

# private sector

## Private Infrastructure

Ada Karina Izaguirre

*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>.*

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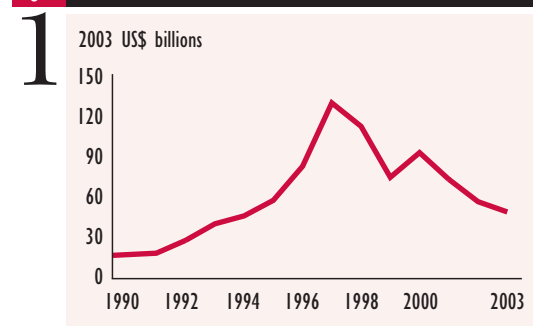
### Activity Down by 13 Percent in 2003

**Drawing on the World Bank's Private Participation in Infrastructure Project Database, this Note reviews developments in 2003. Data for the year show that investment in projects with private participation totaled almost US\$50 billion—back to 1994 levels. About 100 projects reached financial closure. Electricity was the only subsector—and East Asia and the Middle East and North Africa the only developing regions—that saw private activity grow in 2003.**

In 2003, 47 developing countries implemented more than 100 new infrastructure projects with private participation, under schemes ranging from management contracts to concessions, divestitures, and greenfield build-operate-transfer or build-operate-own projects.<sup>1</sup> Nevertheless, developing countries saw investment commitments to infrastructure projects with private participation decline for the third consecutive year, to just 40 percent of the 1997 peak (figure 1). The number of projects also fell, to 30 percent of the 1997 peak of more than 350.

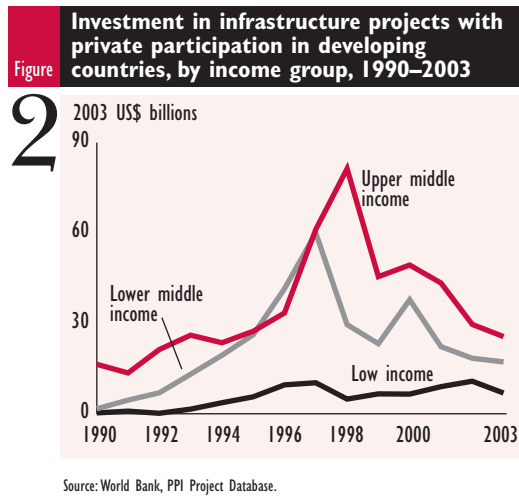
As in previous years, investment in government assets accounted for most of the decline in 2003, with divestiture revenues, license fees, and canon payments amounting to less than US\$9 billion.<sup>2</sup> Investment in facilities declined 6 percent from the level of 2002, amounting to US\$41 billion—just 48 percent of the peak in sector expansion reached in 1997.

**Figure 1** Investment in infrastructure projects with private participation in developing countries, 1990–2003



Source: World Bank, PPI Project Database.

Private activity remained stable in lower-middle-income countries, with investment flows returning to the levels of the mid-1990s (figure 2). But activity declined in low- and upper-middle-income countries, receding to levels similar to those of the early 1990s.



### Sector trends

Private activity fell in all sectors in 2003 (table 1). The downturn hit all subsectors except electricity, where private activity grew by 46 percent. The activity in electricity was focused primarily in greenfield power plants in East Asia and Latin America. Even with the increase in electricity, activity in the overall energy sector declined because of lower activity in natural gas transport, most of it in Peru's Camisea transmission and distribution pipelines.

Telecommunications continued to dominate private activity in infrastructure, with investment flows going mainly to network expansion by existing operators and to the partial divestiture of Saudi Telecom (US\$4 billion). Mobile services drove most of this activity, accounting for 60 percent of investment flows to the sector.

In transport new seaports and toll roads in East Asia accounted for most of the investment flows in 2003. In addition, Argentina reawarded its intercity road network through 6 management contracts after the 12 concession contracts for this network expired.

Water and sewerage was the sector most affected by the decline in private activity. Investment flows to the sector fell to the third lowest level (US\$830 million) of 1990–2003. As in 2002, the sector's private activity was attributed mainly to water treatment plants in China. Activity in all other countries has come to a virtual standstill since 2001.

### Regional trends

Investment flows declined in all regions except East Asia and the Middle East and North Africa. In East Asia the recovery was driven by greenfield power plants and transport projects. In the Middle East and North Africa investment flows reached a new peak of US\$6 billion, thanks mainly to the partial divestiture of Saudi Telecom.

In Latin America and the Caribbean private activity declined for the fifth consecutive year. The reduced activity was directed mainly to energy and telecommunications. In the three other developing regions private activity was concentrated in the expansion of existing telecommunications operators.

