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**EFFICIENCY, EQUITY AND LIBERALIZATION OF WATER SERVICES
IN BUENOS AIRES, ARGENTINA**

by
Miguel Solanes,
Regional Advisor, ECLAC/ONU
Member Technical Committee Global Water Partnership

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The views expressed in this paper are the author's alone and not necessarily those of the OECD or the World Bank

1. THE CONTEXT OF THE PRIVATIZATION*

1. Since 1912 and until the 80's Argentinean water services were provided by a national corporation, Obras Sanitarias de la Nación, (National Water and Sewerage). Central authorities enacted regulations, designed rates and planned service expansion. The highest priority was structural investment, while efficiency was disregarded. The national treasury funded the system and guaranteed financing. The system disregarded economic and financial considerations, setting political rates and tariffs.¹ Yet, a policy of subsidized cross subsidies allowed expansion to the less developed and populated areas of the country.²

2. The system broke down due to the recurrent fiscal crises of the national government, which prevented limitless transfer of funds. From 1976 to 1982 Argentina kept an artificial rate of exchange, with the government subsidizing artificial exchange rates, and devoting significant parts of national funding to it. Resources for other activities were reduced. National Water and Sewerage suffered. As a result there was a sequential halting of activities. Expansion stopped first, and maintenance and rehabilitation deteriorated.

3. In 1982, the crisis of the debt incurred to finance an artificial rate of exchange exploded. Public financing become even more limited. The national system was transferred to the provinces, and 161 service areas were transferred. The provinces kept the original national philosophy, for a while. A main problem was that no alternatives to previous national and crossnational subsidies were provided for.³ Water and Sewerage was not a financial priority for the National Government, or for that matter, for the provinces. Thereafter the system collapsed. The crisis affected quality and coverage; as well as policies, planning and regulation.

4. In Buenos Aires it was clear that the state company was unable to meet investment and maintenance needs. Structural macro-reasons included, *inter alia*, public inability to fund the system in a country where the main priority was shared by external debt and financing an artificial rate of exchange. Sector-specific reasons related to the vices and practices of an overmanned public company with strong, highly politicized, labor unions, and a short-term view of the social aspects of public utility water services.

5. At the time of the concession, only 70 per cent of the population of the Metropolitan Area (MA) had water supply, while just 58 per cent were connected to the sewerage system. Most of the unconnected lived in the poorer areas of MA, where the percentages above were 55% and 36% respectively. The shortfall in the poorer areas had been growing by 5 to 6 percent per year, totaling 5.6 million people. On the other hand, the dwellers of the city proper were almost entirely connected. The state company was not even able to maintain existing assets. Unaccounted for water reached 45 percent. Real water tariffs were low. Consumers had no incentive to either conserve, or to pay, since unpaying consumers could not be cut

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¹ Fiel, "La Regulacion de la Competencia y de los Servicios Publicos" Teoria y Práctica de la Experiencia Argentina Reciente, Buenos Aires, 1999, p. 535/537.

² Azpiazu, Daniel, Forcinito Karina, "Historia de un Fracaso: La Privatizacion del Sistema de Agua y Saneamiento en el Area Metropolitana de Buenos Aires" Abril, 2003. p 7

³ Azpiazu and Forcinito, supra, p. 7

off. Rivers and groundwater were polluted by septic tanks, cesspools and direct discharge of untreated sewage and industrial effluent.⁴

6. The system has abundant, and cheap raw water. Transport is also cheap.⁵ It was deemed that favorable physical conditions, the professional type of management afforded by the private sector,⁶ and the making of postponed investments would definitely improve the conditions of the service.

7. In this context the concession was launched with a sense of urgency.⁷ It was granted to a consortia of companies, private, foreign and national, by contract, which did also contain regulatory principles. As we shall see, urgency affected outcome.

8. At the time of Buenos Aires Privatization (end 1992, beginning 1993) foreign currencies were kept artificially low in order to preserve currency stabilization (much in the same way it was done in 1976-1982, and with the same, but magnified, disastrous results). The state intervened heavily in the currencies market, borrowing and buying foreign currency and selling it in the local market. Debt and unemployment went up. Local production and fiscal revenue came down. In 1976 Argentina had an external debt of 6 billion dollars, accumulated since 1810. By 2001, year of the crisis, external debt was unmanageable. Unemployment was rampant, and shops were looted by hungry mobs.

9. The years of the Buenos Aires privatization were also a period of trust in private markets, and distrust of Governments. It was assumed that market disputability, competition for the market, rate regulation according to price cap mechanisms, light regulation, and information substitutes, would make up for the information asymmetries and market, state, and system failures well researched in neoliberal economics.

- Distrust of governments prompted regulatory systems with weak information requirements.⁸
- Overoptimistic assumptions, such as those based on notions that market contestability reduces the need for regulation, also affected regulatory quality.⁹

⁴ Alcazar, Lorena, et all "The Buenos Aires Concession", The World Bank Development Research Group, Regulation and Competition Policy, April 2000, Policy Research Working Paper, 2311, p 3/7.

⁵ Alcazar, Lorena, et all "The Buenos Aires Concession", The World Bank Development Research Group, Regulation and Competition Policy, April 2000, Policy Research Working Paper, 2311, p. 3

⁶ Fiel, op. cit. supra, p. 538.

⁷ Alcazar op. cit. p. 13.

