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OPPORTUNITIES AND RISKS IN THE PRIVATIZATION-REGULATION OF THE METROPOLITAN WATER AND SEWERAGE SYSTEM

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1. Background

Two private regulated firms now operate separate service areas previously covered by the Metro Manila Water and Sewerage System (MWSS). Manila Water Company Inc. (MWCI), a consortium led by Ayala, serves the east concession[1] and Maynilad Water Services Inc. (MWSI), a consortium led by Benpres, serves the west concession.[2]

Through competitive bidding, MWCI and MWSI were granted rights to bill and collect for water and sewerage services supplied to their respective areas for 25 years. MWCI charges a base price of 2.32 pesos per cubic meter and MWSI charges a base price of 4.96 pesos per cubic meter. Just before privatization, MWSS charged a base price of 8.78 pesos per cubic meter.

In exchange, the concessionaires have been obligated to improve and expand water and sewerage services. In addition, both concessionaires assumed payment of the loans incurred by MWSS to develop water resources as concessions fee.

A regulatory office (MWSS-RO)[3] have been established to monitor and enforce compliance with contract terms, provide for unforeseen circumstances over the duration of the contract, and set out procedures for settling disputes. Recently, MWSS-RO acted on separate requests by the concessionaires for

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[1] The east concession covers Angono, Baras, Binangonan, Cainta, Cardona, Jala-Jala, Makati, Mandaluyong, Marikina (parts), Morong, Pasig, Pateros, Pililia, Rodriguez, San Juan ,San Mateo, Tanay, Taytay, and Taguig.

[2] The west concession covers Bacoor, Cavite City, Imus, Kawit, Las Pinas, Malabon, Manila, Muntinlupa, Navotas, Noveleta, Paranaque, Pasay, Quezon City (parts), Rosario, Taguig (parts), and Valenzuela.

[3] The MWSS-RO has 5 members: the chief regulator and four others in charge of financial, legal, technical and public relations matters.

extraordinary price increases (EPA) on account of the currency crisis and the El Niño phenomenon. Both concessionaires have disputed the MWSS-RO decisions.

From the time the decision to privatize MWSS was made to the time when the MWSS-RO acted on the EPA requests, weaknesses in the privatization-regulation of MWSS have been revealed. These weaknesses are mainly due to failure to account for the information limitations faced by those who managed the privatization process and by those who eventually had to regulate the private concessionaires.

Because the managers of the privatization process did not have full information about firm-specific parameters underlying a bid, privatization became exposed to the risk of picking a concessionaire with a bid price greater than cost, implying smaller gains from privatization. Or, a concessionaire could be chosen that is unable to keep its commitment on its bid over the long term. And because information on cost, performance, and compliance to service obligations is not fully observed by the regulator, the expected gains from privatization may not be fully realized.

By examining weaknesses of the MWSS privatization-regulation, this paper aims to draw lessons that may be useful to future privatization initiatives. It also describes, in broad terms, options that the MWSS-RO might consider in addressing these weaknesses. The lessons and options are discussed by looking at privatization-regulation from an agency perspective (Laffont and Tirole, 1993).

2. Bidding-out Water Concessions

A simple formula for calculating the present value of profits of a prospective concessionaire easily captures the framework used in bidding-out the east and west water concessions. In the equation below, P is the bid price, Q^d is demand for water, Q^s is water supply, C is the cost of meeting water quality and supply targets, and r is the discount rate. Non-revenue water and service obligations account for the difference between water demand and water supply.

$$NPV = \sum \frac{((P^*Q^d) - C(Q^s))}{(1 + r)^{25}}$$

Bidders compete by choosing parameters to let *NPV* approach zero to increase their chances of winning. Financial and technical parameters were submitted separately. Technical considerations were examined first. Financial parameters were only considered for bidders who satisfied minimum technical requirements.

MWSS set the service obligations for water and sewerage services. Bidders were expected to respond by stating when they would be able to meet the obligations and what investments they had to undertake to meet these obligations. The key variable here is the estimation of the costs (including investments) that a bidder thought would be necessary to meet service and quality targets.