### After the boom

Though lower than in the boom period of 1995–99, when investment flows averaged US\$100 billion a year, private activity is still significant. Annual investment flows in 2001–03 averaged US\$60 billion, considerably higher than the US\$40 billion in the first half of the 1990s. Moreover, these investment flows formed a substantial part of the total investment in infrastructure in developing countries, amounting to 0.9 percent of their GDP in 2001–03. If it is assumed that developing countries invest an average 4 percent of GDP in infrastructure—as estimated in the World Bank's *World Development Report 1994*—the private sector accounted for more than 20 percent of all their investment in infrastructure in 2001–03.

The fall in private activity played out differently across the developing regions. The three regions that were most active in the late 1990s also had the biggest declines (figure 3). In East Asia and Latin America in 2001–03, average annual investment flows receded to the levels of the early 1990s. The three other regions were less affected both by the boom of the late 1990s and by the subsequent decline. Annual investment flows to these regions remained at levels similar to those of 1996–2000.

The experience also varied across sectors. Telecommunications, the sector most successful in attracting investment during the boom, was least affected by the subsequent decline (figure 4). Conversely, the energy sector both benefited less from the boom and suffered a larger decline, with investment flows in 2001–03 returning to

**Table** Investment in infrastructure projects with private participation in developing countries, by sector or region, 1990–2003 (2003 US\$ billions)

Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Energy	1.1	1.3	13.4	16.3	17.6	26.3	35.2	53.6	31.5	19.1	28.9	16.4	19.7	15.6	296.0
Electricity	1.1	1.3	9.2	11.5	15.8	22.0	31.1	50.1	24.6	16.1	26.2	15.0	9.7	14.1	248.9
Natural gas	— <sup>a</sup>	— <sup>a</sup>	4.1	4.8	1.9	4.3	3.1	3.5	6.9	3.0	2.7	1.3	10.0	1.5	47.1
Telecommunications	6.4	14.0	8.2	10.2	19.2	20.2	28.3	45.3	58.4	40.0	50.1	44.8	31.2	28.7	405.5
Transport	10.7	3.5	4.8	6.1	9.2	9.9	18.4	22.4	19.7	9.1	9.7	10.5	4.9	4.5	143.3
Water and sewerage	— <sup>a</sup>	0.1	2.1	8.2	0.5	1.9	2.0	9.7	3.6	7.1	5.1	2.5	1.9	0.8	45.5
<i>Region</i>															
East Asia and Pacific	2.7	4.4	9.9	14.0	17.5	22.8	32.8	39.9	10.8	10.1	15.2	12.8	10.6	11.5	214.2
Europe and Central Asia	0.1	0.4	1.4	1.6	4.5	9.7	11.7	16.3	13.6	10.6	24.8	10.9	15.3	9.6	130.6
Latin America and the Caribbean	15.2	13.2	16.9	19.9	19.9	20.6	30.3	57.0	79.9	41.2	41.2	35.4	19.8	15.6	426.2
Middle East and North Africa	0.0	— <sup>a</sup>	0.0	3.7	0.4	0.1	0.4	5.8	3.5	3.3	4.4	4.9	1.5	6.0	34.0
South Asia	0.2	0.9	0.1	1.4	3.5	4.6	6.8	7.0	2.7	5.0	4.5	4.8	5.8	3.5	50.7
Sub-Saharan Africa	0.1	0.0	0.1	0.0	0.8	0.9	2.0	4.9	2.8	5.0	3.6	5.3	4.6	3.4	33.6
<b>Total</b>	<b>18.3</b>	<b>18.9</b>	<b>28.4</b>	<b>40.7</b>	<b>46.6</b>	<b>58.7</b>	<b>83.9</b>	<b>130.9</b>	<b>113.3</b>	<b>75.3</b>	<b>93.8</b>	<b>74.2</b>	<b>57.6</b>	<b>49.7</b>	<b>890.4</b>

a. No private participation in infrastructure occurred.  
Source: World Bank, PPI Project Database.

the levels of the early 1990s. Transport and water saw not only the biggest increases during the boom but also the largest subsequent declines.

### Difficult times

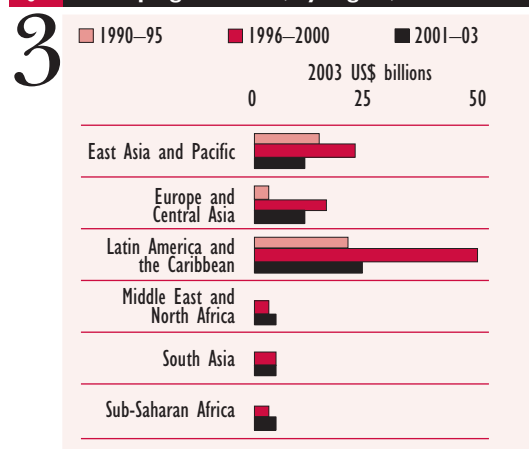
For a growing number of projects private sponsors and governments are failing to renegotiate

contracts, leading to cancellation or distress.<sup>3</sup> Around 140 projects, involving US\$86 billion in investment, had been canceled or were under distress by the end of 2003.<sup>4</sup> Those with the highest profiles have been in Argentina. In 2002–03 private investors in at least 30 projects filed claims against the Argentine government through the International Centre for Settlement of Investment Disputes, mainly as a result of losses caused by the 2002 peso crisis.