⁸ "It may also be in the interest of the recipient country to make it more difficult to measure realized returns in investments....If investors can make their profits less visible, the recipient country is less likely to usurp the profits.... Accounting systems may be specially designed for this purpose, or vertical integration by the regulated firm may be encouraged so that creative transfer prices can reduce measured profits in the relevant industry 8Sappington David, 1986, "Comments to Regulatory Bureaucracy", Information Economics and Policy 2 (4):243-58, according to quotation in Comment on "Regulation, Institutions and Commitment in Telecommunications" by Levy and Spiller, David Sappington, Proceedings of the World Bank Annual Conference on Development Economics", 1993, p. 256. Transparency and information issues earned a Nobel price to Joseph Stiglitz, and are pursued further in his book "Globalization and its Discontents"

⁹ According to the theory, efficient pricing and production can be forced upon a supplier by the threat of competition, just as well as by actual competition. However, while as an abstract construct the theory has gained considerable currency: "its impact on regulatory policies in relation to natural monopolies has been much less significant, simply because the assumptions of perfect contestability on which it is based, notably that the entrant can leave the market, without costs, when it is no longer profitable to remain, are rarely

- It was assumed that, if competition in the market is limited, competition for the market creates some sort of substitute competition, theoretically reducing the needs for regulation and information. Yet, the exercise has been fraught with difficulties.¹⁰
- In many cases, privatization laws and regulations have applied theoretical price cap systems to regulate the earnings of providers. In practice, in the English experience, the system was affected by several problems, including the fact that it required a good deal of information, in order to establish cost reduction potentials.¹¹

10. The concession is now under discussion and review. Both sides are unhappy. The company would like to have a dollar-based revenue system.¹² The government claims that investments were not made as promised. Better understanding of the impact of economic macro-context and improved regulation and practices would have saved a great deal of sorrow to both parties.

2. IMPLEMENTATION OF THE REFORM AND UNIVERSAL SERVICE

11. In Buenos Aires, there is no liberalization in the sense of competition. A private foreign monopolist now provides the service. The provider won a bid based on a 26.9% tariff reduction offer (tariffs had been increased by 62 %, ahead of privatization, and a VAT of 18% had also been added), associated to an expansion program. There were to be new connections paid by the concessionaire. Yet, the high cost, relative to income, of infrastructure charges deterred payment by prospective low-income new users.

12. The concession left in place an opaque and inefficient tariff system. Consumers are charged a flat rate, according to type of use (residential, non-residential, real state) and service (water; or water and sewerage); they are adjusted according to location, plot size, constructed area, and type of construction. The system contained large cross subsidies between rich and poor customers. This was in fact an incentive to serve first to rich areas, which pay more. Flat rates did not encourage savings, and expanded coverage in rich areas induce the company to slow expansion to poor areas if returns did not justify investments. The

encountered in practice" Ogus Anthony, "Regulation, Legal Form and Economic Theory", Clarendon Law Series, Oxford, 1994; p. 33

¹⁰ In the case of Buenos Aires it is argued that the bidding process encouraged the companies to offer the highest possible rate of discount, to renegotiate later, if needed. Furthermore, once the concession is awarded it is a monopoly, with the incumbent enjoying an almost total advantage over potential competitors. The small number of actual bidders participating in the adjudication contest reinforced the inherently monopolistic nature of the concession process. Ferro Gustavo, "El Servicio Publico de Agua Potable y Saneamiento en Buenos Aires, Privatizacion y Regulacion" , Buenos Aires, 1999. This agrees with data on limited number of bidders in most water supply and sanitation biddings provided by Vivien Foster at the "Primer Encuentro de Entes Reguladores de las Americas", Cartagena de Indias, Colombia, Octubre, 2001.

¹¹ In its initial English version it resulted in weak accountability and lack of procedural safeguards. This problem, the reliance of regulators on information provided by firms, and the history of bargaining between them, all suggest that the system may not be as resistant to the influence of private interests as its proponents hoped Ogus, op. cit. p. 312/313.

¹² La Nacion, Buenos Aires, 24 de Enero de 2005.

option to meter consumption did create an incentive for the company to meter poor households, (because of the peculiarities of local rate design, it is profitable for the company to meter when the variable charge is more than half of the fixed rate). Returns in poor areas in fact did not justify investment, since poor areas could not even pay the infrastructure charge. It is also charged that the hybrid price cap system of the concession, by allowing adjustments between periods if a cumulative index of specific costs escalated beyond 7%, reduced incentives to keep costs down.¹³

13. The original contract provided for sequential investments. Water coverage was 70 % and was supposed to be of 90 % by 2013 and 100 % by 2023. Sewerage was supposed to increase to 73 % by 2013 and 90 % by 2023, from 57 % at the beginning of the concession.

14. Yet, the contract did not provide for incentives functional to the goals. Tariffs were globally estimated as mean long term cost. Thus, tariffs were suppose to generate demand related income enough to recover, within 30 years, operational costs, investment costs, and the costs of capital outlays or profit, required to make the investments committed. The estimates discounted in advance revenues required to pay for total concession costs. In practice this is tantamount to an incentive to delay investments, since once the company has collected the tariffs, it makes an economic profit by delaying investment. Lacking adequate supervision and control, there was a perverse incentive not to comply with the investment plan.¹⁴

15. There were more disincentives: a) the rates paid in poorer areas were based on lower indexes than the rates paid in other areas, since rates were not based on consumption, but on property valuation; b) to supply such areas represent a higher investment in infrastructure, as well as relatively higher costs in transportation, distribution and recollection; c) poorer areas represent higher commercial and collection risks; d) cost of connections, at the front of properties, discouraged users, which were accustomed to discharge into septic tanks at the back; e) infrastructure charges were too high to be paid by the poorest sectors of the population; f) the problems associated to a non-performing economy were not considered.

16. Up to 2000 the tools of choice, to ensure universal services, were cross subsidies to expansion, and the infrastructure charge, later substituted by universal service charge, and works by third parties

17. New programs were implemented in 2001 and 2002: a) Social Tariff (PST): it is a cross-subsidy to demand. Selected beneficiaries get targeted discounts, based on social polls; b) Program for Poor Neighborhoods (PPN): secondary networks are constructed with Municipal, beneficiaries, and Concessionaire contributions. Tariffs have discounts.

