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#### PUBLIC POLICY FOR THE

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## Water Services in Chile

Gabriel A. Bitrán and Eduardo P. Valenzuela

Gabriel A. Bitrán (gabriel@bitran.cl) is a founding partner of Bitrán & Asociados Regulated Markets. He has worked extensively in regulated markets, both with government agencies and with private companies. And he has given legal testimony and acted as an arbitrator in conflicts between private companies and between government agencies and private companies.

Eduardo P. Valenzuela (evalenzuela@bitran.cl) has worked in the electricity and water sectors on issues ranging from privatization to tariffs.



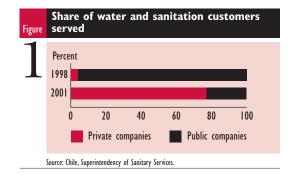
In 1988 Chile put in place a new regulatory regime for water and sanitation, allowing rates to reflect the actual cost of providing services. The government then reorganized the sector under 13 state-owned regional water companies and, in 1998, started to partially privatize some of them. Four years after the first sale, it is now possible to assess the early results of privatization. This Note examines the outcomes for investors and consumers and compares the performance of the privatized companies with that of companies remaining under state ownership.

Chile has long been a pioneer in privatization. The country began privatizing power and telecommunications in the mid-1980s—even before the United Kingdom did. Only water and sanitation remained under state ownership longer, mainly because a change in government moved the public debate to the center left of the political spectrum. But sector regulation was dramatically changed, allowing rates to reflect the actual cost of delivering services.

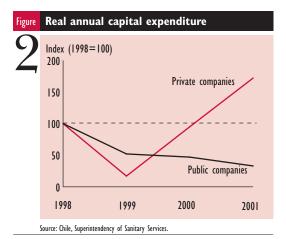
Another important change in the legal and regulatory framework occurred in the early 1980s, when a law was enacted that allowed water rights to be separated from land ownership and freely traded. Water rights became highly mobile and changed hands swiftly within local markets that emerged along water courses. Different types of water rights were defined, depending on the ability of the owner to use the water or restore it to its natural source.

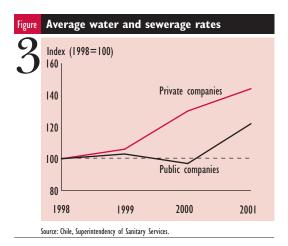
Water and sanitation companies became some of the biggest buyers of water rights, which they needed in increasing amounts to meet the growing demand in their service areas. And as their service coverage grew, water companies drove up the prices of water rights in urban areas. In some regions the cost of new water rights created powerful incentives for companies to reduce unaccounted-for water.

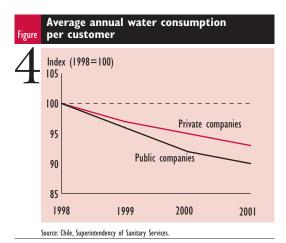
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At the same time, the government began to set water and sewerage rates according to a new methodology based on long-term incremental costs. The rates moved closer to the actual cost of providing services, a shift intended to be the first step toward privatization. Because of the severe price hike expected, a crawling peg scheme was

adopted to adjust prices gradually. In 1990 the Superintendency of Sanitary Services was created to periodically set rates and to define and enforce service standards for concession companies. By 1995 water and sewerage services had been extended to nearly all households in most parts of the country.

#### Privatization becomes a must

Although the new center-left governing coalition that took office in 1990 was not entirely comfortable with the concept of privatization, promises of social spending made privatization a must for the cash-hungry public sector. Moreover, Chile's success in negotiating free trade agreements with such trade blocs as the European Union began creating pressure for the country to improve its poor environmental performance. Sewage treatment became a top priority, an undertaking for which the government lacked the resources.

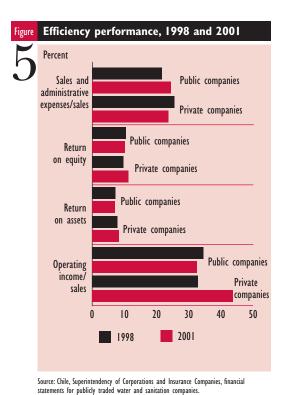
Privatization of Chile's largest water and sanitation companies thus became inevitable. The process started in late 1998, and in less than three years more than three-quarters of Chilean households were being served by private water companies (figure 1). Although only 5 of the 13 regional companies were privatized, they included those serving the three largest urban centers: Santiago, Valparaíso, and Concepción.

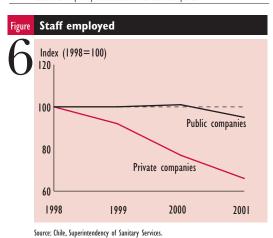
Privatization was carried out through concessions and full divestitures of assets. Initially only 51 percent of the shares of each company were sold. In 2002–03 the Chilean government is expected to sell part of its remaining stake in the privatized companies.

