

Privatisation Results: Private Sector Participation in Water Services After 15 Years

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Privatisation of public infrastructure has been the mantra of many development agencies since the late 1980s. Water supply is no exception, and various forms of private sector participation (PSP) have been tried in the water and sanitation sector. This article examines the results of these experiments. It suggests that PSP has had mixed results and that in several important respects the private sector seems to be no more efficient in delivering services than the public sector. Despite growing evidence of failures and increasing public pressure against it, privatisation in water and sanitation is still alive, however. Increasingly, it is being repackaged in new forms such as that of public-private partnership.

1 Introduction

It is well established that improvements in public utilities infrastructure (water, roads, electricity, telecommunications, ports, airports) are a necessary condition for enhanced economic performance and poverty reduction. Countries follow different models in terms of the degree of public- and private-sector involvement in the provision of such services. However, some patterns hold across the range of country contexts. Whereas there seems to be general consensus among policy-makers and experts that governments should disengage from the telecommunications and electricity sectors, government's role in the supply of water services is controversial. Unlike some other fields of public utilities infrastructure, water is seen as unavoidably social in nature and evokes political emotions like no other issue.

Privatisation and other varieties of private sector¹ participation (PSP) in water services tend to be associated with neo-liberal reform strategies. Such strategies emphasise the importance of the market, fiscal discipline, trade, investment and financial liberalisation, deregulation, decentralisation, privatisation and a reduced role for the state (Robison and Hewison, 2005: 185). Within this approach, objectives such as a limited welfare state, a flexible labour market and restrictive fiscal policies are given priority over those of traditional social policies. These strategies are also referred to as the Washington Consensus.² PSP was introduced in developing countries as the

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1. Private sector in this article refers to firms which have the commercial objective of making a profit. In practice, the firms involved are often multinational water supply companies.
2. John Williamson (1994) was the first to coin this term, referring to the orthodox economic policies promoted by the US Treasury, the IMF and the World Bank.

linchpin of the Washington Consensus. It was argued that PSP would bring in much needed investment, increase access and improve the quality of the water supply. Historically, most water systems in developed European countries were initiated by the private sector. However, today it is the public system which provides water and sanitation in most countries. It is estimated that over 90% of the world's population is currently supplied by the public sector. The funding comes generally from taxation, borrowing and user fees.

After over 15 years of experimentation with various forms of PSP in water supply, it is time to take stock of the results. This article evaluates the lessons learnt, drawing on empirical evidence and a review of the literature. In particular, it investigates the impact of PSP on access and on the poor. In doing so, it also aims to present the state of the art and current issues facing water supply in developing countries. The evidence gathered suggests that PSP has not achieved the desired results, especially in developing countries, and that examples of failure and difficulty are increasing. Nevertheless, the article concludes that the PSP debate is still alive, with privatisation increasingly repackaged in different forms such as public-private partnerships (PPP).

2 Current context

Private sector participation (PSP) in water is one of the most controversial topics in the development field today. On one side are those who argue that, since the government has failed to provide access for everyone, it is worth turning to the private sector and market principles to solve this problem. Those who advocate the involvement of the private sector in water supply (the international financial institutions, bilateral donors, professional associations and some academics) argue that this may be expected to improve efficiency, extend the service, bring in more investment, and relieve governments of budget deficits (World Bank, 2004a). It has been argued that, because of lack of funding to improve the water infrastructure, developing countries are caught in 'low-level equilibrium', implying that low operational efficiency leads to low quality service (Anwander and Ozuna, 2002). In order to break this circle, an injection of PSP is required.

On the other side of the debate are those who consider that water is a common good which, as a matter of principle, should not be in the hands of the private sector. They argue that water is unlike any other resource. Because it is the essence of life itself, water should *never* be treated as a commodity based on market principles. The private sector cannot be expected to apply just criteria to the satisfaction of this basic human need. In any case, access to water is a human right and it is the government's obligation to provide such a vital resource to everyone. This implies that the state has the capacity as well as the duty to deliver water services to everyone.

Each side in this debate presents a passionate argument. However, there is another group which is caught in between these two opposing views. It thinks that solutions can be found by considering water as an economic good and a human right at the same time. The original form of the neo-liberal argument, which came to life during the Thatcher and Reagan era in the 1980s, argued that PSP in public utilities should be generally preferred over state involvement. After the experience of privatising water utilities in the UK and other developed countries, PSP was prescribed for developing countries.

The most vocal critics of this position have generally focused their efforts on demonising the private sector and the profit-seeking motives of large corporations, to which the private sector has responded by proposing (or accepting) certain forms of corporate social responsibility. The major opposition, which comes from the rights-based approach to water, has been relatively weak on substance and heavy on rhetoric. However, these are not the only critics of water privatisation.

In general, three groups of critics of the neo-liberal argument may be identified:

- academics such as Joseph Stiglitz, Paul Krugman, David Parker and Colin Kirkpatrick, who do not question PSP *per se*, but criticise the sequencing of privatisation reforms and call for better regulation;
- those who believe that the public sector can do the job better if given the resources, such as Public Services International (the global federation of public sector unions), David Hall from the Public Services International Research Unit and the Transnational Institute;
- those who criticise it on ideological grounds, comprising NGOs such as WaterAid, the Polaris Institute, the Council of Canadians, the World Development Movement and the Public Citizen, and some academics.

On the other side, the pro-privatisation group is also internally differentiated and well organised. There are several international lobby groups, such as the World Water Council, the World Business Council for Sustainable Development, the International Chamber of Commerce, Business Action for Water and the World Economic Forum.

3 Equity in and access to water services

Issues surrounding water and poverty have now been recognised as crucial by the international community, as evidenced by the Millennium Development Goals (MDG), target 10 of which aims to ‘halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation’. According to various estimates compiled by the World Water Council (2006a), around US\$10 billion per year would be needed to deliver basic water and sanitation to the people who do not currently have access. In other words, the current levels of investment would have to be doubled in order to achieve target 10 of the MDGs.

All developed economies provide some sort of income support to help the poor afford water supply (OECD, 2003a: 34). In addition, these countries have also put in place mechanisms to help the general population and they have policies targeted on selected groups, such as the poor, large families and older people. These measures include VAT reduction, progressive social tariffs, eliminating disconnections, eliminating annual fixed fees, targeted assistance for poor people such as free water up to a defined volume, forgiveness of arrears and grants. However, the OECD argues that the impact of such social policies is limited since the aid is relatively small and the level of poverty minimal in these countries. In another publication, the OECD (2003b: 18) argues that such policies contribute to economic efficiency, resource conservation and equity goals, and would be more appropriate in developing countries where the level of poverty and inequality is high.

Linked to the equity issue is the question of access. Over 1.1 billion people worldwide lack access to safe drinking water and over 2.6 billion do not have access to sanitation services. On the positive side, 83% of the world's population have access to improved drinking water (WHO and UNICEF, 2004). Those who are not connected to the water supply system often resort to purchasing water from independent providers, often at very high prices. And those who cannot afford it, consume unsafe polluted water. WHO estimates that around 2 million people (90% of them children under 5) die every year from diarrhoeal disease, the 6th most dangerous disease on a global scale (WHO, 2003: 1). Around 4,000 children die each day from water-borne diseases. This leads to a vicious circle for the billions of people who are locked in a cycle of poverty and disease (WHO, 2005). In other words, poverty leads to deprivation, which leads to consuming unsafe water, which leads to disease and inability to work, leading to increased poverty. This poverty trap can clearly be overcome by access to safe water.

4 Why privatise? Theory of privatisation

Privatisation is a political strategy which creates new rules and allocates new roles among the state, the market and civil society. According to Savas (1987), there are four types of privatisation: ideological (less government), populist (better society), pragmatic (effective solutions) and commercial (more business). As noted above, it is commonly argued that private ownership is more efficient in delivering services compared with the state (Yarrow, 1999: 162). However, according to Sheshinski and Lopez-Calva (2003: 430), there are four major objectives of privatisation:

- to achieve higher allocative and productive efficiency;
- to strengthen the role of the private sector in the economy;
- to improve the public sector's financial position; and
- to free resources for allocation in other important sectors such as social policy.