18. The Program of Social Tariff Beneficiaries is based on polls designed by the Regulator. It will be audited to correct mistakes and deviations. It benefits 80.000 households and 300.000 people. Poor neighborhoods have location specificities that make leakage, to non targeted users, difficult.

19. The costs of the new programs for the poor are not significant for ETOSS and AA. For the Social Tariff Program, Municipal Costs, at the identification stage, have some magnitude, since municipalities had to constitute special working teams. ETOSS spends 110.000 pesos per year, and the 18 participating municipalities spend 350.000 pesos per year, hiring 69 people. The program administers 4.000.000 pesos per year. The PPN has an administrative cost of \$ 500.000, to AA.

20. The concession did not include a main goal of promoting innovative technologies. The PPN utilizes methods and supplies adjusted to the needs of emergency neighborhoods, without compromising

¹³ Alcazar, op. cit. p 27/29

¹⁴ Emilio Lentini, ETOSS, personal communication. Yet, a similar system has worked well in the case of Chilean Concession Highways.

the quality reached by the Concession. Self-help is being utilized, and the sewerage utilizes the system of “sewerage without solids”

3. IMPACTS OF THE CHANGE: THE SITUATION OF THE POOR

21. The bidding proposal ensured a theoretical reasonable rate between income and investment. The problem was that actual income did not match expectations. Total actual coverage increased by 4% for water, by 1996/7, while it decreased by 3% for sewerage.¹⁵

22. According to Suez, Buenos Aires was a “sick system”. The contract was prepared “with total inadequacy, or even absence of, of reliable information, data, records and measures”.¹⁶ Already in 1994 the company did take a loan from IFC that could only be repaid if there were rate increases or investment reductions.¹⁷ Both the paucity of data, and the loan suggest a reasonable expectation of renegotiation. This, in turn, may justify the claims that the bidder was opportunistic and the offer predatory.

23. Poor prospective users may have not been favored by such context. Although the contract explicitly establishes that governments did not assume responsibility for factual accuracy¹⁸, the information issue justified, among other factors, renegotiations.¹⁹

24. Costs of expanding the secondary network plus the connection cost had to be paid by new users, plus modifications within the house. New connections were a problem for the poor. The charge would represent about 18% of the income of a poor household. And some 85% of the unconnected were either poor or low income. Connection was compulsory, where available. Tariffs, and connection and infrastructure charges, for both water and sewerage, were increased in 1994.

25. Affordability problems prompted contract renegotiation. SUMA (universal service and environmental charge) was created in 1997, and lower connection charges for new users were implemented. Expansion was cut (15% for water, 13 % for sewerage, first 5 years). The average water bill of already connected customers went up by 19%, while for new consumers it came down by 74 %. SUMA was paid in advance, which reduced the leverage of government to ensure that works were timely completed.²⁰ While expansion was reduced, tariffs, based on expansion promises, were not lowered. The \$700 million not invested mostly affected the poor of greater Buenos Aires.²¹

¹⁵ Azpiazu, Daniel, Forcinito Karina, “Historia de un Fracaso: La Privatizacion del Sistema de Agua y Saneamiento en el Area Metropolitana de Buenos Aires” Abril, 2003. p. 69 and FIEL “La Distribucion del Ingreso en Argentina, Fundacion de Invesigaciones Economicas Latinoamericanas, Buenos Aires, 1999

¹⁶ Suez, :An Informed Appraisal of the Document Published in South Africa by Municipal Services Project Titled “Lessons from Argentina-The Buenos Aires Water Concession”, p. 2. Printing place and date N/A.

¹⁷ Alcazar, op.cit. p. 41.

¹⁸ Alcazar, op. cit. p. 21

¹⁹ Suez, op. cit.

²⁰ Alcazar, op. cit. p. 36/39

²¹ Corrales, Maria Elena, Comments to Peter Rogers IADB paper, Fortaleza.

26. One of the problems of the concession is that there is not agreed methodology to establish compliance with targets. The concessionaire counts as compliance works done by third parties and legalization of existing informal connections. Other, argument that such expansion should not be credited to the concessionaire. If legalized and third party works are counted, the rate of compliance during the first five years of the concession would be 70% of contracted works, both for water and sewerage. If they are not, the rate of compliance falls to 40% for water and 20% for sewerage. Thus non-compliance, seven years after initiated the concession, would be 41% for water and 56% for sewerage.²² There are also claims that average water bills increased by 63 % as of Jan, 1999,²³ although increases were banned during the first ten years of the concession.

27. As of 2001 only 39% of the households of the Conurbano had water and sewerage. Only 66 % had water. Just 40 % had sewerage. And 33 % had none. Fifty six percent of the households of the poorest decile do not had either water or sewerage, while 83% of the decile had no sewerage.²⁴

28. There were no direct subsidies, until 2001, although the poorest households, with service access, spent 1.1% percentage of their income on water and sanitation, while the richest decile spent 0.3 %.²⁵ At the same time, the evolution of coverage between 1987 and 1997 shows that, as of 1997, 50% and 30 % of the two poorest quintiles of the population of Metropolitan Buenos Aires had no access to water supply, while 73% and 55% had no access to sewerage.²⁶ The conclusion is that the regulation and programming of the concession should have been more pro-poor.²⁷

29. As we have seen above, new programs for the poor were started in 2001 and 2002. There is some satisfaction with them, but they do not allow complying with universal service objectives. There are now 1.800.000 people without water and 3.000.000 without sewerage. Only 10% of effluent is treated. The comparison between agreed results and effective achievements of the concession show that, after nine years, water coverage reaches 79 % of the population (against a target of 88%), with 800.000 people deficit; sewerage reaches 63%, short of the target by 11%, with 1.032.000 people deficit; primary sewage treatment is 7%, against a target of 74% and a deficit of 6.180.100 people; and investment has been of 1.342.000 against a target of 2.202.200 million, and a deficit of 859.400 million.²⁸

30. Renegotiations, inadequate starting data and defective evaluation of the economic capacity of served population, plus the crisis of 2002 resulted in non-compliance of agreed targets. Measures such as the STP, and PPN, while effective, do not make up for the lack of investment commensurate to the magnitude of problems

²² Arza, Camila, "El Impacto Social de las Privatizaciones: El caso de los servicios publicos domiciliarios" Flacso, Documento de Trabajo Proyecto Bid 1201/OC-AR PICT99-02-O7523, March 2002, based on Etoss data, p. 17

²³ Lentini, personal communication.

