Private participation in water
Toward a new generation of projects?

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In the water sector of developing countries the investment boom of the late 1990s has been followed by declining investment flows and the cancellation or distress of several high-profile projects. Enthusiasm has been replaced by doubts. But recent data paint a more nuanced picture. Activity in 2005 suggests that private participation in the water sector is entering a new phase. New private activity is focusing on smaller projects, a few countries, and bulk facilities. Contractual arrangements involving utilities are combining private operation with public financing. And new players are entering the market.

During the 1990s private participation was broadly hailed as the solution to developing countries’ problems in the water sector. Private investors were expected to provide not only much-needed expertise but also the sizable funding required to rehabilitate infrastructure and expand coverage. Indeed, private investors committed US$50 billion to more than 380 water infrastructure projects in developing countries in 1990–2005. Concessions involving large investment commitments in major cities such as Buenos Aires and Manila were highly publicized. Most of the private activity was undertaken by a few international investors.

The enthusiasm of the 1990s has faded away. Contracts often reflected excessive optimism by both private investors and governments, and the sociopolitical difficulties of raising tariffs to levels covering costs were often underestimated. Financial markets were hesitant to provide nonrecourse financing for water projects (unlike projects in other infrastructure sectors), often requiring that financing be backed by the sponsors’ balance sheets. Finally, some of the largest water projects were in East Asia and Argentina, and when financial crisis broke out, the contracts proved insufficiently robust to weather the storm. Several international water operators lost much of their appetite for further investment in developing countries.

In recent years private activity has both slowed and become more concentrated (Figure 1). In 2005 investment flows amounted to US$1.5 billion, within the US$1–2 billion range of the past five years (excluding the US$2.5 billion Syabas concession in Malaysia in 2004). Although private activity took place in 10 countries, most of the investment flows went to just 2: China (56 percent) and Algeria (34 percent). Beyond these 2 countries commitments amounted to around US$150 million. This confirms that private investors are increasingly selective in choosing where to invest and are concentrating on the higher end of emerging markets.

In sharp contrast with the decline in investment flows is the growth in new contracts. Indeed, 2005 was a record year: 41 projects reached financial closure, the most since 1990. So while investment commitments have declined, the perception that private participation in water has come to a standstill does not reflect the whole truth.

A new profile for projects
Looked at more closely, the data suggest that the profile of private water projects has changed since 2001. The decline in investment flows mostly affected water utility projects (Figure 2). Water
treatment plants saw investment flows increase from US$2.9 billion in 1995–2000 to US$4.1 billion in 2001–05, raising their share in total flows from 9 percent to 35 percent. In 2005 investments in bulk facilities (mostly greenfield) amounted to US$1 billion, representing almost two-thirds of committed investments and 60 percent of projects. The growing importance of such projects among private investors is not surprising given the risks inherent in the water sector. Greenfield treatment plants routinely include off-take (“take or pay”) agreements, a big help in obtaining nonrecourse financing. And they entail much less political and commercial risk (nonpayment of water bills, resis-

Risks in the water sector are driving a change in the profile of private projects

FIGURE 1
Investment commitments slowing, number of projects increasing in recent years
Private participation in water projects in developing countries, 1995–2005

FIGURE 2
A changing allocation of private activity
Investment in water projects with private participation in developing countries by segment, 1995–2005 (US$ billions)

Source: World Bank and PPIAF, PPI Project Database.
tance to tariff increases) because the private operator has no direct relationship with final customers.

Still, concessions for water utilities have not disappeared. Thirty-six were granted in 2002–05. But most were in countries with access to long-term local currency financing, such as Chile, China, Colombia, and Malaysia. And the average size of concessions has diminished. A concession contract represented an investment of only US$54 million on average in 2005, compared with more than US$270 million in 1995–2000.

In addition, a growing number of concession projects are based on a mix of public and private financing (in Colombia, Malaysia, and Peru, for example). The era of megaconcessions financed by international operators in foreign currency seems to be over. The only large concessions reaching financial closure since 2000 are the two in Malaysia (the Johor and Syabas concessions), and these involved local companies and tapped local capital markets for funding.

While concessions have been declining, management and lease contracts have been gaining in importance. Together they accounted for 24 percent of projects in 2005, similar to their share in 2001–04 (25 percent) and significantly higher than their share in the second half of the 1990s (19 percent).

As private operators shy away from large investments, management and lease contracts are becoming a convenient way to introduce private participation in developing countries. They allow the private operator to concentrate on improving the utility’s operational efficiency and viability while leaving the public authority in charge of raising investment financing (which it can often obtain on better terms from donors). In 2005 management and lease contracts were used to introduce private participation in water utilities for the first time in Algeria, Ghana, and the Russian Federation, and a new management contract was successfully awarded in Yerevan, Armenia, after the previous one expired.

**Much diversity across regions**

Developing regions show remarkable variation in their share of private activity and in the type of contractual arrangements used. East Asia and Latin America have led the regions, accounting for 75 percent of projects and 90 percent of investment flows in 1990–2005.

Latin America was the most active region in the 1990s, but its share of investment flows fell from almost 50 percent in the 1990s to 30 percent in 2001–05. Indeed, its private water activity came largely to a standstill in 2005, with only four small private projects awarded (San Andrés Island in Colombia, Tumbes in Peru, and two treatment plants in Chile and Colombia). The drop in private activity appears to be the direct result of a backlash against utility concessions, which had been the favored scheme for introducing the private sector in the region.