The theory of privatisation is an offshoot of the broader theory of ownership and the role of government and regulation. In this context, the case for small government begins with the assumption that there are no externalities and no public goods, the market is not monopolistic and there is no asymmetry of information (Megginson and Netter, 2001: 329). Once this assumption is dropped, the case for privatisation becomes less compelling and more complex. This is precisely the case with water supply, which is considered to involve a natural monopoly, a concept introduced by John Stuart Mill (1806-73). Once such exceptions are admitted, from a theoretical perspective is the argument that PSP in water supply will increase investment and efficiency still justified?

According to Balance and Taylor (2005: 12) the natural monopoly of the water industry is no different from electricity transmission and distribution. However, a key difference is that upstream production and distribution do not exist in the water industry, since a customer can be supplied by other alternatives such as boreholes or large individual reservoirs. In addition to high capital intensity, the water industry also has high sunk costs. Since water is affected by the weather, long-term storage options

become problematic, especially in times of drought. Since water has no substitute and is directly linked to public health and environmental concerns, affordability is a key concern. All this leads to the conclusion that the water industry is an unusual business and does not fit into standard economic theory regarding competition. It is argued by Balance and Taylor (2005: 18) that, even if competition were possible, the benefits from it would be minimal.

5 Poverty and the privatisation literature

A decade ago, privatisation was 'heralded as an elixir that would rejuvenate lethargic industries' and revive stagnating economies (Kessides, 2005: 86). Today, in contrast, there is an outright rejection of privatisation all over the world, mainly because of unpopular price hikes and affordability issues, continuing access problems, staff redundancies, and in some cases evidence of exorbitant profits and corruption. However, studies dealing with the efficiency of private versus public ownership reveal ambiguity and no clear relationship.

5.1 Performance and poverty

Studies of privatisation may be divided into two groups: one consisting mainly of econometric and statistical work and the other mainly of case studies (for more details see Parker and Kirkpatrick, 2005). The econometric work generally indicates that privatisation (measured in terms of ownership) had a positive impact on economic performance, especially from the microeconomic perspective. However, cross-country studies have been inconclusive. On the other side, the case studies demonstrate that there have been some improvements (especially in productivity and profit), but the process is much more complex and the benefits are not automatic.

In general, both methods show that privatisation contributes to improving performance at the firm level but that privatisation alone is insufficient to enhance economic performance. Ownership itself does not determine performance. It is also not clear whether the private sector has improved coverage and access for the poor sections of the community. In most of the econometric studies, it is demonstrated that other structural reforms such as regulation play a crucial role (Parker and Kirkpatrick, 2005). A key contribution to the case-studies approach is to demonstrate the importance of the social and institutional context.

Selected academic literature illustrates the contradictory evidence on the poverty implications of privatisation. On the one hand, Benitez et al. (2003) found that, in the case of Argentina, all categories of the population benefited from improvements in access and coverage, efficiency and quality. In addition, it was the poor who benefited most from increased access and productivity. McKenzie and Mookherjee (2003: 212) argue on similar lines that there is no clear evidence of price increases and increase in poverty in countries that have gone in for PSP, especially in the case of Latin America. Moreover, they find a minimal impact in job losses, which according to them were relatively low compared with nationwide employment. Using a rigorous econometric method, Galiani et al. (2005) argue, for the case of Argentina, that not only were

privatised firms more efficient, invested more and provided better service, but the access also increased in privatised areas. In addition, they show that welfare increases more with PSP, since, for the same levels of connection, child mortality decreased more with PSP than with the public sector, and that it was the poor who benefited the most. However, they are not able to explain the causal mechanism of this increase.

Bayliss (2002), on the other hand, maintains that privatisation has had a negative impact on the poor in terms of job losses, decreases in income and reduced access to basic services. Birdsall and Nellis (2003) show that privatisation has indeed worsened asset and income distribution, and increased inequality. They also show that access has increased in most cases, together with price increases. Mulreany et al. (2006) suggest that privatisation is not a good policy option for improving access and public health. On a more philosophical level, they argue that privatisation prefers the 'non-poor' and is profit-motivated and therefore is not an appropriate policy on grounds of equity and social justice. In addition, through the privatisation of water services, the government distances itself from providing for one of the essential basic needs.

The World Bank itself has also undertaken several studies on the issue of access and affordability regarding PSP in infrastructure services. One such study recognises that PSP in infrastructure failed to take account of sensitive social issues and as a result did not have any specific social policy framework (Foster, 2004: 5). Estache et al. (2001: 1180) also highlight that PSP produces distributional effects, which have been neglected. They also show that the relationship between the poor and PSP is complex and ambiguous. However, they argue that the social issues of PSP should be tackled within the general framework of poverty alleviation programmes and not in the context of utility reforms (Estache and Rossi, 2002: 107). There appears to be no difference between private and public operation in terms of efficiency performance (Estache et al., 2005).

In another study, Estache et al. (2002: 13) demonstrate that, although total welfare increases as a result of PSP, the gains are not shared with the poor. Another World Bank publication recognises that more in-depth analysis is needed to evaluate the impact of PSP on the poor (Kessides, 2004: 15). Clarke et al. (2004) find no evidence that the poor suffer as a result of the private sector's participation in water supply. In a joint publication, the IMF and the Bank (2004: 3) recognise that PSP is not necessarily superior to the public sector in the provision of water services.

5.2 Access and affordability

Very little empirical work has been done regarding the effects of PSP in water supply in developing countries. In cross-country analysis, there are several studies regarding utility privatisation and coverage, but there are only a few on PSP in water supply specifically. In general, the results are inconclusive. One study worth mentioning is that of Clarke et al. (2004), on Latin America. This is not able to show whether the private sector was responsible for increasing coverage, since coverage has also improved in areas under management by the public sector. As for connection rates for the poor, there is no evidence that the increases achieved were associated particularly with the private sector.

In most case studies, it is found that prices increase following PSP. Raising water prices increases inequality, taking into account the low-income elasticities that typically apply to water. Water consumption varies very little with income, since individual water needs are similar in terms of drinking, hygiene and sanitation. For example, according to Smets (2004: 11) water consumption in Europe varies around 75% between the first and last income deciles, whereas income varies around 600%. People therefore have to pay no matter how high the prices are.

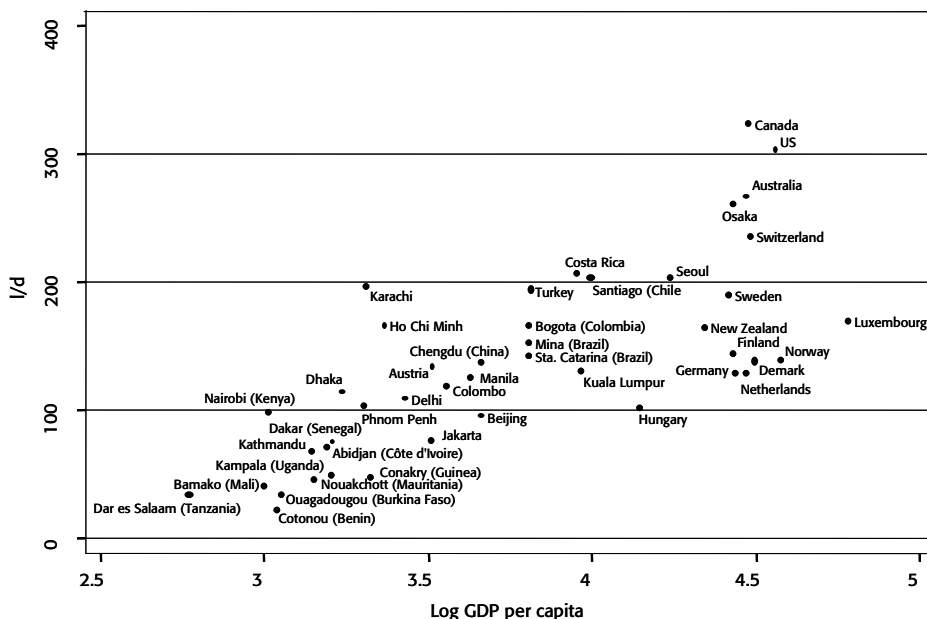
There are very few empirical studies on *affordability* issues and PSP in water supply in developing countries. It may be assumed that the burden (proportion of income) of water bills will be higher for lower-income people. For example, in developed countries each household pays between 0.5% and 2% (1.3% in Germany and the Netherlands, 1.2% in France) of their income on water bills (Smets, 2004: 19): those on the minimum salary in France and Germany pay between 3.4% and 5.2% of their income. In the UK, the poorest 1% of households pay over 10% of their income on water. In Mexico the poorest pay 5.2% of their income for water, whereas the rich pay only 0.8% (ibid.: 133). According to international practice, this should not go beyond 5% of a household's income. In some developed countries, it is considered that a household should not pay more than 3 times the median water bill (3.9% in the UK and 3.6% in France).