²⁴ Navajas, Fernando, *Mirando el Nivel de Cobertura en Agua y Saneamiento en la Argentina*. Datos preliminares, Junio 2001, according to information submitted by Maria Elena Corrales, Consultant. , See also Peter Rogers, *Water Governance*, 2002, prepared for the Interamerican Bank Annual Meeting, Fortaleza, Brazil, March 2002

²⁵ Arza op.cit. p. 34.

²⁶ Arza, op.cit. p.52

²⁷ Arza, op.cit. p.54

²⁸ Lentini, Etoss, Personal Communication.

4. REGULATIONS

4.1 Conflicts between equity and efficiency. Conflict resolution and sectoral characteristics

31. Systems with a long-standing history of private provision of public utility services record an often seen conflict between private and public interests. One aims for maximized profit. The other for adequate service at the lowest possible price. The conflict is more apparent than real, since a public utility can not maximize profit in the long run without providing adequate service at reasonable price. On the other hand the public cannot expect to receive services from companies, which are not financially healthy.²⁹ Thus, it hinges on regulation - lacking competition - to ensure a balance, whereby efficiency gains-or parts of them- are passed to the users.

32. Thus, market failures-such as a legally reinforced monopoly- and government limitations, make a case for good regulation, as a means to overcome the limitations resulting from lack of competition. Yet, regulation is conflictive and analytically demanding.³⁰ And here is where the clues to understand the problems of Buenos Aires-in addition to what in retrospective comes out as a defective structural assessment of the sustainability of the economic system-are.

33. In 2000, before the Argentinean debacle, the World Bank already warned that: The Buenos Aires privatization of water utility services, their information shortcomings, lack of transparency in regulatory decisions and ad hoc nature of executive branch interventions, make it difficult to reassure consumers that their welfare is being protected, and that the concession is sustainable.³¹

34. In similar terms, but with after-the-fact-foresight, The Economist stated that: In Argentina it has been said that privatizations were sweet deals, with public utilities becoming private, rather than public monopolies. Rates in long-term contracts were updated according to American inflation, even if prices in Argentina were falling down. Dollar interest rates were high, even if in theory risk was low.³²

35. Thus, the conflicts between equity and efficiency in the relationship societycompany (without considering the problem of the poor that were addressed before) where not properly addressed by regulation. Regulation and control were weak, and political authorities routinely by-passed the regulator, as in the 1997 re-negotiation.³³

36. More specifically, the regulation process and the negotiation of the contract failed in terms of key tools relevant to enhance equity: ensuring that the provider equity participation were of a level commensurate to the magnitude of the operation, providing for good-quality technical diagnostics and information before privatization, providing means to recalculate tariffs without altering the value of concession when reducing expansion obligations, controlling transfer pricing and intra-holding contracts, providing for proper accounting, determining adequate ratios regarding equity/debt financing, and

²⁹ Phillips, op. cit. pp 5/6.

³⁰ Phillips, op.cit. pp. 17/21

³¹ Alcazar, Lorena, et all "The Buenos Aires Concession", The World Bank Development Research Group, Regulation and Competition Policy, April 2000, Policy Research Working Paper, 2311, Front Cover.

³² The Economist, March the 2d. 2002. "Special Report on Argentina's Collapse", p. 27.

³³ Maria Julia Alsogaray, the Secretary of State responsible for the renegotiation is currently in jail, accused in 8 cases of corruption, although none of them is specifically related to Buenos Aires Concession yet., Clarin, Buenos Aires, Argentina, 3/1/2005.

generally, ensuring that proper legal guarantees and procedures were built to prevent political capture of the regulatory process.³⁴

37. The conflicts associated to regulation require impartiality and technical knowledge to ensure equity in conflict adjudication processes. Yet, the Buenos Aires concession has become infamous for the bypassing of the regulator by political authorities in both, rate regulation processes and contract renegotiation.³⁵

38. There are other factors, connected to the global economy and its institutional framework, rather than to internal regulations or institutions, that may impinge on the equity aspects of the concession. The provider is a foreign investor entitled to the use of the investors-state arbitration procedure. Selection of a local forum, for conflict adjudication, as per contract, does not prevent an investor to resort to foreign arbitration, as illustrated by the Aguas del Aconquija case, also involving a water firm, active in Tucuman. In state arbitration cases investors usually pursue to keep a tariff level commensurate to contractual arrangements, and agreed adjustment provisions. Even if adjustments are in foreign currencies. Because of the crisis of 2002, the presidency of Aguas Argentinas submitted an emergency plan whereby all non emergency investment was suspended, and dollars were to be submitted to the company, at the old 1 to 1 exchange rate, to serve debt and buy inputs.³⁶

39. Aguas Argentinas was the first company to sign an agreement that put arbitration on hold until 31stDecember, 2004. Yet, the agreement has expired and arbitration procedures raise several equity related concerns. Companies are requesting that tariffs be adjusted according to devaluation. Such adjustments may well go beyond the carrying capacity of the country and the paying capacity of users. Elsewhere, previous cases of national economic crisis, having the magnitude of Argentina's, have consistently found that tariffs can not increase above the rate of national economic growth.³⁷ . Otherwise some economic actors would not be affected by the crisis, and be also a regressive factor.