East Asia has replaced Latin America as the most active region, attracting half of all new private water projects and investment flows in 2001–05. The activity was driven largely by China—by far the biggest market for private water investors among emerging market economies today—but also by Malaysia. In 2005 East Asia was again the most active region, with more than 60 percent of the activity. This activity includes both greenfield bulk projects and utility concessions.

Eastern Europe and Central Asia ranks third, but presents a different picture. Most of its private water projects relied on public investment for capital expenditure, taking advantage of public financing from the European Union (at a concessional rate) or the European Bank for Reconstruction and Development (which can lend directly to municipal governments without sovereign guarantees). As a consequence, management and lease contracts accounted for 70 percent of all projects. In 2005 private activity remained modest but steady with six new projects: a lease contract in the Czech Republic, a management contract for the Armenian city of Yerevan, and three leases and a management contract in Russia.

Lagging behind are the Middle East and North Africa, with 10 stand-alone water projects, and Sub-Saharan Africa, with 17. These regions also had contracts combining water and electricity services (7 in the Middle East and North Africa and 12 in Sub-Saharan Africa). Because of the high country risk in Sub-Saharan Africa, private operators had been reluctant to invest there even during the “concession boom,” leading to a predominance of management and lease contracts. As these schemes have proved to be more sustainable, such countries as Côte d’Ivoire and Senegal have become international success stories for private participation.

In South Asia private activity remains rare. Only a greenfield project and a management contract were awarded in 1990–2005.

**Is private activity in retreat?**

The dwindling appetite of several large international operators for developing country projects, along with the troubles of a significant share of

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**Is the private sector in retreat from water activity? The facts suggest not.**
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awarded projects, has spurred a debate on the adequacy of private participation in water. By 2005 projects involving more than 34 percent of the investment commitments made since 1990 either had been canceled or were under distress (in international arbitration or subject to a formal request for cancellation). But these projects accounted for just 11 percent of the total number of projects. So the problem seems to stem from a few large, well-publicized concessions in Latin America and East Asia.  

Overall, 84 percent of the more than 220 contracts awarded for water utilities in 1990–2005 were still operational by 2005. Some projects are bound to fail in a market economy, and a 16 percent failure rate is not high. Indeed, it compares well with the large share of poorly performing public water utilities in developing countries. But in these cases, of course, dissatisfied governments cannot cancel “contracts.”

In the past 15 years 68 developing countries brought private participation to their water sector. By 2005, 54 of those countries still had operational water projects. And in the past three years countries as diverse as Albania, Algeria, Ghana, Peru, and Russia have opened their water utilities to private participation. These facts suggest that the perception of a widespread retreat by the private sector from water activity in developing countries is unfounded.

New players arriving on the scene
Another positive trend confirmed in 2005 is the changing market for private sponsors. New private firms are entering the water business in developing countries. National or regional firms from Argentina, Brazil, China, Colombia, Malaysia, and Russia were the primary sponsors of utility concessions awarded in 2005.

In addition, since 2001 European water companies—from such countries as Germany, Italy, Portugal, and Sweden—have shown new interest in developing countries. Joining them in 2005 was Vittens of the Netherlands, which won the management contract for Ghana’s national water utility in a consortium with Rand Water of South Africa. Most of these firms look for contractual arrangements allowing them to concentrate on the operational side of the business rather than construction and large capital investment. This has reinforced the tendency toward management and lease contracts.

Traditional private operators are still interested in developing countries, but they are focusing on selected markets and lower-risk projects. In 2005 Veolia was the most active, with seven management contracts (one each in Armenia, the Czech Republic, and Russia and four in China). Suez was the private sponsor for the management contract in Algeria’s capital city of Algiers.

The long-awaited move from an oligopoly to a more open and competitive market seems finally to be taking place. In 1990–97 the top five sponsors ranked by number of projects held 54 percent of all projects closed. But in 2002–05 their share fell to 30 percent—and three of the top five were from developing countries.

So what we are seeing today is not a backlash but a natural maturation of the market following an initial boom. Now more aware of the benefits and risks involved, stakeholders are looking for contractual arrangements best suited to each country’s situation. This is clearly a positive development. In the coming years a new generation of projects can be expected to emerge. These are likely to be moderate in size. They are likely to include more management and lease contracts as tools to improve the performance of utilities, and more greenfield projects for bulk facilities. And they are likely to increasingly involve regional players.  

Notes
1. Data are from the Private Participation in Infrastructure (PPI) Project Database, which includes only low- and middle-income countries as classified by the World Bank. Country classifications and project information are updated annually. All U.S. dollar amounts are in nominal terms as posted on the PPI Web site (http://ppi.worldbank.org). The database lacks good coverage of small-scale providers of water and sewerage services because projects involving such providers usually are not reported by the sources it uses.
2. In Sub-Saharan Africa the share of water projects canceled or in distress by 2005 is 25 percent when combined water and electricity projects are included.
3. Of these countries, 56 introduced private participation in stand-alone water business, while the other 12 countries did so in combined water and electricity utilities.