The topic of privatisation of public services has been well researched. In general, there is agreement that privatisation leads to an increase in microeconomic performance (profitability of firms, productivity increase and efficiency). However, how this impacts on the broader economy and how it helps in reducing poverty is still insufficiently researched. There are only a few serious academic studies undertaken that effectively link privatisation with poverty.

6 Some statistics

It is instructive to place the above discussion in the context of what is happening in the water supply sector worldwide. The standard statistical data confirm that utilities supplying water are not able to serve everyone. Many people are not connected to any network. As would be expected, the proportion of people with access to improved water sources increases with the level of development, as measured by GDP per capita (PPP, current international dollars). It is worth noting that this trend is not linear but in a logarithmic form, implying that extra efforts in terms of resources are needed to reach those who are underprovided, and this takes time.

It appears that water consumption increases with income level (Figure 1). But there are other elements to take into account when generalising this fact, such as climatic zones, availability of water, etc. As mentioned earlier, demand varies little with income levels. It should be noted that, according to WHO, 50 litres a day per person is the minimum amount needed. In the developed countries each person uses 150 l/d, whereas in developing countries it could be as little as 20 l/d. With a consumption of 30-50 litres per capita, the poorest 20% of the population would consume only 6% of a typical city's total water consumption (World Bank, 2003a: 6).

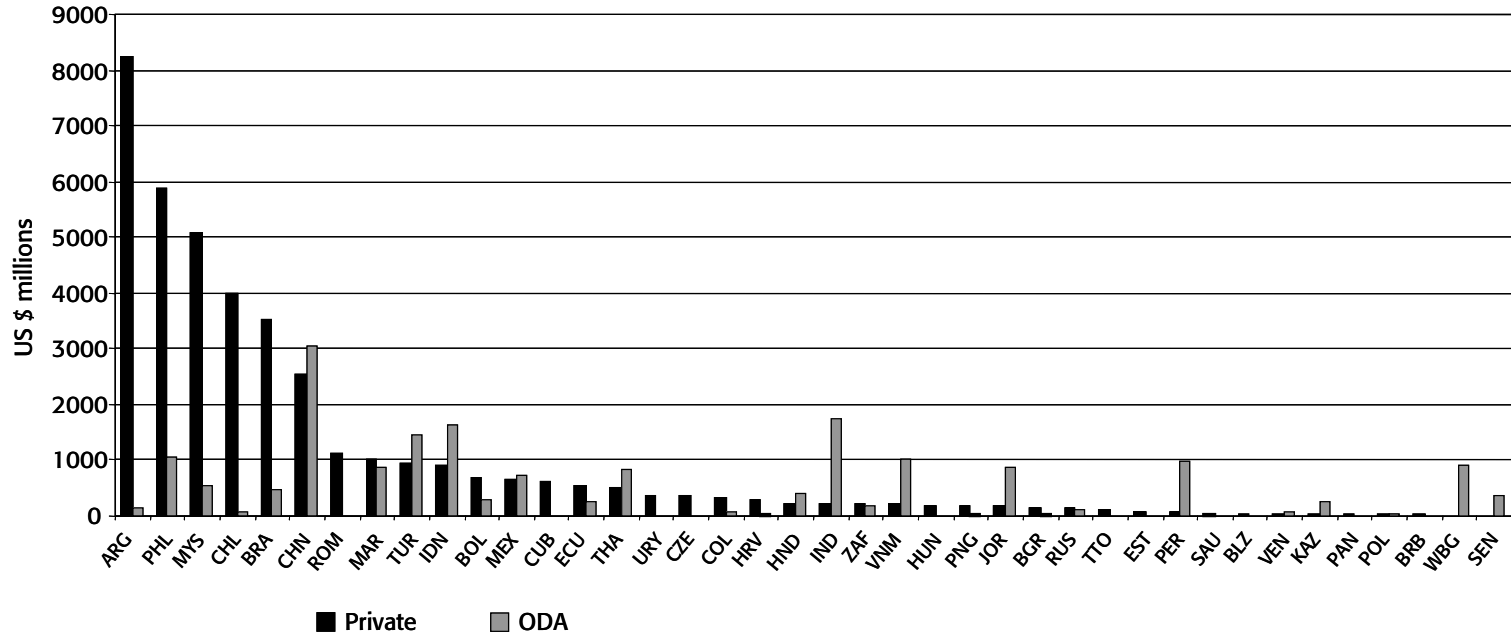
Figure 1: Water consumption and income levels

Source: ADB (2004); OECD (1999); Collignon and Vezina (2000).

The water and sanitation sectors of developing countries receive extremely varied financial inputs, including different proportions of private investment and concessional finance. As may be seen in Figure 2, Argentina received the largest volume of private investment in the period 1990-2003, followed by the Philippines, Malaysia and Chile. These are not the countries with the lowest level of access, nor are they the poorest of the poor. It is increasingly recognised that foreign capital is only interested in large markets with very limited risk (World Bank, 2005b: 170). In other words, the risks associated with infrastructure projects are too large to be absorbed by the private sector (World Bank, 2005c: 20). Within this context, the privatisation wave of the 1990s bypassed most developing countries, especially in sub-Saharan Africa, which received only 3% of the total private infrastructure investment.

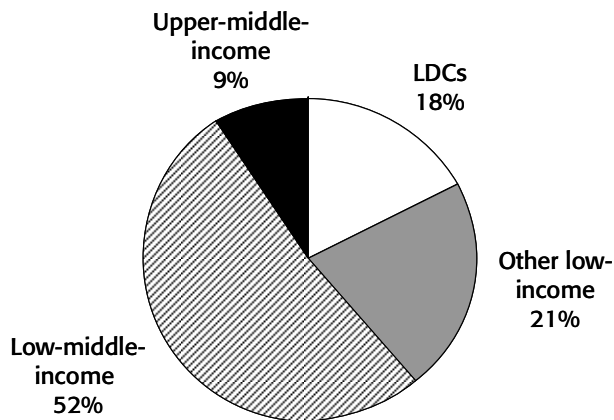
As for aid, the largest amounts of Official Development Assistance (ODA) went to China, followed by Egypt, India, Indonesia and Turkey during the same period. Once again, aid does not necessarily go where it is most needed, especially in Africa. Another interesting point to note is that it is not the least developed countries that receive the most ODA to the sector (Figure 3). Lower-middle-income countries received over half of the total ODA for water and sanitation between 1990 and 2003.

Figure 2: Private investment and ODA in water and sanitation, selected countries (1990-2003)



Source: World Bank (2005a); OECD (2005).