40. The practice to guarantee exchange rates is questioned. World Bank scholars have pointed out that such guarantees can wipe out the benefits of privatization, by dampening incentives to select and manage programs and projects efficiently. In addition: "Companies also use arbitration to insulate themselves from the risk of doing business. Claiming damage from Argentina's decision to let the peso float in 2001 and 2002, at least 27 companies have filed for arbitration-even though the decision was

³⁴ Emilio Lentini, presentation on the Buenos Aires Case, 1er Seminario Latinoamericano de Politicas Publicas en Recursos Hídricos, Brasilia, DF, 21-24 Set/2004; also Azpiazu, Daniel, Privatizacion del Sistema de Agua Potable y Saneamiento en el Area Metropolitana, de Buenos Aires, Debilidad Institucional-regulatoria y Enseñanzas. For the Toolbox of the Global Water Partership, October, 2002

³⁵ Alcazar, op. cit. p. 37

³⁶ Memo from Carlos Ben and Juan Carlos Cassagne, January, 2002, to the National Secretary for Water Resources.

³⁷ Thus, in the United States, at the time of the Depression, the Court recognized a decline in interest rates and business earnings throughout the country, and was willing to accept lower rates of returnPhillips, op. cit. p. 378, and cases quoted there. In addition: Wilcox Vs. Consolidated Gas, 212 US 19, 48-49 (1909) ; Lincoln Gas and Electric Light Vs. Lincoln, 250 US 256 (1919); Missouri ex-real Southern Bell Tel Co V. Missouri Pub. Services Commission, 262 US 276 (1923; McCardle Vs. Indianapolis Water, 272 US 400, 419 (1926), Alexandria Water Company Vs. City Council of Alexandria, Supreme Court of Virginia, 163 Va. 512;177 S.E. 454; 1934, State et al Vs. Lone Star Gas Company, Texas, Julio 1935, Lexis 135, Daytona Power, 1934; Chesapeake and Potomac, 1935; Driscoll, 1939.

arguably necessary to fend off an economic depression, and even though ordinary argentinians suffered greatly during the crisis”³⁸

4.2 Regulatory Bodies

41. Buenos Aires did not have a regulator prior to the concession. A regulator was created to control the concession. And in creating it the Government did in fact throw out the book. Almost every empirical and theoretical principle on organization of regulators was disregarded. The Buenos Aires regulator is a political body, with representatives from three levels of government, not a technical body. Its decisions may, therefore, be complicated by political considerations. In addition, it has been bypassed by the central government, who has taken decisions ignoring the views of the regulator. It was staffed with people from the former government agency.³⁹ Thus the regulator has divided loyalties, was inexperienced, had to work on one to one basis with a single regulated company, and lacked a universe allowing it to make comparisons among firms. Because of the theoretical underpinnings of the regulatory approach applied in Buenos Aires it was also weak, in terms of powers, capacity and information.

42. It is however, well financed, with a surcharge on bills. While some authors have criticized the procedure, it responds to international practices. In the US financing comes from percentage tax on each utilities gross revenues, although some states (6) finance from general revenues.⁴⁰ The total budget of Etoss is 12.000.000 pesos, and compares, favorably, with the budgets state regulars in the US.⁴¹

43. The Regulator has 130 people, and there are no programs to reduce costs. There has been some training courses, but not a full-fledged policy to create a fully capacitated, competitive, world standard regulator. Some personnel have already developed skills beyond their initial capabilities, but it is more the result of personal effort and of the regional impact of ADERASA (South American Association of Water Regulators) than of coherent national policies.

4.3 Institutional Adaptation

44. Original regulation was much affected by rushed privatization, ideology, and the idiosyncrasies of the government of the time. Yet,

45. Over time, and with untold difficulties, the regulator, the civil society, and the company, have initiated the development of important regulatory tools: User Commission, Tariff Public Audiences, Public Directorate Meetings, Social Tariffs Program, Poor Neighborhood Programs, Trust Fund for Expansion, Regulatory Accounting, Billing Permanent Auditing, Procurement Regulations, Related Services and Suppliers Regulations, Separation of Concession Accounting and Accounting Books.⁴²

³⁸ The New York Times, Editorial, Monday September 27, 2004, “The Secret Trade Courts”

³⁹ Although some of them also were union members, as Carlos Ben, went to serve AA, as director).

⁴⁰ Phillips, p. 37

⁴¹ See Phillips, op.cit. p. 138/9

⁴² Emilio Lentini, personal communication.

5. CONCLUSIONS

46. There are several conclusions, that come out of the Buenos Aires Concession:

- The urgent requirements for drinking water supply and sanitation services of the concession area cannot be met by the methodologies and schemes established in the 1990s. In the case of services in Greater Buenos Aires, it is not feasible to continue with a system that depends exclusively on integrated and monopolistic management by the private sector and on absolute cost recovery in the short or medium term through rates charged to customers. This is particularly the case because, given current circumstances, private-sector companies would demand even higher levels of risk coverage for their capital investments than in the previous round. It is this coverage that results in high profit levels and higher utility rates that bear no relation to the payment capacity of most of the population.
- Both parties were aware that data were deficient . This should have prompted a more conservative approach, on both sides, to contractual commitments.
- Public utility services are not neutral to the socioeconomic mores of the environment where they perform. Their sustainability is affected by overall economic performance. Privatization is a formal procedure that does not, by itself, ensure sustainability, since its success depends on the quality of overall economic policies and economic growth. The main priority of the Argentinean Government was to ensure a stable rate of exchange. Resources were allocated accordingly. The impacts that such policy would have on growth and governance were not evaluated. They should have been evaluated, and should be considered in future privatization processes.
- The Buenos Aires Regulatory system was mostly based on contract regulation. In accepting contract regulation the parties ignored that contract regulation affects regulatory quality. It has been disqualified by mature regulatory systems, such as the American: *"While use of the well-drawn franchise had some merit, in the main the franchise, as actually used, proved a defective instrument for ... regulation ... little regard was paid to the interest of the public ... franchises ... tended to be poorly drafted ... And even when they were well-drawn, the company often benefited, since it was common for the utility's lawyers to draft the franchise and then present it to the city council for approval. Changes in the prescribed rates or in the service standards were made with great difficulty ... As expected, the companies resisted downward rate changes, and the city councils, upward adjustments ... Service often became poor as the termination date on the franchise drew near. The company would try to keep its investment as small as possible to avoid loss if the contract were not renewed. The agreements also failed to provide for administrative machinery to keep check on the company to see it met the terms of its franchise ... It was often impossible ... for franchise ... provisions to be changed ... Detailed requirements were unsatisfactory under changing conditions"*⁴³
- Future regulatory designs should set the basic regulatory instruments, enacted through regulatory law, and separated from the contract.
- The Buenos Aires regulatory structure was affected by the speed of the process, more related to macroeconomic and political concerns, than to the quality of both regulation and service. As a result baseline data were deficient, and the regulatory system ignored empirical information on

