Water privatisation and quality of service

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1. Water privatisation and performance

There are many problems with water privatisation. This note addresses two key ways in which privatisation of water services jeopardised the quality of service and environmental responsibility compared with direct provision through a public authority.

These are:

- Profit-oriented management behaviour
- Fragmentation of responsibility

2. Profit-oriented behaviour in the water industry

2.1. Responsibility to shareholders

Throughout a privatisation the public authority will, or should, retain a primary responsibility to its citizens for delivery of that service. The private sector equally remains throughout responsible for securing and maximizing the return to its shareholders. This responsibility does not cease when a contract or concession is awarded, it determines how that service will be managed – it is this incentive which distinguishes the private sector, and is indeed often advanced as the reason for introducing it in the first place.

This is central to understanding the observed behaviour of privatized utilities or services. There is a profit-seeking dynamic which may, and often does, conflict with the public objectives of the water service. The extent to which companies will go to do this can be illustrated by the recent behaviour of International Water (a USA-Italian owned, and British-run, company) in Tallinn, Estonia.

Tallin Water was an efficient municipal company, but Tallinn council sold a controlling share in December 2000. In May 2001 it was reported that in the year 2000, its last year of municipal ownership, Tallinn Water had recorded a small profit of 24m. Estonian kroons (about 1m Euros). The new owners however decided to pay themselves a dividend of 182m EK (about 7.5m Euros). International Water justified this by saying that Tallinn Water was overcapitalised: “European water companies have on the average of 47% of borrowed or external capital and 53 percent of shareholders' capital. In Tallin Water, that proportion was very much in favour of the shareholders' capital and payment of dividends was a good means to change it”.

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Note

- PSIRU research

This paper is based on the research into the privatisation and restructuring of water and other services which has been conducted by PSIRU. This research has been worldwide in scope, covering developing countries as well as OECD countries, not restricted to the UK. Reports by PSIRU are all available at www.psiru.org. The most relevant for this paper are: “In Public Hands” (July 2001); “UK Water; a briefing” (Feb 2001). A forthcoming paper on the water services in Grenoble is also relevant. Other relevant PSIRU papers on energy, in particular, can also be found on the website.

- Terminology

This paper uses the term privatised and privatisation to include all forms whereby the management of the operation of a public service such as water, or part of it, is devolved to a private entity. It thus includes sales (as in the UK); concessions or affermage, following the French model; any form of joint venture or PPP between companies and public authorities in the service; management contracts; and the sub-contracting of elements of service eg maintenance.

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The next surprise for Tallinn came later in the same month. The company demanded that the city council should pay an extra 2.5 m Euros per year for surface water drainage – although in the past the costs of this service had been covered by the water tariffs. The council would be paying a second time for this service.  

The behaviour pattern is not restricted to occasional ‘bad’ companies, or ‘bad’ managers, it is typical of the forces at work in privatized water operations. A typical cycle of behaviour focuses on three economic aspects which are key to profitability – the initial terms of the concession or contract; prices; and investment.

2.2. Cycle of behaviour

2.2. A. Contract terms and corruption

Companies aiming to maximise the benefits from a long-term concession have incentives to engage in corruption. This may take the form of a bribe to a person or a political party, or the allocation of monopoly profits to politicians or their relatives.

This pattern of bribery is widespread where private interests are introduced into public services, it is not restricted to developing countries, or to one or two European countries reputed to be ‘corrupt’. At present, in July 2001, there are court cases in the USA, in both New Orleans and Bridgport Connecticut, concerning water contracts where bribes were paid by executives of Professional Services Group, now part of US Filter, itself part of Vivendi.

2.2. B. Higher prices

The public interest lies clearly in obtaining lower prices, and this is usually the key parameter used to evaluate bids for private water concessions. However, after the bidding process, the operator has a simple incentive to maximize prices. We thus find a diverse range of strategies for doing this – in the UK this has taken the form of bargaining with the regulator, in France and elsewhere it occurs through a series of technical adjustments and renegotiations which cumulate to a considerable gain. Privatised water prices in France are between 10% and 15% higher than public sector water prices in the same country.

One typical adjustment is upward renegotiation of prices after concessions won on forecast rising demand which does not materialise. One example was in Gdansk, Poland, the most northerly privatized water concession, in 1992, where the French multinational SAUR negotiated higher prices after a year because consumption levels had not matched their forecasts; the latest example, in June 2001, is in the most southerly privatized water concession in the world, in Dolphin Coast, South Africa – where the same company, SAUR, has informed the authority that the failure of middle class development to keep pace with their assumptions means that prices have to rise.

2.2. C. Underinvestment

The scale and cost of capital investment in water means there is a consistent incentive to minimise it. Given that specific investments are usually central to the purpose of the privatization, this means that there is a constant tension between the public service objectives and the profit-seeking behaviour of the company.

In the UK scheme, investment projections formed part of the basis on which companies were allowed to charge prices. Once the price rises were agreed in 1995, many companies rapidly discovered reasons not to follow the investment forecast, and announced ‘capital efficiencies’ which enabled them to award the money not spent on investments as increased dividends to shareholders. These were substantial amounts, between £50m and £100m (Can $120m to $240m) for Thames Water, North West Water, and Yorkshire Water (now Kelda), for example.
2.3. Impact on environment and water quality

Given this pattern, what can be said about the relationship between the typical processes of privatization and the impact on environmental and service quality? The main impact is always likely to be on costs, but there are clear points where the behaviour of private companies have negative effects on environmental and service quality too. Two examples of this are given here.