The service obligations include compliance with Philippine water quality standards by a certain date and then compliance with a more stringent standard (set by WHO) by the year 2000. Bidders had to commit to increase water pressure to reach a level of 11 to 14 meters of pressure (16-20 psi) and would make available to connected customers in an uninterrupted basis, 24 hours per day by the year 2000. Moreover, effluents from waste water and sludge treatment plants will conform to DENR standards by the year 2000.

The bidders themselves calculated water projections including the reduction of non-revenue water. Population projections, in addition to revenue data from MWSS, were the basic sources of information. These data sources and methods have been criticized as inappropriate for making long-term projections. Moreover, available information did not provide sufficient detail to allow the bidders to effectively discern differences in water demand by various consumer groups (David, 1997). Hence, water demand becomes a key variable in developing a bid.

Without the benefit of demand and cost function estimates, bidders had to submit a bid base price, expressed as a percentage of the benchmark MWSS base price of 8.78 pesos per cubic meter. The base price, the starting point for computing the final water tariff, was the key parameter in bid evaluation.[4]

[4] The base price plus a currency exchange rate adjustment factor plus an automatic recoup adjustment factor forms the standard tariff. Sewerage charges (50 percent of standard tariff), an environmental charge (10 percent of standard tariff) and other charges for meter maintenance are added to the standard tariff to get at the final tariff.

Finally, in addition to cost, demand, and base price, bidders had to choose a rate with which the stream of net profits was to be discounted. Given demand and cost estimates, there would be a unique combination of the bid price and the discount rate that would set the net present value of profits from the concession equal to zero. This rate would imply that the bid price would be equal to the present value of average costs incurred throughout the life of the concessions.

In order to effectively evaluate the various bids and enforce the contract terms under regulation, bid parameters not only had to be valid, these had to be verifiable. Clearly, to set NPV close to zero, prospective concessionaires had to tweak four different parameters (cost of meeting service obligations, demand projections, price, and discount rate) in developing their bids. Bid evaluation and then regulation of contract terms could be made much easier had more specific methodological guidelines been issued, forms been given to make calculations more transparent, and a common data base been made available (for cost and demand projections) to remove doubts about validity of information.

Table 1
Base price bids of four prospective concessionaires

	Manila Water	Maynilad Water	Philwater	Metro Water
Bid base price	2.32	4.96	4.99	5.87
Percent of MWSS price (8.78)	26.39	56.59	56.88	66.89

3. Picking the Winners

Four bids were submitted and evaluated for both east and west water concessions. Table 1 below shows the base price bids submitted, which were identical for both service areas.

The final parameter used in determining winners was the rate bids (i.e., the percent share of the base price bid to the MWSS benchmark price). If the lowest rate bid for each zone was submitted by different firms, each firm was declared

the concessionaire of the zone for which it submitted the lowest rate bid.

MWCI submitted the lowest bid for both east and west service areas at 26.39 percent of the MWSS benchmark. The rate was unexpectedly so low it prompted MWSS to seek clarification from MWCI. In particular, MWSS wanted to clarify if the rate submitted was indeed the rate bid, not the rate of discount against the benchmark tariff. Confirmation was also requested on the MWCI position that it expected no major price adjustment until the 10th year of the concession.

MWCI confirmed its submission stating that 26.39 was its bid rate (not the discount), that it was aware of its commitments to service obligations, and that it did not expect tariff changes in the first 10 years (REF). MWCI assured MWSS that should there be any conflict between their bid and the provisions of the concession agreement, it would uphold the latter.

MWSS also requested the International Finance Corporation (IFC) for technical assistance in validating the MWCI submission. Was a bid price of 2.32 pesos sustainable or should it be declared a stray bid?

IFC deemed the MWCI bid feasible under the following assumptions (REF). Its demand projections were 45 percent higher than an earlier study by Sogrea (MWSS Privatization Technical Studies, 1996). Moreover, MWCI assumed a high NRW conversion; it expected to reduce non-revenue water by more than half in first 5 years.