⁴³ Phillips, op. cit. p. 130

critical regulatory issues in the water industry. In so doing the process ignored both American and European experiences.⁴⁴

- Future regulatory exercises should rely less on theories and beware of , and regulate for, proper management of critical regulatory issues. Relevant subjects include, but are not limited to: ensuring that the provider equity participation were of a level commensurate to the magnitude of the operation, providing for good-quality technical diagnostics and information before privatization, providing means to recalculate tariffs without altering the value of concession when reducing expansion obligations, controlling transfer pricing and intra-holding contracts, providing for proper accounting, determining adequate ratios regarding equity/debt financing, satisfying information requirements, assuring reasonable prices to both, providers and users; providing access to essential facilities and resources, empowering the regulator to adequately discharge its responsibilities, etc
- The American regulatory system provides good examples of both, regulatory issues, and regulatory tools. Its principles for both, normal and crises situation, should be more widely disseminated.
- International arbitration courts dealing with controversies associated to public utility services should apply the principles and rules accepted by civilized nations, when legislating, regulating, and adjudicating conflicts associated to the utilities sector.
- Governments and lending organizations should carefully consider the impact of special guarantees, such as rates of exchange, on the efficiency of service providers, macroeconomic national balances, contingent national liabilities, and equitable apportionment of national resources;
- Rate design should consider impacts on both expansion and targeted groups and be functional to policy objectives. Targeted subsidies should concentrate on demand expansions addressing needs of prioritized groups.
- Governments are responsible for policy design, selection of implementation tools and monitoring of implementation. Regulators should have legal powers, resources and independence to carry out their duties.
- The design of the Buenos Aires regulatory body illustrates a case of political reluctance to create and implement a truly independent technical regulatory system. The Regulator is a political body that was several times by-passed by politicians. Best practices and common knowledge on the subject were blatantly ignored. There is a need to restructure and improve the organization of the regulatory entity, particularly regarding independence and technical capacity.
- Bidding mechanisms, and other designs such as price cap systems are no substitute for adequate regulation. There is a need to refine competition mechanisms for awarding monopolies, with the aim of avoiding bid offers with predatory tariffs (to win now and negotiate later) and provide for a capital contribution from the successful bidder that represents a level of risk appropriate to the venture undertaken.

⁴⁴ See for example, Phillips for the American experience, and *La Gestion des Services Publics Locaux d'Eau et D'Assainement*, Cour des Comptes Publie, Janvier 1997, France. Ogus op. cit for the English experience.

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- Structural design of privatization processes should include the analysis of the technological and economic feasibility of a vertical or horizontal separation of systems in order to award the concession to more than one operator. Inclusion of competition mechanisms —contestable markets— to be applied in particular in the areas subject to expansion
- There is a need for improved and increased use of methods for encouraging community involvement. Emphasis on making this type of involvement professional and specialized. Increased use of public hearings. Enhancement of information systems according to the needs of customers and public opinion⁴⁵
- Initiating a privatization process with faulty data, and inadequate public information, as well as on the basis of unheld premises is a prescription for conflict.

⁴⁵ Lentini, Costa Rica Presentation, March 2004

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Annex 1 Real evolution of the rates for water and sewage services*