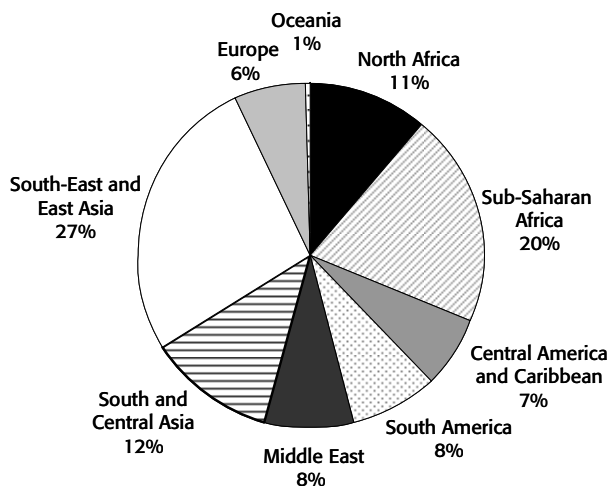
Figure 3: Distribution of ODA in water and sanitation, 1990-2003



Source: OECD (2005).

In terms of regional distribution, South-East and East Asia received most water and sanitation ODA, followed by sub-Saharan Africa at around 20% of the total ODA flows (Figure 4). Ghana received around 7% of the total aid destined for sub-Saharan Africa, followed by Tanzania, Senegal and Uganda at around 6% each.

Figure 4: Regional distribution of ODA in water and sanitation, 1990-2003

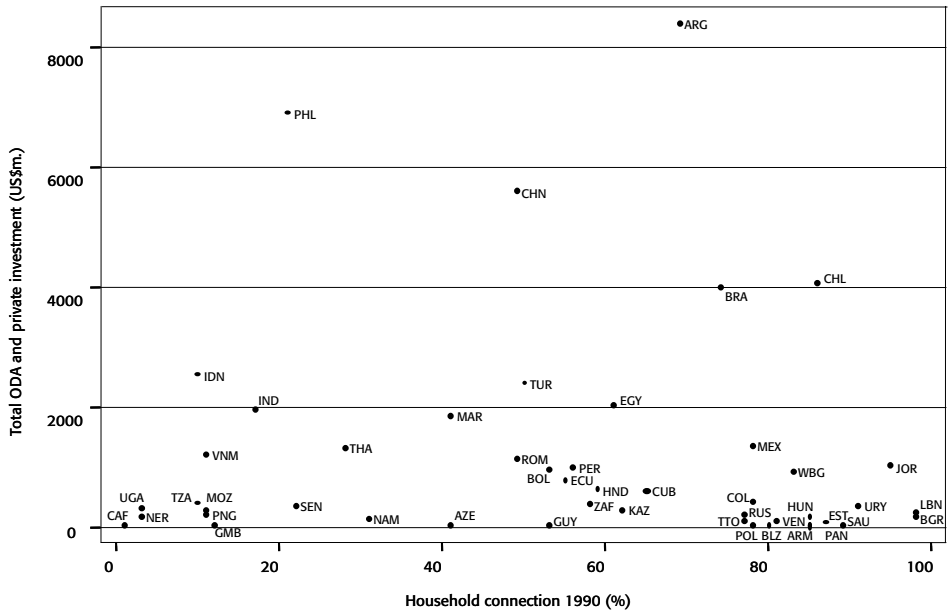


Source: OECD (2005).

In principle, the countries that have low household connection rates should receive more funds to improve access for the poor. However, it can be seen that funds do not go where they are most needed (except for a few outliers such as Argentina, Philippines

and China) (Figure 5). The countries which have lower levels of connection received few funds and those with over 70% of connection received more assistance in terms of both ODA and private investment.

Figure 5: Total ODA and private investment (1990-2003) and connection rates



Source: World Bank (2005a); OECD (2005).

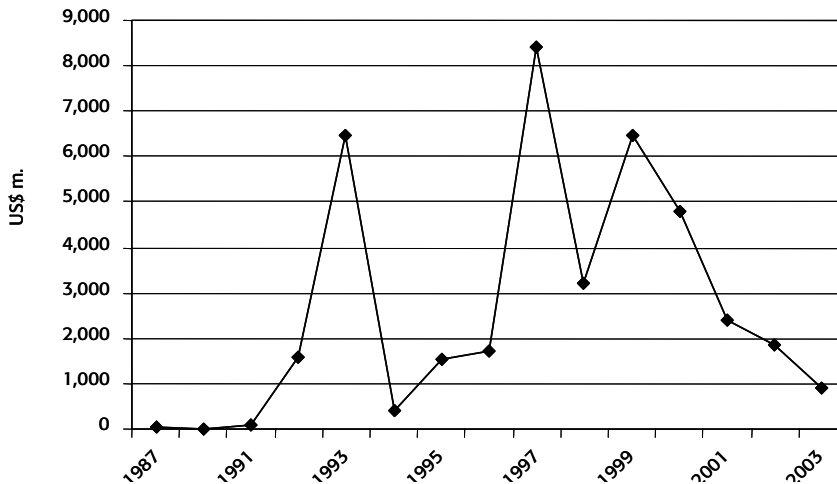
7 PSP in water supply

The involvement of the private sector in water supply is not a new phenomenon. What is new is the belief that the private sector could be the sole solution for water problems (Rodriguez, 2004: 108). Development agencies such as the World Bank and its private arm, the International Finance Corporation, have given loans to governments to improve their water supplies since the 1960s. However, private sector investment in infrastructure increased dramatically in the early 1990s. It reached a peak in 1997. Subsequently, the Asian financial crisis and successive crises in other countries, together with growing concerns about PSP in infrastructure projects and reservations amongst investors about going into developing countries because of weak regulatory instruments and market failures, led to a waning of private investment in general.

Why was there such an increase in investment during the 1990s? According to UNCTAD (2000), the mid-1990s was a period of mergers and takeovers, resulting in increased private flows. It is argued that many of the so-called ‘investments’ were not really investment (Greenfield operations) but private flows to acquire new business assets. As for investments in water supply and sanitation in particular, the private flows

have been very erratic, reaching a peak in 1997 and falling to under US\$1 billion in 2003 (Figure 6).

Figure 6: Total investment in water and sewerage, 1987-2003



Source: World Bank's private project investment database, www.worldbank.org

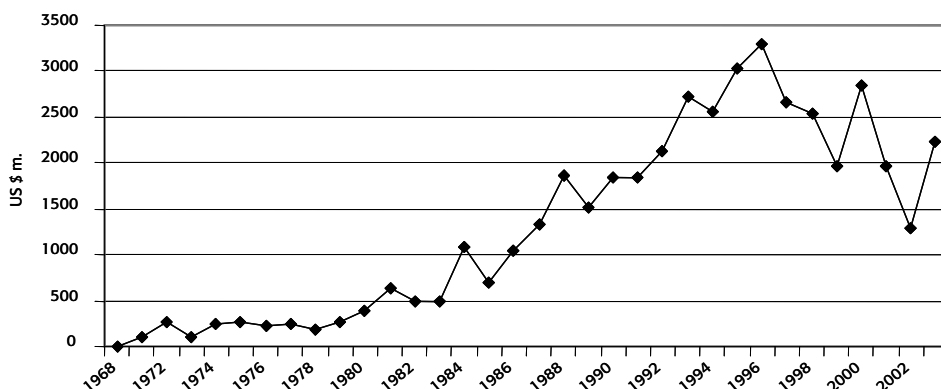
During the 1987-2003 period, 140 developing countries introduced some form or other of PSP in infrastructure services. According to the World Bank's private project investment (PPI) database, there were only 2 private investment projects in water and sewerage in 1987, increasing to a peak in 1999 with 38 projects and then decreasing to 11 projects in 2003. There are currently 266 projects in developing countries, of which 42% (111) are the concession type and less than 1% (20) with full privatisation (divestiture). At least 55 countries had some sort of PSP in water and sewerage by the end of 2003.

According to Estache and Goicoechea (2005), 35% of developing countries had PSP and 80% of developed countries (it should be noted that the sample for developed countries covers only 38% of countries, with 82% for developing countries). The poorest regions of the world have difficulty in attracting private-sector investment, due mainly to the high level of commercial risks. This is manifested in the fact that only 13% of the countries in South Asia have PSP, 20% in sub-Saharan Africa and 21% in the Middle East and North Africa. East Asia and the Pacific has 64%, followed closely by Eastern Europe and Central Asia with 62% and 41% for Latin America and the Caribbean. In other words, the poorer countries have higher risks, leading them to have a higher cost of capital, which in turn implies higher tariffs for the poor (Estache and Pinglo, 2004). If we examine the private sector modality, we find that East Asia and the Pacific generally has many Build-Operate-Transfer (BOT) schemes and a few very large concessions.