The MWCI cost of term debt was low, relying heavily on yen denominated term debt at 2.79 percent – real rate. It had a high gearing ratio of up to 87 percent and had a low target minimum rate of return. Its project internal rate of return was set at 3.6 percent, whereas other bidders had 9 to 11 percent. Low capital spending in first 5 years – 25 percent less than the amount earmarked by other bidders.

Table 2
Winning bids for the east and west concessions

	East Concession – MWCI	West Concession – MWSI
Award – lowest price (ADR at NPV = 0)	2.32 (5.2%)	4.96 (10.4%)
Award – Vickrey	4.96	4.99

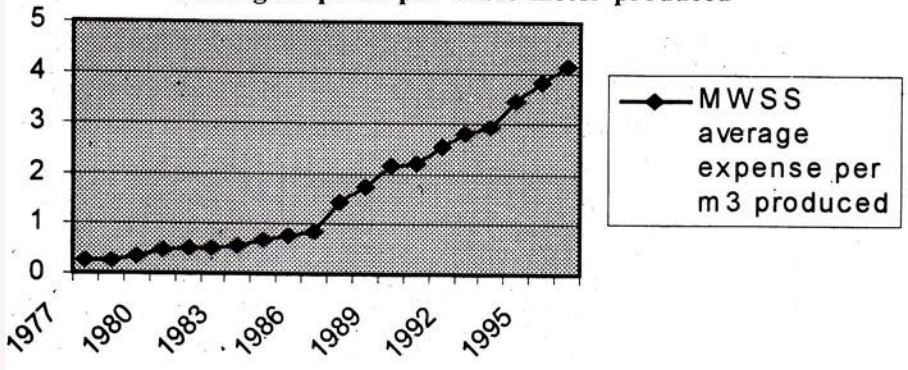
IFC concluded that the MWCI bid is attainable but cash flow will be negative in the first 10 years – down to $496 million at the lowest. IFC expressed concern over how MWCI would gain access to debt funding under these terms.

Based on the above clarifications, MWSS awarded the east service area to MWCI and the west service area to MWSI, the next lowest bidder for that area (see Table 2). But even if IFC considered the MWCI bid infeasible, one doubts whether MWSS could have survived the political flak after declaring MWCI as having submitted a stray bid.

Doubts about picking a dive bidder (and its consequences on regulation) could have been avoided had Vickrey auction rules been adopted instead. Under the current rules, the firm with the lowest bid is picked and awarded its bid price. Under Vickrey rules, the firm with the lowest bid is still chosen but is awarded the next lowest price. This simple modification prevents firms from submitting bids other than the ones that reflect its true opportunity cost. Vickrey rules are best used when the auctioneer does not observe the true parameters underlying submitted bids. But under Vickrey or any competitive bidding rules, the only guarantee against the possibility of under-bidding is long term commitment to stick to the parameters of the winning bid.

Based on the bids submitted, MWCI would still have been chosen but would have been awarded the bid base price of MWSI – 4.96 instead of 2.32, as shown in Table 2. Similarly, MWSI would still have been chosen for the west concession but would be awarded the bid price of Philwater – 4.99 instead of 4.96.

Figure 1
Average expense per cubic meter produced



4. Dive Bidders and the Regulatory Infrastructure

MWCI bid aggressively and won the east concession. IFC noted the special assumptions that made the bid feasible. There could very well have been other factors like non-water related benefits that entered into MWCI calculations but are unobserved by MWSS and the MWSS-RO. But nonetheless, suspicions of under-bidding by MWCI prevails considering that it bid way below the average expense MWSS incurred in producing water (see Figure 1).

In theory, one possible outcome in bidding-out long-term contracts under a price cap is underbidding. The incentive to dive increases with a weak regulatory infrastructure. A poorly informed and equipped regulator with lots of discretionary powers raises the possibility of being able to correct a low bid through re-negotiations.