The sector most affected has been water and sewerage, where projects accounting for 40 percent of the total investment slated for projects with private participation in 1990–2003 were canceled or under international arbitration by December 2003. A large share of the investment under arbitration relates to large water concessions (Buenos Aires and Manila) that encountered problems when major devaluations triggered tariff increases that were politically infeasible to implement.

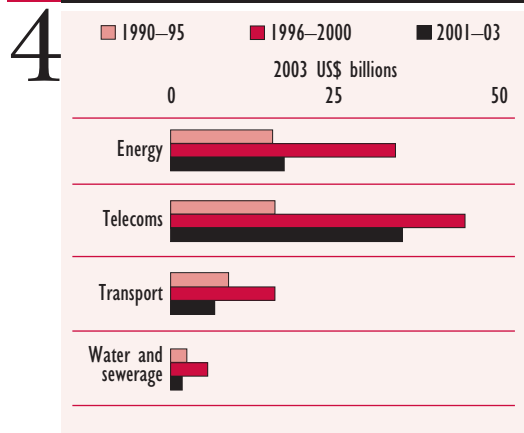
The shares of investment in projects canceled or under international arbitration were smaller, though still substantial, in transport (12.6 percent) and energy (11.2 percent) and smaller still

**Figure** Average annual investment in infrastructure projects with private participation in developing countries, by region, 1990–2003



Source: World Bank, PPI Project Database.

**Figure 4** Average annual investment in infrastructure projects with private participation in developing countries, by sector, 1990–2003



Source: World Bank, PPI Project Database.

in telecommunications (4.1 percent). Across all sectors the share was 9.7 percent.

### Looking ahead

The decline in private investment flows to infrastructure has been driven by several factors—the main ones being the impact of macroeconomic crisis in developing countries, unfinished reforms needed to place infrastructure business on a commercial footing, and underdeveloped local capital markets in most developing countries. These factors have triggered a critical rethinking of prospects for private infrastructure. There has also been recognition that many of the affected projects allocated risk in ways that left private sponsors and financiers—as well as governments and taxpayers—unnecessarily exposed.

Another emerging trend is the greater participation by local and regional investors. By contrast with the 1990s, when global investors from industrial countries dominated private activity in infrastructure, regional and local sponsors are becoming significant players.

- In Latin America, America Movil, a spin-off of Telefonos de Mexico, has become a major mobile operator.
- In East Asia regional investors accounted for the two largest electricity transactions in 2003. The Malaysian company Malakoff Bhd secured finance for its US\$2 billion Tanjung Bin power plant, as did the Thai firm Banpu and Hong Kong-based China Light and

Power for their US\$1.3 billion BLCF power project in Thailand.

Private sponsors are also using local capital markets to finance infrastructure projects. In Chile, for example, where six infrastructure projects closed in 2002–03, sponsors raised around 75 percent of the US\$1.2 billion to secure finance for the projects from local capital markets, through issues of local currency bonds and bank debt. As domestic capital markets continue to develop, regional and local investors are likely to increase their participation in infrastructure projects.

### Notes

1. The Private Participation in Infrastructure (PPI) Project Database includes only low- and middle-income countries, as classified by the World Bank. For the country income classification used in the 2003 update, see <http://ppi.worldbank.org/wbclassification.asp>. Project information and country classifications in the database are updated annually. The 2003 update includes significant upward revisions for 2001 and 2002. For more information, go to <http://ppi.worldbank.org/faq.asp>.

2. All dollar amounts are in 2003 U.S. dollars. Nominal figures have been deflated using the U.S. consumer price index. The PPI Project Database records total investment in infrastructure projects with private participation, not private investment alone.

3. Canceled projects are those in which private sponsors sell or transfer their economic interest back to the government; remove all management and personnel; or cease operation, service provision, or construction. Distressed projects are those under international arbitration or for which cancellation has been formally requested.

4. These figures may underestimate international arbitration cases because most arbitration bodies do not disclose information about cases (see Peterson 2004).

### References

- Peterson, Luke Eric. 2004. "Investors Looking beyond ICSID in Investment Treaty Telecoms Cases." [[http://www.iisd.org/pdf/2004/investment\\_investsd\\_april13\\_2004.pdf](http://www.iisd.org/pdf/2004/investment_investsd_april13_2004.pdf)].
- World Bank. 1994. *World Development Report 1994: Infrastructure for Development*. New York: Oxford University Press.

## viewpoint

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