In addition to private investment, aid could also help developing countries solve their water problems. Aid in the water and sewerage systems from bilateral donors and

regional banks has followed a similar pattern to private investment, peaking in 1997 and falling since then (Figure 7). It is argued that aid money was used in the privatisation process; in other words, it was used to make the sale of state-owned enterprises more attractive to buyers.

**Figure 7: Aid in water and sewerage systems
(bilateral and regional banks)**



Source: OECD (2005).

Reform of the water sector with PSP has taken different forms. The variants include complete privatisation, as in the case of England and Wales, BOT models, private management contracts, and concessions (see Table 1). In all these ways of shifting responsibilities from the state to the market, the institutional framework also alters.

The global water sector is dominated by a small number of international companies including Suez, Vivendi and SUAR (France) and RWE-Thames (Germany, UK). It is estimated that between 3% and 5% of the world's population is supplied through piped water by the private sector (OECD, 2003b: 13; Rodriguez, 2004: 108). These few multinationals manage to restrict competition, both at the international and the local levels. For example, in France Suez and Vivendi control 85% of the market. Joint ventures are one of the common practices used by these giant water companies to prevent competition.

The two French companies, Suez and Vivendi, are present in over 100 countries. Vivendi claims to be operating in some 80 countries and to be supplying drinking water to 110 million customers worldwide.³ Suez claims that it is supplying drinking water to 91 million people and providing some 49 million with sanitation services.⁴ It has been estimated that, in 1990, around 51 million people were supplied by private companies, and that this figure rose to around 300 million in 2002 (Gleick et al., 2004: 46). In 1990 the six companies which were most active were present in 12 countries, and this figure had increased to over 56 countries by 2002 (CPI, 2003).

3. See Veolia website at www.veoliawater.com

4. See Suez website at www.suez.com

Table 1: Different forms of PSP in water supply

Option	Ownership	Financing	Operations
Service contract (Mexico City, Santiago-Chile, Madras)	Public	Public	Public then some private
Management contract (Cartagena-Colombia, Gdansk-Poland, Johannesberg, Mali)	Public	Public	Private
Lease contract or <i>affermage</i> (Côte d'Ivoire, Guinea, Czech Republic)	Public	Public	Private
Concession (Buenos Aires-Argentina, Manila, Cancun-Mexico, Jakarta)	Public	Private	Private
Build-operate-transfer or build-own- operate-transfer contract (Mendoza-Argentina, Izmit-Turkey, Natal-South Africa)	Private then public	Private	Private
Reverse BOOT	Public then private	Public	Private
Joint ownership	Private and public	Private and public	Private and public
Sale or full divestiture (England and Wales)	Private	Private	Private

Source: Expanded from Kessides (2004).

8 Results so far: has privatisation gone full circle?

The results of privatisation and PSP in developing economies are quite mixed. In terms of increasing access, it is estimated that a mere 600,000 connections have been added in 15 years (World Development Movement, 2006). If public finance is excluded, the private sector is responsible for providing only an additional 250,000 connections in the same period.

Those who were putting pressure on governments to privatise now recognise that infrastructure privatisation failed to bring the expected gains and growth to the economy (World Bank, 2005c: 19). Very few privatisations were successful, while the majority did not achieve what was intended. The experiences of water companies in developing and developed countries demonstrate that PSP in the water sector has a very unreliable record. There has been bribery, corruption (Davis, 2004), non-compliance with contractual agreements, lay-offs, tariff increases, and environmental pollution. 'Sign and renegotiate' is the order of the day, and the World Bank has even published a manual on how to renegotiate a failed concession contract (Guasch, 2004).

In some respects, privatisation seems to have gone full circle. Some have argued that there will be a need to 'remunicipalise' the water services (Bakker, 2003; Robbins, 2003). Hall (2004) argues that privatisation of water services has failed in many parts of the world and is falling apart. The list of failed experiments is long and growing, now including Buenos Aires, Atlanta, Manila, Cochabamba, Jakarta, Nelspruit, Kelantan,

Mozambique, Nkokebde, Conakry, Gambia, Parana, Trinidad and Tobago, Belize, La Paz, and Dar es Salaam.

According to the World Bank's PPI, 10 projects in water supply by the World Bank were cancelled worldwide between 1991 and 2001.⁵ There are another 5 that are considered 'distressed'.⁶ Several reasons have been advanced to explain this. In most cases, the projects were confronted with controversies relating to high price increases, and problems of non-payment by consumers (Harris et al., 2003).

The major water companies (Suez, Veolia, and Thames Water) are withdrawing from developing countries as a result of economic and financial crises (the Asian crisis, the peso crisis in Argentina) and natural disasters like El Niño, droughts and floods. Most of the privatisation was carried out during a period when it was assumed that there would be macroeconomic stability and sustainability. In some cases this assumption proved to be unrealistic (Argentina, Philippines, Brazil). During macroeconomic instability, it is very difficult to calculate a price that is appropriate for the private operator and at the same time affordable to the disadvantaged consumers and pertinent to the economy (Chisari and Ferro, 2005).

Why are so many projects being cancelled? Some have argued that the theoretical foundation of PSP in water supply is flawed. Other reasons have been advanced, but one of them which merits particular attention is the lack of understanding of the local context in which reform is taking place.

8.1 The politics of reform in the water sector

Most economic studies tend to favour privatisation (Megginson and Netter, 2001). How can this be reconciled with the policy failures and the street protests? The answer lies in the political economy and the social structure of reform. For any policy to be successful, social, economic and political dimensions all need to be taken into account. The economic and political areas are a product of a country's social governance (Barraqué, 2003). Therefore, if the intended policy is not contextualised within the appropriate pattern of social governance, it is doomed to be rejected. The Inter-American Development Bank is among those emphasising the need to take a closer look at the critical processes that shape policies, carry them forward to implementation and sustain them over time (IADB, 2005: 3). Otherwise policy changes such as privatisation will lead to failure.

There are many examples of how privatisation has failed for reasons related to social governance in particular countries. Nickson and Vargas (2002) show how vested interests, combined with politics, lack of proper communication and street protests, managed to cancel the Cochabamba water concession projects in Bolivia. Kohl (2004) also demonstrates how poor understanding of the social and political realities led to the failure of the Bolivian privatisation project.

5. Central African Republic, Malaysia (2 projects), Argentina (2 projects), China (2 projects), Brazil, Bolivia, and Vietnam.

6. Projects (4 in Argentina and 1 in the Philippines) where the government or the operator has either requested contract termination or is in international arbitration.

There has been an increasing feeling of discontent and active resistance against privatisation in developing and developed countries alike. It is argued that the economic benefits of privatisation have not been achieved and that the social impact of privatisation was not thoroughly analysed, especially its impact on the poor. Another reason frequently advanced for private sector failure in water supply is the lack of a regulatory mechanism.

8.2 Has regulation helped?

Whenever privatisation has failed in terms of achieving its contractual goals, it has been argued by the pro-privatisation camp that this was mainly due to the weakness of the regulatory mechanisms. In other words, regulation has become the scapegoat, allowing the concept of PSP to prevail.

It is widely recognised that regulation and regulatory governance are key elements of development-policy thinking in promoting pro-poor market-led development (Kirkpatrick and Parker, 2004). However, very little attention has been focused on this topic in developing countries. Donor agencies initially placed the emphasis on securing privatisation, liberalisation and deregulation of the economy, and did not insist upon a prior strengthening of regulatory governance. Privatisation was one of the key conditionality elements of the World Bank and the IMF, even affecting the Poverty Reduction Strategy Papers of Heavily Indebted Poor Countries (HIPC). The World Development Movement (2005) has pointed out that 15 out of 24 HIPC countries (63%) were pressured to put privatisation or greater involvement of the private sector in the water sector into their PRSPs; the figure is 12 out of 18 (67%) for non-HIPC countries. In contrast, the introduction of competition and effective regulation has been neglected. Yet research suggests that the sequencing of privatisation, regulation and competition is important. Zhang et al. (2005) demonstrate, using panel data and an econometric model, that establishing a regulatory authority and introducing competition prior to privatisation results in better performance for the operator as well as for the consumers.

