are providing the utility an opportunity (but not a guarantee) to earn a reasonable (or fair) return on investment. To earn that return, managers are then incentivized to achieve cost containment, quality improvements that are valued by customers, and network expansions (when prices recover costs that are incurred). In principle, regulation attempts to replicate what would happen in a competitive market when managerial success is gauged by financial performance.

Eisendrath (2012) also identifies the governance structure of private utilities as an important element of the system: “Similarly, in a private utility, the board, appointed by shareholders, will have the power to establish bonuses for management based on performance, salary levels, and to appoint and fire management. There are often substantial benefits to shareholders and management associated with performance, and similarly, when there is poor performance, boards and management are often replaced”. His key point is that in order for the board of directors to be in a position to discipline weak managers, owners of the utility require transparency regarding trends in performance indicators, particularly financial performance.

However, government ownership introduces some complications into the governance process: “In state-owned utilities, there is often little concern about return on equity, dividends, or bonuses to

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