The possibilities for a concessionaire to correct a dive bid after winning increases with the information handicap of the regulator. For example, inaccuracy of MWSS data on the status of facilities prior to takeover can lead concessionaires to declare that "the pipes are not as good as we were led to believe."

Ambiguities in the concession contract also make for easy correction of an underbid. Poorly specified operational definitions and measurement methodologies can lead concessionaires to correct for the underbid by overstating compliance to service obligations. For example, in the absence of clear guidelines, a concessionaire can claim that the inclusions of once illegal connections constitute expansion of service coverage.

Regulators are given discretionary powers because it is impossible to anticipate all contingencies, and put them all down in paper. However, especially with information handicaps, the exercise of such powers can be exploited to the concessionaires' advantage.

Incentives governing the concessionaires

Three sets of incentives influence the behavior of concessionaires with respect to pricing, investments, and in meeting service obligations. One, the bid base price effectively imposes a cap on the final tariff that concessionaires can

charge consumers. And in addition to a price cap, the private regulated firms also face a cap on rate of return implied by the MWSS charter. Two, two firms operating in two separate areas allow for yardstick competition. And three, two channels for changing the price cap (and bid parameters) are available – the extra-ordinary price adjustment (EPA) and rate rebasing (the fist one comes after 10 years, unless the MWSS-RO allows for an early rebasing after 5 years).

The theory of incentives suggests that choosing the

Table 3
Price caps and rate of return regulation and their implications on efficiency and rent

	Full information	Information asymmetry
Fixed-price contract (e.g. price caps)	High efficiency	High rent (high efficiency)
Cost-reimbursement (e.g. rate of return regulation)	Low efficiency	Low rent (low efficiency)

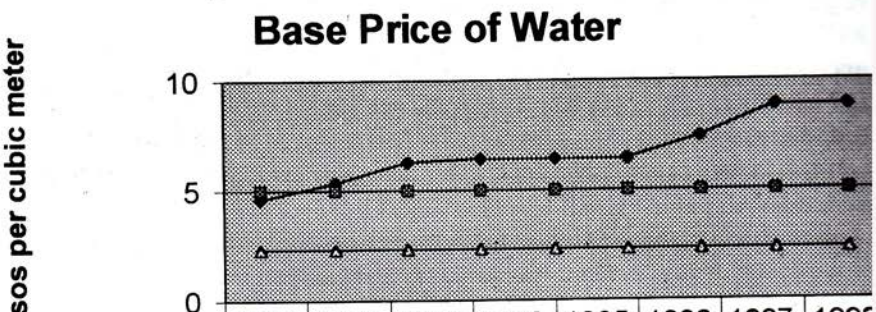
compensation mechanism for a private regulated firm needs to be undertaken in recognition of a trade-off between efficiency and rent. Since the concessionaire is residual claimant, price caps induce high efficiency. On the other hand, rate-of-return regulation induces low levels of cost reduction effort on the part of the regulated firm. The obvious choice is to compensate water concessionaires using a price cap (see Table 3).

But if underlying cost parameters (including cost reduction effort) are private to the concessionaire, price caps allow the concessionaire to earn economic rent (or a rate of return that is higher than what is implied in the original bid). On the other hand, the rents tend to be lower under cost-reimbursement.

It would be difficult to argue that the MWSS-RO operates under full information. And with a price cap in place, its focus should be on minimizing opportunities for concessionaires to generate economic rent. Of course, one can argue that at their bid prices, it would be unlikely for them to generate rent. The base price awarded to MWCI and MWSI are even lower than what MWSS charged in 1991 (see Figure 2).

But there are opportunities available for changing the price caps – EPA and rate rebasing. Once a year, concessionaires

Figure 2
Trends in base price of water from 1990 to 1988



	1990	1991	1992	1993	1995	1996	1997	1998
MWSS	4.61	5.36	6.28	6.43	6.43	7.41	8.87	8.87
MWSI	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96
MWCI	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32

can petition for a tariff adjustment owing to unforeseen events (i.e., influences not within the control of the concessionaires). And, on the 10th year (or earlier on the 5th should the MWSS-RO allow it), all the parameters underlying the original bids can be changed.