There are relatively few studies on the nature, role and performance of the new forms of regulatory state, particularly for developing countries with their very different social, cultural and economic settings. It is suggested that developing countries often have established regulatory institutions on paper, but that in reality they are ineffective (Kessides, 2005: 86). What is clear is that developed-country models of regulation or a 'best practice' approach cannot easily be replicated or transferred to developing economies, since regulation is deeply embedded in the local cultural and institutional setting (Minogue, 2005). Moreover, effective and efficient institutions take time to develop, even in developed economies. In this area, there is a 'reality gap' between the advocates of neo-liberal ideas and the actual legal, administrative, political and economic processes going on in developing countries.

8.3 Can history be our lesson?

PSP has a long history in urban water supply. It was instrumental in establishing modern supply systems in response to urban growth from the mid-1800s in most European countries and North America. However, during the late 1800s increasing

evidence that these services were inefficient, costly and corrupt led to their being returned to public or municipal ownership. The one major exception was France, where private operators such as *Compagnie Générale des Eaux* (later Vivendi and now Veolia) and *Lyonnaise des Eaux* (now Suez) which were established in 1852 have survived till today. Among European countries the provision of urban water supply varies significantly, ranging from no PSP (the Netherlands) to an amalgam of PPP (France, Belgium, Finland, Spain, Germany, Greece, Italy) and PPP with no profit motive (Austria, Denmark and Sweden) to full privatisation (England and Wales) (Mahajeri et al., 2003).

Juuti and Katko (2005: 108) use this diversity of experience to warn that water should always be seen in its political, socio-cultural, technological, environmental and legislative context. The World Bank (2004a: 166-7) argues that, since developed countries have used the private sector to develop their water supply, developing countries should likewise encourage PSP in the sector. History, however, warns against liberalising the water sector simply to attract private operators, and suggests that there is no one-size-fits-all solution.

Even in the case of developed countries like France and England and Wales where the private sector has been dominant in supplying water, there are numerous problems. In the case of England and Wales, the prices charged to customers are relatively high compared with those charged by the public companies (Dore et al., 2004). Results suggesting a lack of efficiency gains in England and Wales are also obtained by Saal and Parker (2001). In addition, the rates of return and the profits of the private companies have been extremely high. Bakker (2003: 559) sums up the situation as 'successful privatisation, broad-based commercialisation, and failed commodification'. Barraqué (2003: 210) argues that the French system of water management by the municipality was intended to make the rich pay for the poor. But the problem with this method was that it limited other players in competing for the market. This was also the case for Barcelona and Venice. Tariffs have also been substantially higher (around 40%) compared with publicly managed companies and there is a lack of regulation by the municipalities, which leads to corruption and lack of competition. It is argued that the private sector failed to gain efficiency advantages in both cases and that privatisation did not lead to welfare gains.

9 Repackaging privatisation and PSP through PPP?

The promotion of PSP in water supply and sanitation continues. Like the first World Panel on Financing Water Infrastructure (chaired by Michel Camdessus), the Report on Financing Water for All (chaired by Angel Gurría) (World Water Council, 2006b) promotes PSP and speculates that the private sector can bring in the necessary investment. The 2003 G8 Water Action Plan⁷ in particular called for PSP in developing countries and asked the World Bank to implement the recommendations of the World Panel. The *World Development Report 2004: Making Services Work for the Poor* proposed an 'eight sizes fit all' approach for delivering services and renewed the Bank's encouragement to the private sector to deliver social services such as water. The *Second*

7. Evian Summit 2003, available at <http://www.g8.fr/evian/english/home.html> (accessed 28 April 2006).

United Nations World Water Development Report also highlights that, despite not being appropriate in all cases, the private sector plays a significant role in delivering cost-efficient water services (UNESCO, 2006: 400).

At the same time, the high level of privatisation failure, especially in the water sector, has led the pro-privatisation lobby to do some soul-searching. It is now accepted that it does not matter who controls the network, but that it should be run like a business with equity principles. The World Bank's *Water Resources Sector Strategy* (2004a) suggested that a more 'pragmatic but principled' approach would be adopted for water and that more emphasis would be given to broader reform (such as economic liberalisation) outside the water sector (p. 3). In addition, the Bank has recently recognised that privatisation may not make sense in certain local contexts (World Bank, 2005b, 2005c).

There is a growing consensus among experts, including the World Bank, that, regardless of who provides the services, whether it is public, private or community-based, the policy should be to ensure the financial viability of the provider (World Bank, 2004b: 1). In some cases, privatisation may lead to transferring public assets into private hands at a discounted price and therefore the risk of capture (World Bank, 2005b). It may also lead to increased tariffs which may outweigh the gains in coverage or quality (p. 14). However, who provides the service is not the main factor in ensuring equity. The important thing is whether the service provider has the right incentives and how accountable they are to the general public.

In general, the United Nations has recognised that much more emphasis should be put on the availability, accessibility and affordability of public services, especially in relation to the poor (UNDP, 2005: 7). Regarding public services, the United Nations (2005) emphasises that, even in the best circumstances, PSP cannot replace public provision (p. 24). It mentions the role of a regulatory mechanism which could help in preventing discrimination against certain groups. Others agree that there should be some clear policy priority for 'equitable, efficient and reliable operation and management' (Gleick et al., 2004: 47). The Pacific Institute has gone a step further by proposing several guiding principles in dealing with water privatisation, including managing water as a social good, using sound economics in water management and having strong regulation. Gleick et al. (2004: 48) point to the paradox that the effects of PSP are expected to be greatest where there is weak and corrupt government, but that regulation is most likely to be inefficient in precisely those countries where the bureaucracy is corrupt. The Asian Development Bank (2006a: 43-4) has also highlighted that the most important private-sector role in the water sector would be that of the small local private sector as opposed to the large multinational corporations.

In summary, the private sector seems to be on the defensive and the pro-privatisation rhetoric is changing.⁸ This was observed during World Water Forum 4 held recently in Mexico City, which was sponsored by the World Water Council – a pro-privatisation lobby group. On the basis of the recent privatisation failures, it is gradually becoming recognised that the private sector cannot deliver to the poor. It would, however, be premature to speculate that the PSP debate is dead. The privatisation debate

8. According to Hall and Hoedmann (2006), Aquafed was created by the international federation of private operators as an advocacy tool to promote PSP in the water sector.

is very much alive and now turns around public-private partnerships (PPP) and community or locally based solutions.

Although the World Bank claims that conditionality for privatisation and user fees has decreased (World Bank, 2005d: 9), there is a trend towards repackaging privatisation through different means such as PPP.⁹ The position of the Asian Development Bank is rather ambiguous in that it states that it 'does not support water privatisation, but advocates improved delivery of water services, which may require the participation of the private sector'.¹⁰ Since privatisation is seen as an ideological concept, development agencies are now branding it through PPP initiatives, arguing that PPP offers the same benefits (IMF, 2004: 4). In its progress report on infrastructure, the Development Committee of the World Bank and IMF recommended encouraging PSP in infrastructure projects through 'direct measures' (management contracts, leases, concessions) and through providing technical assistance (World Bank, 2005e: 23). In other words, the World Bank will continue to provide soft loans to the private sector in order to help public utilities increase their efficiency in service delivery. Since direct investment by the private sector has decreased, the World Bank will encourage the private management of public utilities. In addition, it will continue to provide assistance in the preparation of infrastructure projects.

Taking this concept further, the World Bank has published a Toolkit on how to involve the private sector in water services (World Bank, 2006), arguing that this will enable governments to widen their reform options (p. xix). More precisely, the private sector can create a focus on service and commercial performance, can make it easier to access finance and can boost clarity and sustainability. The Toolkit cautions that there is no free money and no unlimited risk-bearing, and that government regulation should continue. But it does not provide any answers as to how to reconcile the profit motives of the private sector and the public interest.