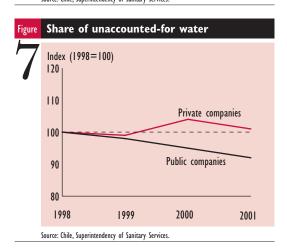
The investments needed to reach the target of treating 100 percent of Chile's sewage were estimated at about US\$1.5 billion, a sum the Chilean government could ill afford. But the British, French, and Spanish consortia that bought the privatized companies brought with them not only technology but also the massive capital needed to carry out the new investments.

#### Investment jumps-and so do user rates

Privatization was followed by renewed investment by the privatized companies but also by more apparent limitations for their public counterparts. While private companies invested 70







percent more in 2001 than in 1998, public companies invested almost 70 percent less (figure 2). The decline for public companies reflected the growing difficulties the government was having in funding their cash flows.

Sharp differences between the two groups of companies also emerged in price behavior. In 1998–2001 private companies' rates rose 20 percent more on average than did public companies' rates (figure 3).

Most of the difference in price behavior stems from the fact that privatized companies invested more, in part to add new services (mostly sewage treatment). But the remaining gap raises interesting questions about the effects of privatization. Although new rates were set after privatization (nine months afterward, on average), some speculation may arise (though it is not shared by the authors of this Note) about the government's capacity to reach informal compromises with investors on rate adjustments for privatized companies. This thesis points to the moral hazard a government faces when selling assets whose value can be increased simply by raising the price for the services they produce. A second line of thought points to the superior bargaining skills of private management when dealing with technical issues such as the negotiation of water rates.

Even so, the rates charged by private companies are still 40 percent lower on average than those charged by their public counterparts. The explanation for this difference might lie in the fact that the state has kept the highest-cost companies, especially those in northern Chile, which has one of the world's driest climates.

#### Customers mind the leaks

The rise in water rates has taken a toll on consumption, which has steadily declined since the new methodology for setting rates was introduced. Increasingly aware of the cost of water, customers reduced their consumption by almost 10 percent in only three years (figure 4). The reduction in consumption has brought clear benefits for the utilization of installed capacity.

The change in consumption is not a direct effect of privatization. But it is an indirect one, since the adjustment of water rates was a precondition for private investment in the sector.

#### A management gap emerges

Although private investors took over water and sanitation companies less than two years ago in most cases, efficiency differences have already become apparent. While private companies have improved their performance on four common indicators of efficiency, public companies have seen their performance worsen on all of them (figure 5).

A comparison of labor productivity is even more dramatic. While public companies reduced their workforce by a mere 5 percent in 1998–2001, private ones slashed their staff numbers by more than 30 percent—even while expanding their client base by more than 6 percent (figure 6).

Still remaining to be explained is the difference in outcomes for unaccounted-for water. From the data, one could easily conclude that public companies have been more efficient in managing their water losses (figure 7). But the opportunity cost of the water lost becomes a key issue when deciding how to deal with unaccounted-for water. As noted, the largest water companies remaining in state hands are those in northern Chile, where water is scarce and thus very expensive. Under circumstances like these, taking direct measures to reduce water losses is probably the most cost-efficient way to control unaccounted-for water. By contrast, where water is more abundant, the most efficient way to deal with water losses may be to buy more water rights.

#### **Conclusion**

Perhaps the most notable finding of this analysis is not the obvious differences between private and public companies, but the speed with which those differences emerged. Private equity appears to provide a powerful boost in meeting the investment needs of a highly capital-intensive sector such as water and sanitation. The investment gap between the private and stateowned companies has become so evident that the remaining companies will probably be privatized in the long term. Not least among the reasons will be the smaller aggregate size of the state-owned companies, which will make it difficult for them to exert the necessary pressure within government to get their capital requirements approved.

Although privatization may raise user rates in the short term, the efficiency gains from superior private management will translate into lower rates in the long term as long as the rate setting system allows an expeditious transfer of efficiencies to final prices (as the Chilean system does). But the issue of short-term hikes in water rates should be dealt with carefully, for it may become a significant political obstacle to privatization. Surprisingly, in Chile a social consensus has emerged that has made the higher water rates acceptable given the improvements in service quality and the addition of new services such as sewage treatment. But a similar consensus may not arise in countries with less cultural and social acceptance of privatized public services.

The companies that were privatized were already among the most efficient water and sanitation utilities in Latin America (public and private). The results of the comparison show that further improvements were possible beyond this apparently superior performance.

#### Note

Chile's Superintendency of Sanitary Services makes general, detailed, and performance information on water and sanitation companies available online at http://www.siss.cl. And the Superintendency of Corporations and Insurance Companies makes financial statements of publicly traded water and sanitation companies available online at http://www.svs.cl.

### viewpoint

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Telephone:
001 202 458 7281
Fax:
001 202 522 3480
Email:
ssmith7@worldbank.org

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