

# Private Water Projects

## Investment Flows Up by 36 Percent in 2004

**Drawing on the World Bank's Private Participation in Infrastructure Project Database, this Note reviews developments in the water and sewerage sector of developing countries in 2004 and changes in private participation in the sector since 2001. Data for 2004 show that total investment in water and sewerage projects with private participation amounted to nearly US\$2 billion. Recent private activity in water was concentrated in a few countries and focused on treatment plants and smaller projects.**

In 2004, 28 new water and sewerage projects with private participation reached financial closure in nine developing countries.<sup>1</sup> Those projects involve arrangements ranging from management contracts with no private capital requirements, to lease contracts with private working capital, to concession or greenfield build-operate-transfer (BOT) contracts with significant private investment requirements.

That activity represents a strong recovery from 2003. In 2004 annual investment flows grew by 36 percent, and the number of projects reaching financial closure by more than 50 percent. Although the recovery only signified a return to the activity level of 2002, it finally reversed the steady decline in private activity since 1999 (figure 1). But most of the 2004 activity took place in just three countries: Chile, China, and Mexico accounted for 90 percent of investment flows and 70 percent of projects.

### Regional trends

New private activity in water during 2004 occurred in three developing regions: East Asia and Pacific, Europe and Central Asia, and Latin America. South Asia and Sub-Saharan Africa had no new activity, while the Middle East and North Africa had just one project, involving both a power plant and a water treatment plant.

In East Asia 11 water projects reached financial closure, attracting investment commitments of US\$470 million.<sup>2</sup> Most involve water treatment plants in China, part of efforts by provincial governments to improve water quality. The two exceptions: a water utility concession in Tangu, China, and a management contract for the water distribution system in Sybus, Malaysia.

Europe and Central Asia had 4 new water projects with private participation in 2004—management contracts for water utilities in Armenia, the Czech Republic, and Hungary.

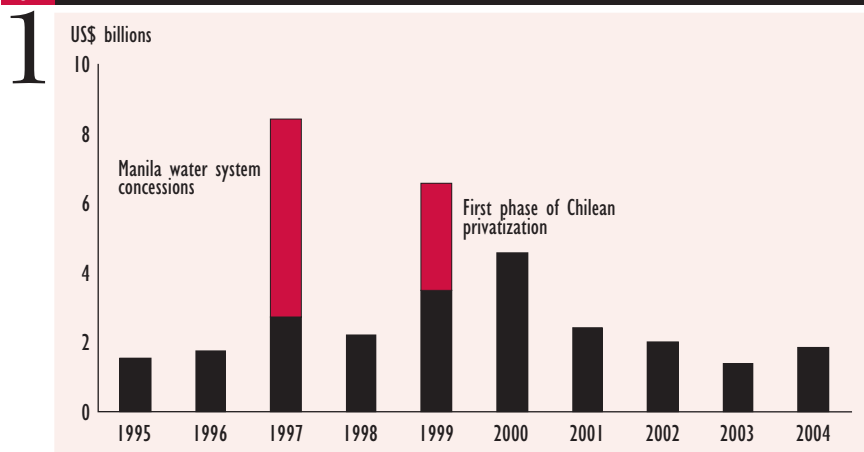
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*The Private Participation  
in Infrastructure (PPI)  
Project Database tracks  
infrastructure projects  
owned or managed by  
private companies in  
energy (electricity and  
natural gas transmission  
and distribution),  
telecommunications,  
transport, and water and  
sewerage. For more  
information on the  
database, see the Web site  
at <http://ppi.worldbank.org>.*



**Figure 1** Investment commitments in water and sewerage projects with private participation in developing countries, 1995–2004



Note: Includes projects that reached financial closure in 1990–2004.  
Source: World Bank, PPI Project Database.

Latin America had 13 new projects, attracting investment commitments of US\$1.4 billion, the region's highest activity since 2001. Most of this activity took place in just two countries: Chile, where six small and medium-size utility concessions reached financial closure, and Mexico, where four water treatment plants did. Three other countries also had new private activity in water: Brazil (the sale of a stake in Companhia de Saneamento Básico do Estado de São Paulo), Colombia (the concession of a small water utility), and Ecuador (a small greenfield water treatment plant).

### Difficult times

Water has lagged far behind other infrastructure sectors in private activity. In 1990–2004 water projects attracted just 5 percent—around US\$41 billion—of the investment commitments in infrastructure projects with private participation in developing countries. The annual average, US\$2.7 billion, was also small relative to sector needs. Just meeting the Millennium Development Goals in water and sanitation has been estimated to require US\$6.7 billion a year.<sup>3</sup>

The characteristics of water services have often limited the willingness of developing country governments to engage the private sector in their provision. Many countries continue to treat water as if it were entirely a public good rather than also a commercial commodity. And where governments have pursued projects with private

participation, there was often much political resistance to raising tariffs to cost recovery levels.