There are limits to how much change can be introduced through EPA and rate rebasing. The MWSS charter imposes a rate of return ceiling of 12 percent. Moreover, the concession agreement specifies a rate adjustment limit – the percentage of approved price change to the original price plus the inflation rate.

In addition to caps and ceilings, two different concessionaires operating in two separate zones allows for yardstick competition. In theory, this can be a powerful instrument to induce greater efficiency and lower economic rent. As long as the two firms do not collude, yardstick competition allows the regulator to discern changes in cost that are firm-specific versus ones that are industry-specific. For example, the MWSS-RO cannot grant adjustments to a concessionaire when the other has not made a similar request. Similarly, the two concessionaires will be allowed to use different technical and cost specifications for water meters serving the same purpose.

But yardstick competition has yet to be used effectively by the MWSS-RO. While the principles are well understood guidelines need to be specified and made available to both

concessionaires. Arbitrary impositions would reduce the ability of firms to make long term commitments and could violate the firms' participation constraints.

5. Preserving the Gains from Privatization

The main task of regulation is to preserve the gains from privatization. This should not mean that the MWSS-RO considers only consumer benefits. After all, whatever gains there may be are realized only with the continued participation of the private regulated firm.

The privatization-regulation of MWSS is expected to bring about 5 types of benefits. These are (1) greater water supply and better quality, (2) lower prices for consumers, (3) elimination of the social cost of public funds, (4) indirect environmental effects, and (5) a fair rate of return for concessionaires.

The most obvious benefit from MWSS privatization-regulation is price reduction. Consumers in the east service area realized a 6.46 pesos per cubic meter (= 8.78 – 2. 32). Those in the west service area gained 2.32 pesos per cubic meter (= 8.78 – 4.96).

But part of the price reduction might be imagined. In August 1996, MWSS raised the base price of water from 6.43 to 8.78 pesos per cubic meter – a discrete jump given the tariff trend since 1990 (see Figure 2). The tariff increase was partly implemented to avoid the probability of a substantial increase in water rates following privatization – an event that was considered politically unsound.

Another set of benefits would be improvements in water supply and quality. Much of such benefits still remain to be realized and are largely dependent on the ability of the private firm to keep its obligations and on the effectiveness of the MWSS-RO.

A less obvious but significant benefit from privatization is government relief from the burden of future capital expenditures and from whatever hidden subsidies (especially prior to the 1996 tariff increase). This gain is especially significant for developing countries like the Philippines where the social cost of public funds is believed to be large. The shadow cost of public funds increases with the use of indirect taxes. It is

estimated that in order to generate a peso in tax revenue, the economy would lose 2.5 pesos . The 1.5 peso difference represents distortions created by a tax system that relies heavily on indirect taxes.

A more indirect benefit would be environmental effects brought about by reductions in water tariffs. Studies have argued that poor water service by MWSS produced negative environmental effects (Ebarvia, 1997). Consumers, especially commercial and industrial establishments, cope by tapping ground water sources privately, leading to the rapid degradation of the water base. Some suggest that government declare ground water as a public resource through legislation and allow MWSS to charge tariffs on private ground water extraction. Others pointed out that the MWSS privatization-regulation take this explicitly into account, but wrongly suggested that a surcharge be imposed (David, 1999).

Careful analysis of the situation would suggest that to generate environmental benefits, the concessionaires should be induced to internalize the effect of its pricing on the demand for unregulated substitutes that exert negative externalities on society. Concessionaires should lower price below what it would have charged as an unregulated monopolist in order to reduce the demand for the unregulated good.

Given the current tariff rates, it would not be difficult to argue that the concessionaires are charging less than Ramsey prices. But the extent to which environmental benefits are generated remains an empirical issue. But the relative tariffs charged by the two concessionaires would suggest that larger environmental benefits are forthcoming in the east concession.