2.3. A. Yorkshire and drought, 1995

The UK drought of 1995, for example, saw Yorkshire water unable to maintain piped water supplies to the major town of Halifax, for 6 months. OFWAT suggested in 1996 that Yorkshire Water PLC’s serious failures to ensure a reliable and continuous supply, as well as to control leakage and flooding from sewers had to be related to the company’s dividend policy. 8

2.3. B. Trading water to exploit shortages

In 1999 Enron’s water subsidiary Azurix set up a trading venture, Water2Water, to make transactions relating to the transfer of water and the purchase and sale of water storage and water quality credits. Azurix said that it expected the first subscribers to be in the western United States.

In the same year Azurix bought into a huge bulk water ‘bank’ in California, Madera water bank, with a capacity of 400,000 acre feet and maximum extraction of 100,000 acre feet a year. Azurix said it planned to sell bulk volumes of water to various public and private sector customers in central and southern California under 20 to 30 year lease agreements at fixed price, covering.

Azurix stated: “We estimate that the remaining 20 percent of the storage capacity will be retained by Azurix for the purpose of trading and optimisation. Trading will be maximized during dry and drought years when demand far exceeds supply”. 9 In effect, the company plans to profit using a combination of the techniques that have delivered profits in electricity – long-term guaranteed contracts with public authorities, plus exploitation of markets through trading.

This contains a direct parallel with the California and Maharashtra energy crises; Azurix’ parent, Enron, was one of the power companies which made huge profits in the California electricity market when prices soared, and also the company that has threatened to bankrupt the Maharashtra state electricity board in India.

3. Fragmented responsibilities

3.1. Weak chains of responsibility

A general problem with almost any form of privatisation or subcontracting is the creation of uncertainty of responsibility. Following a reorganisation under public ownership in 1974, the water service in England and Wales, uniquely in Europe, was based on unitary river-basin authorities, responsible for water, sewerage, and rivers. All monthly board meetings were open to the public.

One immediate result of privatisation of water in the UK was the loss of this unitary system of responsibility. There are now three separate regulatory bodies – the Environment Agency, the Drinking Water A. OFWAT, responsible for economic regulation and with the power to apply economic sanctions and incentives, does not recognise any environmental responsibilities.

Most privatised water systems exhibit this problem to a greater or lesser extent. Thus in France, the Agences d’Eau are conduits for investment finance, but have to wait for the operators to decide to make the investments.
In developing countries the key public service objective is usually to extend the service. Recent studies in Cartagena (Colombia), Cordoba (Argentina) and La Paz (Bolivia) have all shown how private operators (Suez-Lyonnaise in all cases, as it happens) systematically avoid making the investment in such extensions, despite contractual obligations and political demands, because they regard such connections to the urban poor who can only afford water with cross-subsidy as too risky – not profitably sustainable. Thus the chain of responsibility is simply broken by the force majeure of profitability.

Another example in the water industry is the case of Suez-Lyonnaise in Brittany, France. The company was successfully sued by local consumers because of the excessive levels of nitrates remaining in the drinking water. The company continued to deny responsibility, however, on the grounds that the level of nitrates was so high that it would be uneconomic for Suez-Lyonnaise to extract it. The company claimed that problem was caused by local farmers using excessive fertilizer, with the government ultimately responsible for not enforcing restrictions on the use of such fertilizers. Suez won their court case against the government, which thus has paid for the compensation. The relevant point is the denial of any responsibility other than providing a service within the boundaries of acceptable profitability.

3.2. Other sectors

It is possible to see more of the dynamics of privatisation by looking at other sectors.

3.2. A. Rail accidents

Very similar factors can be identified in the privatized rail industry in the UK. There the fragmentation of responsibilities is extreme; with separate companies responsible for operating the trains, and another company for maintaining the track and signaling system. This company in turn subcontracts maintenance work to contractors. The whole system is supposed to be supervised by a strategic rail authority, and, in its safety aspects, the health and Safety executive.

This fragmentation was at the heart of the fatal rail crash at Hatfield in the UK last year. The track company, Railtrack, was contracting work out to contractors who then were left to organize it; as a result it emerged that Railtrack were simply failing in their duty to maintain the track, and hundreds of miles were unsafe; a government clampdown made the railways safer but almost unworkable; Railtrack’s share value has fallen to the floor, on the basis that it is unprofitable if it is forced to be so safe; and all the companies involved deny responsibility. Similar problems were highlighted by the official enquiry into the earlier Paddington train crash, whose recommendations emphasised the need for special measures to ensure co-ordination and implementation of decisions.

In this case, the link between privatization, profitability and fragmentation is clear. The risk that the company took was acceptable to the company, because the option of operating completely safely was commercially unacceptable.

3.2. B. California energy

The recent crisis in California’s energy markets are also relevant. The wholesale market in electricity was expected, by virtue of competition, to supply electricity to the distribution utilities cheaply. In fact, from May 2000, prices soared: the small group of generating companies made super-profits, the utilities were driven into bankruptcy, price increases of 49% have been imposed nearly everywhere. The exception is Los Angeles, where electricity remains in the hands of the municipality, with a vertically integrated system and no market. Prices and supply have remained stable.
4. Some conclusions

There are systemic features of privatisation that are likely to increase both uncertainty over responsibilities and underspending contrary to public interest. This makes companies ready to accept risks for commercial reasons, which public authorities would not. The extent to which these risks are life-threatening will depend on actual events, and the technical features of the industry. Broken water pipes, for example, result in leaks; broken railway tracks result in accidents and deaths.

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