Those characteristics have also made private water projects prone to contract disputes. Many water contracts were renegotiated.<sup>4</sup> In addition, 20 water projects were canceled or became distressed—accounting for 7 percent of projects and 37 percent of investment commitments in 1990–2004.<sup>5</sup> Concessions of water utilities accounted for more than 80 percent of those commitments, including the Manila West Zone and Cochabamba concessions, the subject of high-profile cancellations, and six Argentine concessions that came under distress after the 2002 peso crisis.

Renegotiations do not necessarily indicate systematic problems or project failures and indeed are expected for long-term contracts, during which many unforeseen developments may occur.<sup>6</sup> Nevertheless, renegotiations and cancellations of water contracts have raised questions about the viability of private participation in water, particularly in concessions with significant investment commitments.

### Private activity after the 1995–2000 boom

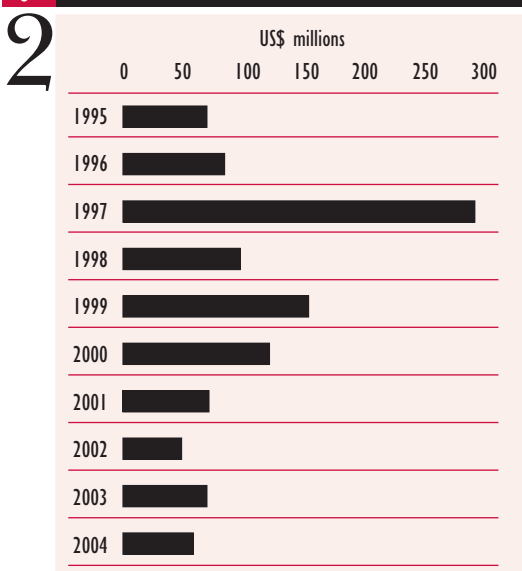
Among infrastructure sectors, water and sewerage was the most affected by the broad decline in private activity. Annual investment flows to the sector averaged US\$1.9 billion in 2001–04, less than half the US\$4.2 billion in 1995–2000.

The decline in investment flows came with changes in the size and type of water projects with private participation. The average project size fell from US\$156 million in 1999 to US\$59 million in 2004 (figure 2). Indeed, while annual investment flows dropped sharply after the boom, the annual number of projects reaching financial closure barely changed, from 28 in 1995–2000 to 27 in 2001–04.

New concessions declined in both number and size after the boom, and their share in investment flows fell from 64 percent to 45 percent. Concessions for small and medium-size cities in Latin America became predominant. In 2001–04 only two water concessions involved investment commitments of more than US\$200 million—those for Guayaquil (Ecuador) and San Pedro Sula (Honduras).

Similarly, fewer lease contracts were signed, with the number falling from 19 in 1995–2000

**Figure 2** Average size of water and sewerage projects with private participation in developing countries, 1995–2004



Source: World Bank, PPI Project Database.

to only 9 in 2001–04. Conversely, management contracts became more frequent, growing from 10 to 18.

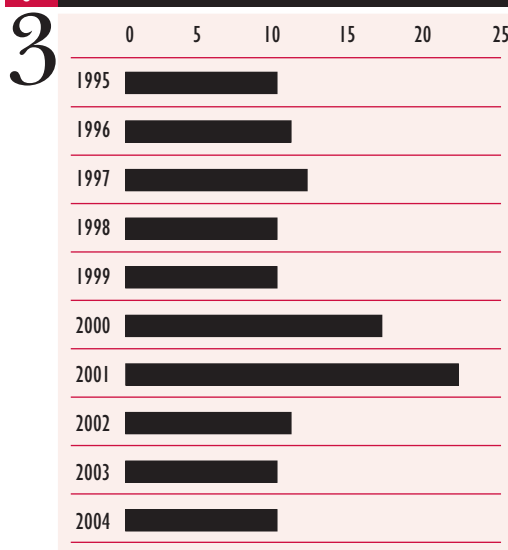
Private activity in water and wastewater treatment plants showed greater resilience than that in water utilities. Average annual investment flows to treatment plants grew from US\$0.6 billion in 1995–2000 to US\$0.8 billion in 2001–04, while flows to water utilities declined sharply, from US\$3.6 billion to US\$1.1 billion.

This resilience was thanks largely to China, which accounted for 40 percent of the total investment in projects involving treatment plants and half the 46 treatment plants built in 2001–04. The remaining projects were spread across 16 countries, with the largest in Mexico (San Luis Potosí wastewater treatment), Croatia (Zagrebacke Otpadne Vode), Thailand (West Bangkok water project), and the Russian Federation (St. Petersburg’s southwest wastewater treatment plant and southwest Moscow’s drinking water plant).