In its Review of Water Policy Implementation, the ADB (2006b) recognises that PPP has been one of the most difficult and controversial objectives. This is evidenced by the fact that, of its technical assistance grants and loans in the 2000s, only two projects have been successful in integrating PPP. However, it will encourage efficiency gains through PPP (rather than simply trying to secure private capital). It recognises that there is an urgent need for better advocacy and outreach in order to promote PPP in the water services. Mehrotra and Delamonica (2005: 166) also speculate that, behind the scenes, there is relentless pressure from international agencies and donor countries to promote PPP in basic services, including water services, as demonstrated by recent developments in international bodies.¹¹ In other words, the Washington Consensus seems to be being given a new lease of life and rejuvenated through PPP.

9. World Bank staff have a wide range of opinions on privatisation. This is often reflected in some of its staff publications where the debate on privatisation is much more nuanced. However, the World Bank as an institution is not willing to abandon its ideology of market approaches and this is often reflected in country policy operational documents.

10. <http://www.adb.org/water/actions/REG/public-private-models.asp>, accessed 28 April 2006.

11. World Bank/IMF's initiative on Heavily Indebted Poor Countries (HIPC), Poverty Reduction Strategy Papers (PRSPs), World Bank's Private Sector Development Strategy, WTO and GATS, among others.

10 Conclusion

It has been argued that PSP in water supply would, amongst other things, help the poor have access to the service at an affordable price. However, experiences with PSP worldwide suggest that there is, after all, a significant conflict between social development, public health and environmental concerns and poverty reduction, on the one hand, and the private sector's motive of profit maximising, on the other. The profit-seeking motive of the private sector seems difficult to reconcile with providing service to the poor. Although financial sustainability is considered vital, financial profitability cannot be the main goal in the provision of water services. In other words, there is a diverging interest between the public sector, the private sector and consumers, which seems hard to reconcile.

Recent developments indicate that large multinational companies are not interested in the low-income countries where there is lack of commercial viability of water supply (Global Water Intelligence, 2005). In other words, from the private sector's perspective, low-income countries, and the poor in particular, are unattractive and have high levels of risk. In order to circumvent this risk, the private sector 'cherry picks' the better-off customers in an urban area or a less risky environment. Alternatively or as well, it may rely on subsidies, soft loans, and a renegotiation of the contractual agreement in order to provide services to the poor. In this case, it uses the same sources of funds as the public sector, namely, loans from bilateral and multilateral donors, aid money and revenue from customers through tariffs. Thus, it is public funds that support the private sector in providing services to the poor. The World Bank also clearly states that even where there is PPP, public funding will be essential to meet the required investments (World Bank, 2004b: 8, 15).

As this article has shown, the policy of PSP in water supply is economically flawed and politically difficult. Despite signs of decreased PSP in water services, its main proponents are trying to repackage the concept and re-launch it as PPP. However, if our argument is correct, this has to be interpreted as evidence of the robustness of the free-market ideology of PSP, rather than as good sense based on examination of the evidence.

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References

- Asian Development Bank (2006a) *Asia Water Watch 2015*. Manila: ADB.
- Asian Development Bank (2006b) 'Water for All: The Review Panel's Final Report and Recommendations'. www.adb.org, accessed 28 April 2006. Manila: ADB
- Asian Development Bank (2004) *Water in Asian Cities: Utilities' Performance and Civil Society Views*. Manila: ADB.
- Bakker, K. (2003) 'From Public to Private to... Mutual? Restructuring Water Supply Governance in England and Wales', *Geoforum* 34 (3): 359-74.
- Balance, T. and Taylor, A. (2005) *Competition and Economic Regulation in Water: The Future of the European Water Industry*. London: IWA Publishing.

- Barraqué, B. (2003) 'Past and Future Sustainability of Water Policies in Europe', *Natural Resources Forum* 27 (3): 200-11.
- Bayliss, K. (2002) 'Privatisation and Poverty: The Distributional Impact of Utility Privatisation', *Annals of Public and Co-operative Economics* 73 (4): 603-25.
- Benitez, D., Chisari, O. and Estache, A. (2003) 'Can the Gains from Argentina's Utilities Reform Offset Credit Shocks?' in Ugaz C. Waddams Price (ed.), *Utility Privatization and Regulation: A Fair Deal for Consumers?* Northampton, MA: Edward Elgar.
- Birdsall, N. and Nellis, J. (2003) 'Winners and Losers: Assessing the Distributional Impact of Privatization', *World Development* 31 (10): 1617-33.
- Center for Public Integrity (2003) 'The Water Barons'. www.icij.org, Washington, DC: CPI.
- Chisari, O. and Ferro, G. (2005) 'Macroeconomic Shocks and Regulatory Dilemmas: The Affordability and Sustainability Constraints and the Argentine Default Experience', *Quarterly Review of Economics and Finance* 45 (2-3): 403-20.
- Clarke, G., Kosec, K. and Wallsten, S. (2004) *Has Privatization in Water and Sewerage Improved Coverage? Empirical Evidence from Latin America*. World Bank Policy Research Working Paper No. 3445. Washington, DC: World Bank.
- Collignon, B. and Vezina, M. (2000) 'Independent Water and Sanitation Providers in African Cities'. Water and Sanitation Program. Washington, DC: World Bank.
- Davis, J. (2004) 'Corruption in Public Service Delivery: Experience from South Asia's Water and Sanitation Sector', *World Development* 32 (1): 53-71.
- Dore, M., Kushner, J. and Zumer, K. (2004) 'Privatization of Water in the UK and France: What can we Learn?', *Utilities Policy* 12: 41-50.
- Estache, A. and Goicoechea, A. (2005) *How Widespread were Private Investment and Regulatory Reform in Infrastructure Utilities During the 1990s?* World Bank Policy Research Working Paper No. 3595. Washington, DC: World Bank.
- Estache, A., Perelman, S. and Trujillo, L. (2005) *Infrastructure Performance and Reform in Developing and Transition Economies: Evidence from Survey of Productivity Measures*. World Bank Policy Research Working Paper No. 3514. Washington, DC: World Bank.
- Estache, A. and Pinglo, M. E. (2004) *Are Returns to Private Infrastructure in Developing Countries Consistent with Risks since the Asian Crisis?* World Bank Policy Research Working Paper No. 3373. Washington, DC: World Bank.
- Estache, A. and Rossi, M. (2002) 'How Different is the Efficiency of Public and Private Water Companies in Asia?', *World Bank Economic Review* 16 (1): 139-48.
- Estache, A., Foster, V. and Wodon, Q. (2002) *Accounting for Poverty in Infrastructure Reform: Learning from Latin America's Experience*. World Bank Development Studies. Washington, DC: World Bank.
- Estache, A., Gomez-Lobo, A. and Leipziger, D. (2001) 'Utility Privatization and the Poor: Lessons and Evidence from Latin America', *World Development* 29 (7): 1179-98.
- Foster, V. (2004) *Toward a Social Policy for Argentina's Infrastructure Sectors: Evaluating the Past and Exploring the Future*. World Bank Policy Research Working Paper No. 3422. Washington, DC: World Bank.