Finally, a fair rate of return on investments is needed for concessionaires to effectively participate in the MWSS privatization. What the fair rate should be can be argued on several grounds. One can refer to what private firms in the utilities sector are receiving. One can also refer to the minimum rate of return government expects from public investments (the social rate of return). But the fair rate of return have been established by the concessionaires themselves in the processes of participating in competitive bidding. MWSI won with a rate of return of 10.4 percent and MWCI won with a rate of return of 5.3 percent. By sticking with these rates, the MWSS-RO in effect uses a rate that the concessionaires themselves provided.

Table 4
Extraordinary price increases requested by concessionaires

MWSI	MWCI
Base price 4.96 (56.59%)	2.32 (26.39%)
Base price with EPA requested 5.70 (64.93%)	5.55 (63.21%)
Base price with EPA recommended 5.27 (60.02%)	2.36 (26.87%)

Preserving the spirit of the bidding process – the 1998 EPA

Less than a year after they took over MWSS operations, MWSI and MWCI filed for extraordinary price increases mainly citing a 52 percent increase in the peso-dollar rate and the El Niño. The requested EPA and its impact on the base price are shown in Table 4.

Both firms requested adjustments for peso depreciation on account of the dollar denominated portions of the concession fee (i.e., MWSS loans that the concessionaires had to assume). But only MWCI requested for adjustments owing to dollar denominated operating and capital expenses (see Table 5 for a summary of the concessionaires' EPA petitions).

MWSS-RO ruled that adjustments on the concession fees be made in proportion to what the two concessionaires had to bear (90 percent of concessions fees are being charged to the west concessionaire MWSI). On account of the dollar expenses, it was ruled that only actual expenses be considered.

Both firms suggested that El Niño increased cost of water delivery and reduced water revenues. Only actual costs incurred were considered by the MWSS-RO. Adjustments owing to foregone revenue was dismissed citing that MWSS made no guarantees to supply water that would match revenue projects in the concessions agreement.

MWCI made two specific requests regarding the way the EPA was to be treated over the life of the concession. It requested that a discount rate of 18 percent be used in cash flow calculations and that the EPA be applied or front-ended over the first 4 years. Both requests would help relieve the

Table 5
Specific EPA p etitio m s raised by MWSS concessionaires

EPA ITEMS RAISED	MWSI WEST	MWCI EAST
1. ADR 10.4 = same as in bid	change to 18 from	implicit rate of 5.6 in the bid
2. Spread of EPA	Over 24 years	Front-ended in first 4 years
3. FOREX		
3.1. Concession fee	0.47	0.37
3.2. $OPEX/CAPEX		0.85
3.3. Performance bond	Less than 0.01	
3.4. Other $ OPEX		0.26
4. El Niño		
4.1. decrease H_2O supply > lost revenue	0.05	0.31
4.2. Increase NRW		0.33
4.3. Additional rehabilitation cost	0.01	0.34
4.4. Increased cost of alleviation		0.06
5. Breach of contract		
5.1. Material deterioration of Network		0.22
5.2. Increase in MWSS salaries		0.12
6. Material change in Bidding assumptions		
6.1. Cost overrun of existing projects		0.37
6.2. Water transfers	0.04	
7. Tax holiday	0.17	
8. Adjustment for domestic inflation		
TOTAL EPA REQUESTED	0.75	3.23

burden of negative cash flows that MWCI had to face in the first 10 years of operation as IFC pointed out during bid evaluations.

MWSS-RO ruled that to preserve the competitive spirit of the privatization process, the discount rate implicit in the financial models submitted during the bidding process were to

be used until changes are made under rate rebasing. Furthermore, the discount rate alone determine how cash flows were to be discounted so that the request for a 4-year front end was deemed inconsistent with the spirit of the bid.

One issue that the MWSS-RO had to face was the possible backlash from firms who lost in the bidding process. Note that granting MWCI its EPA request (assuming all items were valid) would raise its bid price to 5.55 pesos per cubic meter. From Table 1, this would put MWCI out of the race – Philwater would have been chosen besides MWSI. Having to do this after less than a year was politically unacceptable to *the MWSS-RO.*

What the 1998 round of petitions for EPA failed to do was to develop guidelines for the use of yardstick competition in te evaluation process. Table 5 shows differences between the petitions by the two concessionaires despite the fact that both referred to two common experiences that both claimed to have led to changes in cost parameters – currency adjustment and El Niño.