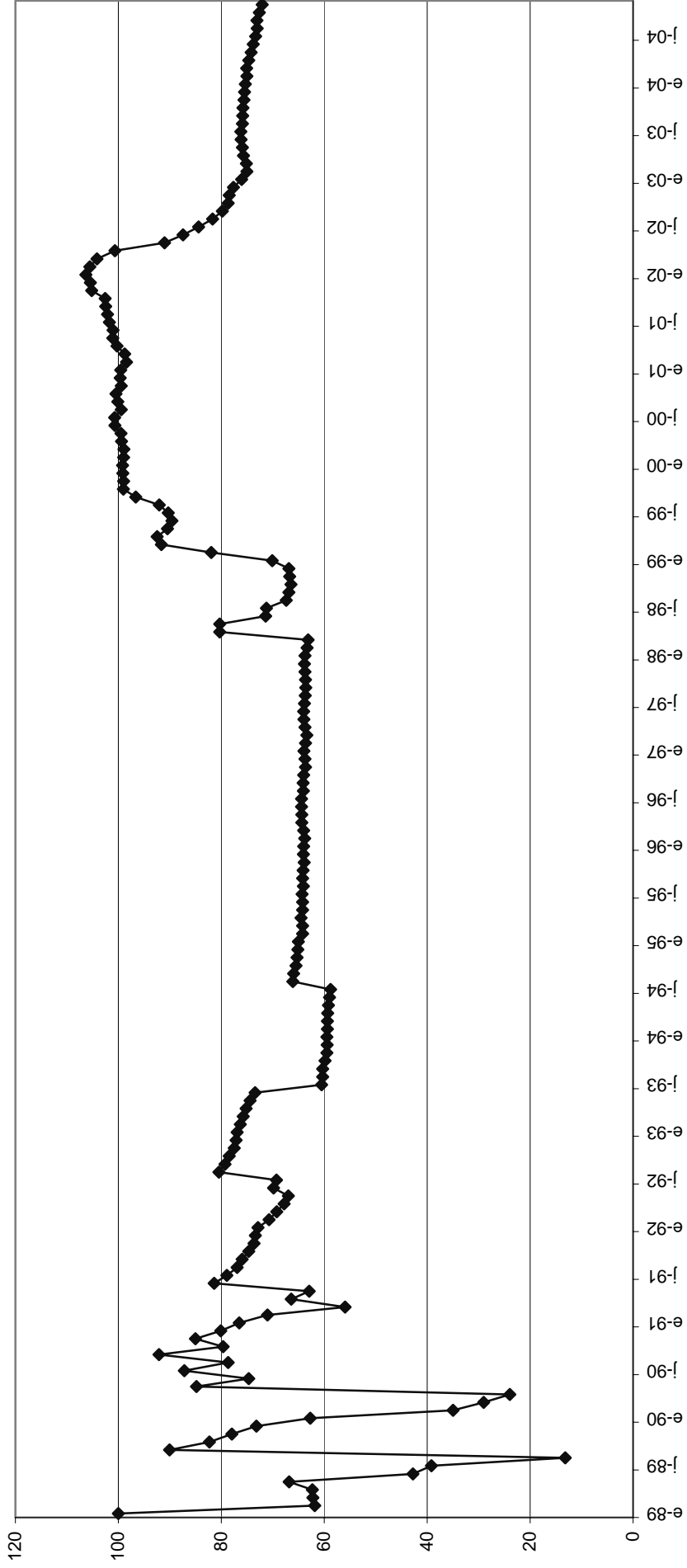
Base 1988 = 100

Month	Year																
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
January	61,8415	34,9913	71,0359	70,7359	76,2848	59,4041	64,2096	63,7898	63,6490	63,3391	81,9544	98,9914	98,4105	105,5132	75,0005	75,0093	
February	62,2013	29,0201	55,9380	69,2443	75,7317	59,4063	64,2114	63,9977	63,4052	63,1190	91,6238	98,9181	98,7812	104,1781	75,1078	75,0541	
March	62,2868	23,9452	66,3952	67,8204	75,1665	59,3235	64,5012	64,3449	63,7193	80,3303	92,4770	99,3738	100,2797	100,6732	75,6848	74,6456	
April	66,7977	84,7995	62,9276	66,9588	74,3889	59,1795	64,2075	64,3439	63,9306	80,3212	90,4514	99,4857	101,0956	91,0405	75,8819	74,1953	
May	42,7713	74,6423	81,4078	69,8367	73,4440	58,9751	64,1940	64,4013	63,9837	71,3632	89,6102	100,6729	101,0349	87,4530	76,1789	73,7927	
June	39,1675	87,1741	78,9419	69,2934	60,5232	58,7477	64,3265	64,3997	63,8383	71,2273	90,2922	100,6970	101,7684	84,3974	76,2306	73,3584	
July	13,2040	78,6590	76,9482	80,4725	60,3291	66,0920	64,0666	64,0523	63,6968	67,3916	92,0546	99,4241	102,0978	81,7114	75,8900	73,0213	
August	90,0315	92,1099	75,9600	79,2859	60,3195	65,9559	64,2222	64,1020	63,5921	66,8805	96,6319	100,1227	102,4605	79,7913	75,8606	73,0619	
September	82,3293	79,6267	74,6415	78,4746	59,8264	65,5076	64,1168	63,9858	63,6226	66,4726	99,0246	100,4383	102,5438	78,6490	75,8017	72,6023	
October	77,9668	85,0319	73,6467	77,4936	59,4901	65,2983	63,8995	63,6649	63,7224	66,7167	98,9754	99,4150	105,1816	78,4762	75,5837	72,0598	
November	73,1952	80,0823	73,3614	77,1381	59,4561	65,1510	64,0458	63,7639	63,8458	66,8755	99,1270	99,6405	105,4203	77,6173	75,4837	71,9658	
December	62,7061	76,5046	72,8882	76,9199	59,4639	65,0097	63,9810	63,9462	63,7372	70,0990	99,1887	99,5240	106,2872	76,0351	75,3249		
Average	100	61,2083	68,8822	72,0077	73,6395	66,2020	62,3376	64,1652	64,0660	63,7286	69,5113	93,4509	99,7253	102,1135	87,1280	75,6691	73,5242

Source: table prepared based on information from INDEC.

*This annex has been prepared by Emilio Lentini, ETOSS, Buenos Aires, Argentina, January 2005

Real evolution of the rates for water and sewage services Base year 1988 = 100



*Deflated prices with Consumer Price Index, General Level
Source: INDEC

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Real evolution of the rates for water and sewage services