- Galiani, S., Gertler, P. and Schargrotsky, E. (2005) 'Water for Life: The Impact of the Privatization of Water Services on Child Mortality', *Journal of Political Economy* 113 (1): 83-120.
- Gleck, P. et al. (2004) *The World's Water 2004-5: The Biennial Report on Freshwater Resources*. Washington, DC and London: Island Press.
- Global Water Intelligence (2005) 'Patience Wins the Day at Veolia', *Global Water Intelligence* 6 (4), May. www.globalwaterintel.com, accessed on 25 August 2005.
- Guasch, L. (2004) *Granting and Renegotiating Infrastructure Concessions*. Washington, DC: World Bank Institute.
- Hall, D. (2004) *Reclaiming Public Water: Achievements, Struggles and Visions from Around the World*. Amsterdam: Transnational Institute.
- Hall, D. and Hoedmann, O. (2006) 'Aquafed: Another Pressure Group for Private Water'. London: PSIRU, University of Greenwich, www.psiru.org
- Harris, C.; Hodges, J.; Schur, M. and Shukla, P. (2003) *Infrastructure Projects: A Review of Cancelled Private Projects*. Public Policy for the Private Sector 252. Washington, DC: World Bank.
- International Monetary Fund (2004) 'Public-Private Partnerships'. A paper prepared by Fiscal Affairs Department in consultation with World Bank and IADB, www.imf.org
- Inter-American Development Bank (2005) *The Politics of Policies: 2006 Report*. Washington, DC: IADB.
- Juuti, P. and Katko, T. (2005) 'D45: City in Time', *Water Time*. London: PSIRU, University of Greenwich, www.watertime.net/docs/WP3/D45_City_in_Time.doc, accessed on 25 august 2005.
- Kessides, I. (2005) 'Infrastructure Privatization and Regulation: Promises and Perils', *World Bank Research Observer* 20 (1): 81-108.
- Kessides, I. (2004) *Reforming Infrastructure: Privatization, Regulation and Competition*. New York: Oxford University Press for the World Bank.
- Kirkpatrick, C. and Parker, D. (2004) 'Regulatory Impact Assessment and Regulatory Governance in Developing Countries', *Public Administration and Development* 24 (4): 333-44.
- Kohl, B. (2004) 'Privatization Bolivian Style: A Cautionary Tale', *International Journal of Urban and Regional Research* 28 (4): 893-908.
- Mahajeri, S; Knothe, B.; Lamonthe, D. N.; and Faby, J. A. (2003) *Aqalibrium: European Water Management Between Regulation and Competition*. Brussels: European Commission.
- McKenzie, D. and Mookherjee, D. (2003) 'The Distributive Impact of Privatization in Latin America: Evidence from Four Countries', *Economia* 3: 161-233.
- Meggison, W. and Netter, J. (2001) 'From State to Market: A Survey of Empirical Studies on Privatization', *Journal of Economic Literature* 39 (2): 321-89.
- Mehrotra, S. and Delamonica, E. (2005) 'The Private Sector and Privatisation in Social Services', *Global Social Policy* 5 (2): 141-74.
- Minogue, M. (2005) 'Apples and Oranges: Problems in the Analysis of Comparative Regulatory Governance', *Quarterly Review of Economics and Finance* 45 (2-3): 195-214.

- Mulreany, J.; Calikoglu, S.; Ruiz S. and Sapsin, J. (2006) 'Water Privatization and Public Health in Latin America', *Revista Panamericana de Salud Pública/Pan American Journal of Public Health* 19 (1): 23-32.
- Nickson, A. and Vargas, C. (2002) 'The Limitations of Water Regulation: The Failure of the Cochabamba Concession in Bolivia', *Bulletin of Latin American Research* 21 (1): 99-120.
- OECD (2005) International Development Statistics Database, www.sourceoecd.org
- OECD (2003a) *Water: Performance and Challenges in OECD Countries*. Environmental Performance Reviews. Paris: OECD.
- OECD (2003b) *Social Policies in the Provision and Pricing of Water Services*. Paris: OECD.
- OECD (1999) *The Price of Water: Trends in OECD Countries*. OECD.
- Parker, D. and Kirkpatrick, C. (2005) 'Privatization in Developing Countries: A Review of the Evidence and the Policy Lessons', *Journal of Development Studies* 41 (4): 513-41.
- Robbins, P. (2003) 'Transnational Corporations and the Discourse of Water Privatization', *Journal of International Development* 15 (8): 1073-82.
- Robison, R. and Hewison, K. (2005) 'Introduction: East Asia and the Trials of Neo-Liberalism', *Journal of Development Studies* 41 (2): 183-96.
- Rodriguez, R. (2004) 'The Debate on Privatization of Water Utilities: A Commentary', *Water Resources Development* 20 (1): 107-12.
- Saal, D. and Parker, D. (2001) 'Productivity and Price Performance in the Privatized Water and Sewerage Companies of England and Wales', *Journal of Regulatory Economics* 20 (1): 61-90.
- Savas, E. (1987) *Privatization: The Key to Better Government*. London: Royal Institute of International Affairs.
- Sheshinski, E. and Lopez-Calva, L. (2003) 'Privatization and its Benefits: Theory and Evidence', *CESifo Economic Studies* 49 (3): 429-59.
- Smets, H. (2004) 'De l'eau pour tous'. Académie de l'Eau. <http://academie.oieau.fr/>, accessed 25 August 2005.
- UNCTAD (2002) *World Investment Report 2000: Cross-Border Mergers and Acquisitions*. Geneva: UNCTAD.
- United Nations (2005) *The Equity Predicament: Report of the World Social Situation 2005*. New York: United Nations.
- United Nations Development Programme (2005) *Human Development Report 2005*. New York: Oxford University Press for UNDP.
- United Nations Educational, Scientific and Cultural Organization (2006) *The Second United Nations World Water Development Report: Water, a Shared Responsibility*. Paris: UNESCO.
- WHO (2005) *Celebrating Water for Life: The International Decade for Action 2005-15, an Advocacy Guide*. Geneva: WHO.
- WHO (2003) *Domestic Water Quantity, Service, Level and Health*. Geneva: WHO.
- WHO and UNICEF (2004) *Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress*. New York: WHO and UNICEF.

- Williamson, J. (1994) 'In Search of a Manual for Technopols', in J. Williamson (ed.), *The Political Economy of Policy Reform*. Washington, DC: Institute of International Economics.
- World Bank (2006) *Approaches to Private Participation in Water Services: A Toolkit*. Washington, DC: World Bank.
- World Bank (2005a) *World Development Indicators 2005*. Washington, DC: World Bank.
- World Bank (2005b) *World Development Report 2006: Equity and Development*. New York: Oxford University Press for the World Bank.
- World Bank (2005c) *Economic Growth in the 1990s: Learning from a Decade of Reform*. Washington, DC: World Bank.
- World Bank (2005d) 'Review of World Bank Conditionality', paper prepared for the Development Committee of the World Bank and IMF, September.
- World Bank (2005e) 'Infrastructure and the World Bank: A Progress Report'. Paper prepared for the Development Committee of the World Bank and IMF, September.
- World Bank (2004a) *Water Resources Sector Strategy: Strategic Directions for World Bank Engagement*. Washington, DC: World Bank.
- World Bank (2004b) *Public and Private Sector Roles in Water Supply and Sanitation Services: Operation Guidance for World Bank Group Staff*. Washington, DC: World Bank.
- World Bank (2003a) 'Water Supply and Sanitation and the Millennium Development Goals'. Report prepared for the Development Committee of the World Bank and IMF, September. Washington, DC: World Bank.
- World Bank (2003b) *World Development Report 2004, Making Services Work for the Poor*. New York: Oxford University Press for the World Bank.
- World Development Movement (2006) 'Pipe Dreams?'. World Development Movement, www.wdm.org.uk, accessed 27 April 2006.
- World Development Movement (2005) 'Denying Democracy: How the IMF and World Bank take Power from the People', www.wdm.org
- World Water Council (2006a) 'Costing MDG Target 10 on Water Supply and Sanitation: Comparative Analysis, Obstacles and Recommendations', www.worldwatercouncil.org
- World Water Council (2006b) 'Task Force on Financing Water for All: Report 1: Enhancing Access to Finance for Local Governments' (chaired by Angel Gurria), www.worldwatercouncil.org
- Yarrow, G. (1999) 'A Theory of Privatization: Why Bureaucrats are still in Business', *World Development* 27 (1): 157-68.
- Zhang, Y., Parker, D. and Kirkpatrick, C. (2005) 'Competition, Regulation and Privatization of Electricity Generation in Developing Countries: Does the Sequencing of the Reforms Matter?', *Quarterly Review of Economics and Finance* 45 (2-3): 358-79.