Yardstick competition could have been used to rule against petitions 1, 2, 3.3, 3.4., 5 and 6 in Table 5. The MWSS-RO could have simply denied petitions on items raised by one concessionaire but not by the other on grounds that should have affected both, if considered valid.

For item 1 in Table 5, the ADR, MWCI requested for an increase in the discount rate used in calculating its net present value. This would clearly affect the impact of price adjustments on its cash flow conditions. The second item requested similarly further increases the front-loading effect of the higher ADR. But all other parameters in the cash flow model remaining the same, a higher ADR would mean a negative net present value. Moreover, the justifications cited for the change in ADR, like the Asian financial crisis, clearly should affect both concessionaires. But MWSI in its presentations argued that this had yet to have a significant impact on its original bid assumptions. Hence, MWSI did not file for a similar petition to increase its discount rate.

In principle, relative performance evaluation is a way for the regulator to reduce its information handicap by comparing the cost (or petitions related to changes in cost parameters) with that of other firms facing a similar technology. The

effectiveness of this measure diminishes as the differences between the firms being compared expand.

Another factor that can render yardstick competition ineffective is the possibility of the two firms being compared to collude. In the EPA items, for example, both concessionaires can agree to raise the same items in their petitions. As the possibility of collusion increases, incentives (or disincentives) would have to be introduced to induce independent action. Such incentives are not yet built into the existing concessionaire agreements.

The MWSS-RO ruling on the EPA may be considered stringent considering the situation that MWCI is in. And the decision is now subject to appeals – a process that is expensive relative to the resources of the regulator and the concessionaires. And the appeals rule is that losers pay for the expense. This imposes a disincentive for concessionaires to seek appeals rather than negotiate. It serves as a penalty for reckless rulings by the regulator.

6. A Strategy for Introducing Regulatory Reforms

The fact remains that the recent currency crisis has changed the parameters faced by the two concessionaires. And its impact is heavier on MWCI, having aggressively bid for water concessions.

The other fact is that the regulatory infrastructure remains weak. MWSS-RO staff needs further training and orientation with regard to effective regulatory practices and in the exercise of regulatory instruments and incentives design. Its organization, especially its relationship to the MWSS board of trustees, needs to be clarified to put greater accountability for its decisions. Guidelines need to be developed, especially as it exercises regulatory instruments like yardstick competition. Information that can be used and verified by concessionaires, as well as the public, need to be generated and analyzed.

But regulatory reforms cannot be introduced unilaterally by the MWSS-RO. Changes in the concessions agreement would have to be made, and this would require approval by the concessionaires. Obviously, the regulatory framework and infrastructure had to be an important consideration that concessionaires took in developing their bids.

A strategy for introducing regulatory reforms is leverage for the desired changes in exchange for early rate rebasing in the year 2002. Changes that need to be made should be openly discussed with concessionaires and the public. But it should be clear that acceptance of regulatory reform guarantees approval of items on the rate rebasing agenda raised by the concessionaires.

In order for the strategy to become effective, the MWSS-RO should undertake the necessary preparations. It must specify what changes need to be made in various areas of concern including organization, capacity building, information generation (including forms for financial and technical reporting by concessionaires), forms for EPA requests, and legal aspects of provisions in the concession agreement.

Notwithstanding regulatory reforms, MWSS-RO needs to prepare for rate rebasing itself. It would have to anticipate what items the concessionaires are likely to bring to the table, what skills and information it would need to evaluate these, and simulate how this would affect the gains from privatization.

An area which regulatory reforms need to strengthen would be the explicit use of yardstick or benchmark competition in regulation. New incentives will have to be introduced in the concession agreement to minimize collusion that would render benchmark competition less effective. Guidelines need to be developed so that the evaluation process becomes more transparent to the concessionaires as well as to the public.

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