Base 1988 = 100

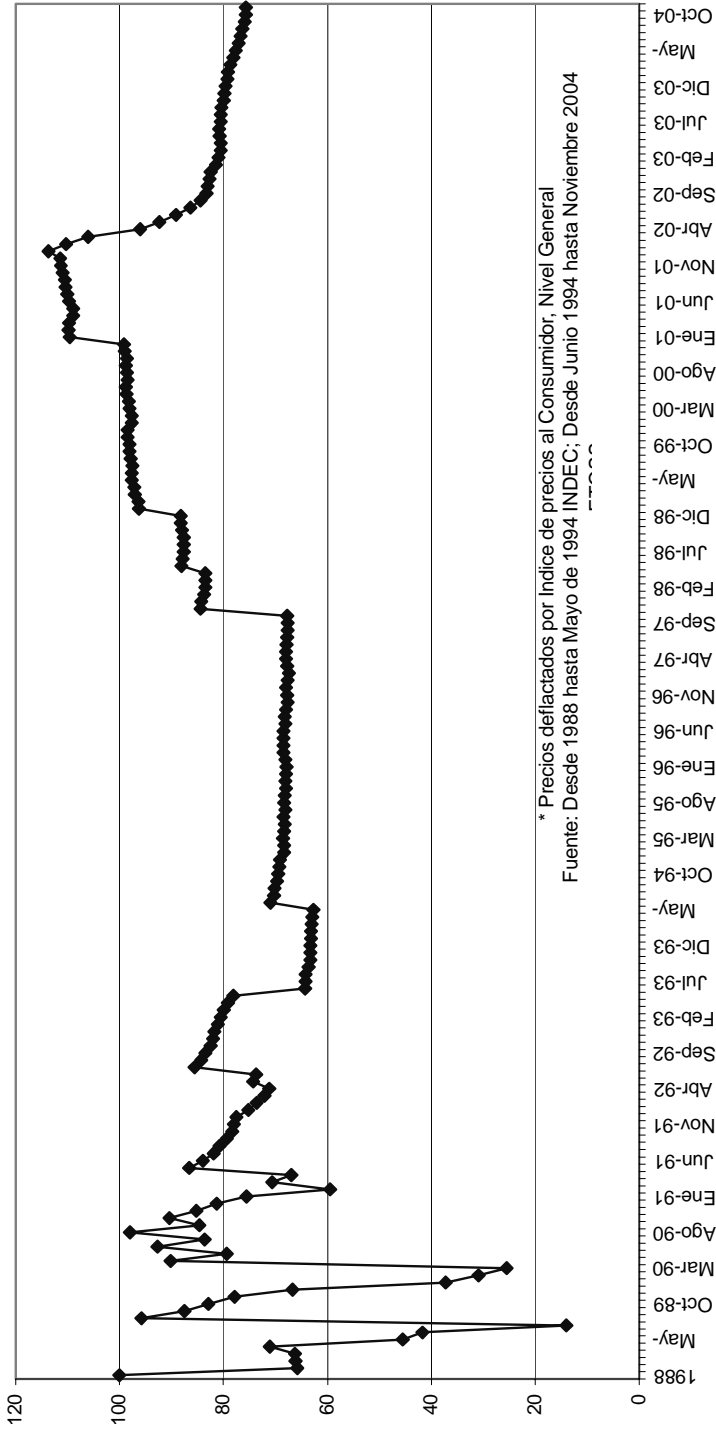
Month	Year															
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
January	65,7604	37,2087	75,5374	75,2184	81,1190	63,1685	68,2725	67,8261	67,6764	83,7254	96,1931	97,6035	109,5928	113,6734	81,4260	79,2539
February	66,1430	30,8591	59,4828	73,6323	80,5307	63,1708	68,2744	68,0472	67,4172	83,4345	96,3478	97,5996	109,8364	110,2181	80,9671	79,1765
March	66,2338	25,4626	70,6026	72,1181	79,9298	63,0828	68,5825	68,4163	67,7511	83,5394	97,0767	98,1180	109,6260	106,0173	80,4962	78,7043
April	71,0307	90,1732	66,9153	71,2020	79,1029	62,9297	68,2703	68,4153	67,9758	83,5299	97,1718	98,2285	108,9013	96,0409	80,4505	78,0386
May	45,4817	79,3723	86,5666	74,2622	78,0981	62,7123	68,2559	68,4764	68,0323	88,0618	97,6527	98,6117	108,8359	92,3371	80,7654	77,5745
June	41,6496	92,6982	83,9444	73,6845	64,3585	70,9228	68,3968	68,4746	67,8778	87,8940	97,6586	98,7944	109,6260	89,1108	80,8344	77,0374
July	14,0407	83,6436	81,8244	85,5720	64,1521	70,2740	68,1205	68,1053	67,7272	87,6201	97,4774	98,3672	109,9808	86,3579	80,4733	76,6835
August	95,7368	97,9469	80,7736	84,3102	64,1419	70,1293	68,2859	68,1581	67,6159	87,6025	97,8458	98,5793	110,3716	84,3803	80,4562	76,4201
September	87,5465	84,6726	79,3715	83,4475	63,6176	69,6526	68,1738	68,0346	67,6483	87,6296	98,0410	98,7309	110,4613	83,2599	80,4220	75,9395
October	82,9075	90,4203	78,3137	82,4043	63,2600	69,4301	67,9428	67,6933	67,7545	87,9513	98,0564	98,5496	110,9460	83,0770	79,9518	75,6409
November	77,8336	85,1571	78,0103	82,0263	63,2238	69,2735	68,0984	67,7986	84,3952	88,1607	98,3674	99,0362	111,3094	82,6535	79,7551	75,6409
December	66,6797	81,3527	77,5071	81,7942	63,2321	69,1232	68,0294	67,9925	84,2516	88,1726	98,4285	99,1561	111,4007	82,4973	79,5873	75,0109
Average	100	65,0870	73,2473	76,5708	78,3060	70,3972	66,9891	68,2253	68,1199	70,5103	86,4435	97,5265	110,0740	92,4686	80,4655	77,0934

Source: From 1988 to May 1994 INDEC; from June 1994 to November 2004 ETOSS

Efficiency, Equity and Liberalization of Water Services in Buenos Aires, Argentina

Real evolution of the rates for water and sewage services

Base 1988 = 100



* Precios deflactados por Índice de precios al Consumidor, Nivel General
Fuente: Desde 1988 hasta Mayo de 1994 INDEC; Desde Junio 1994 hasta Noviembre 2004 ETOSS

Source: From 1988 to May 1994 INDEC; from June 1994 to November 2004 ETOSS