### Expanding country coverage

Private activity in water was concentrated in a few countries, with each year generally seeing a different set of countries implementing new water projects with private activity (figure 3). China, Chile, and Colombia were the only coun-

**Figure 3** Developing countries with new private activity in water and sewerage, 1995–2004



Source: World Bank, PPI Project Database.

tries that remained active throughout 2001–04 and thus accounted for most of the activity, whether measured by investment flows or number of projects.

The number of developing economies newly introducing private activity in water peaked in 2001, when 11 countries brought their first project to financial closure. Armenia, Azerbaijan, Belize, Honduras, and Niger involved the private sector in managing water utilities, while Croatia, India, Namibia, Peru, and Vietnam attracted private capital and management to treatment plants. Ecuador did both. In 2002 four economies—Guyana, Kosovo, Lebanon, and Uganda—opened their water sector to private participation, all of them by awarding management contracts for water utilities. In 2003 Tanzania was the only developing country to newly introduce private participation in the sector, by granting a lease contract for the Dar es Salaam water utility. No developing country did so in 2004. Nevertheless, 53 developing economies had large-scale private participation in water and sanitation facilities in 1990–2004.

### Who is investing?

The landscape of companies pursuing water contracts changed in recent years, with two trends emerging. First, local companies with little or no operational experience entered the

Table

**Top five sponsors of water and sewerage projects with private participation in developing countries, 2001–04**

Sponsor	Projects	Investment (US\$ millions) <sup>a</sup>	Projects by region					
			East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East		Sub- Saharan Africa
						North Africa	South Asia	
Suez Environnement	17	1,053	9	2	1	2	0	3
Veolia Environnement	16	1,088	8	6	0	0	0	2
New World Infrastructure	7	292	7	0	0	0	0	0
RWE Thames	6	762	3	1	2	0	0	0
Berlinwasser International	6	135	3	2	0	0	0	1
Total <sup>b</sup>	52	3,330	30	11	3	2	0	6

a. Investment from all sources in projects in which sponsor has a stake of 15 percent or more.

b. Data may not sum to totals because of projects involving more than one sponsor.  
Source: World Bank, PPI Project Database.

water business. One example is the Russian investment conglomerate Interros, which won the lease contract for the water utility in Siberia's Perm City. In Chile local investors (Grupo Solari, Consorcio Financiero, Grupo Luksic, and Icafal) won five of the six water contracts awarded in 2004. And in Colombia local construction and engineering companies won contracts for small cities in 2001–04. Second, developing country companies expanded within their regions. Malaysian firms (YLI Holdings, Temasek Holdings, Ranhill Utilities, PBA Holdings, and DKLS Industries) won five contracts awarded in China in 2001–04.

Sponsors from developed countries still accounted for a large share of investment flows in 2001–04 (table 1). But they limited their investment to selected developing countries and sought to exit underperforming contracts. RWE Thames announced that it would withdraw from most regions while focusing on Central and Eastern Europe, Veolia Environnement that it would concentrate on selected Asian countries, and Suez that it would pull out of Asia and Latin America.<sup>7</sup> The retrenchment by global sponsors in some cases has facilitated greater activity by local and regional sponsors.

providers of water and sewerage services because projects involving such providers usually are not reported by the sources it uses. For more information on the database, see <http://ppi.worldbank.org>.

2. All U.S. dollar amounts are in nominal terms as posted on the PPI Web site (<http://ppi.worldbank.org>). This reporting method differs from that used in earlier Notes based on the PPI Project Database, which reported investment in real U.S. dollars for the year of the update.

3. UN Millennium Project, *Health, Dignity, and Development: What Will It Take?* abridged ed., Task Force on Water and Sanitation (Stockholm: Swedish Water House, 2005).

4. According to a recent study, 55 percent of water concessions in Latin America were renegotiated in the 1990s. See J. Luis Guasch, Jean-Jacques Laffont, and Stephane Straub, "Renegotiation of Concession Contracts in Latin America" (World Bank, Washington, D.C., 2002).

5. For definitions of cancelled and distressed projects, see <http://ppi.worldbank.org/glossary.asp>.

6. Clive Harris, *Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons*, World Bank Working Paper 5 (Washington, D.C., 2003).

7. See RWE's 2004 annual report (<http://www.rwe.com/generator.aspx?property=Data/id=190518/ar=2004.pdf>); Veolia's 2004 annual results ([http://www.veoliaenviroment-finance.com/frameset.php?page=download/download\\_acc.php](http://www.veoliaenviroment-finance.com/frameset.php?page=download/download_acc.php)); and "Savoir Faire: French Companies Dominate the World's Water Industry," *Economist*, July 17, 2003.

## viewpoint

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## Notes

1. The Private Participation in Infrastructure (PPI) Project Database lacks good coverage of small-scale