

## 2 Recent Experience with Infrastructure Privatization and PPPs<sup>1</sup>

Analysis of privatization and PPPs since the 1990s reveals several interesting trends as described in Notes on Public Policy for the Private Sector, developed by The World Bank/International Finance Corporation, and based on the infrastructure projects tracked in the World Bank's global Private Participation in Infrastructure (PPI) Project Database.

### 2.1 The Level and Form of Infrastructure Privatization/PPPs from 1990–2004

- **In 2004, investment flows to infrastructure projects with private participation in developing countries grew** for the first time since 2000 to reach \$64 billion. However, the analysis shows that the growth was driven by the telecommunications sector which accounted for \$45 billion. All developing regions, apart from Sub-Saharan Africa, experienced increased investment in telecommunications. Within the telecommunications sector, independent mobile operators attracted about 50% of sector investment.
- **Proceeds<sup>2</sup> from infrastructure privatization** in developing countries grew in recent years, rising from 48% of the total in the 1990s to 55% in 2000–2003.
- **East Asia and the Pacific raised twice as much in privatization proceeds<sup>3</sup> in 2000–2003 as in the 1990s (\$66 billion from 420 transactions).** The People's Republic of China (PRC) alone accounted for nearly 90% of the proceeds in the region in 2000–2003, compared with 50% in the 1990s. PRC's stock market offerings in telecommunications and energy made it the top revenue earner among all developing countries in 2000–2003.
- **Greenfield projects accounted for 56% of total investment flows and 60% of projects in 2001–2004.** These are the most common form of privatization/PPP across infrastructure sectors, except in water where concessions are still the preferred form. Greenfield projects are also the most common in developing regions—except in Europe and Central Asia, where divestitures are still preferred.
- **Greenfield projects predominated in developing countries,** particularly in lowest-income countries, based on data for 1990–1999. They constituted 65% of projects in

low-income countries compared with 37% for developing countries, reflecting the low starting base of infrastructure in developing countries.

- After the global slowdown in PPPs in the late 1990s, **preference for low-risk contracts increased**. Management contracts became more common, increasing from 2% of projects in 1990–2000 to 7% in 2001–2004 (based on the World Bank’s PPI Project Database). They grew in number in all regions and sectors, but most were for water projects. The share of lease contracts remained at 2% of projects in both periods.
- **Fourteen lease contracts were implemented in 2001–2004**. In contrast, divestitures and concessions declined as a share of both investment flows and projects. Most investment flows to divestitures in 2001–2004 went to projects that had reached financial closure in the 1990s. New divestitures were limited to East Asia and Europe and Central Asia by 2003–2004.
- **Privatization/PPPs have reached nearly all developing countries**, generating more than \$400 billion in proceeds in 1990–2003. Activity peaked in 1997 then declined, but was reactivated in 2001. Proceeds are concentrated in a small group of countries. Five countries—Brazil, PRC, India, Poland, and Russian Federation—accounted for more than 40% of proceeds in 1990–2003.
- **Infrastructure** (telecommunications; electricity generation, transmission, and distribution; natural gas transmission and distribution; transport; and water) accounted for half of privatization<sup>4</sup>/PPP proceeds in developing countries in 1990–2003. These sectors were followed by the competitive sectors (manufacturing, services, tourism, and other firms), energy (production of oil and gas, other hydrocarbons, and petrochemicals), finance, and the primary sector (minerals and metals) in terms of revenue generated.

Table 1 summarizes the flow of investment to developing countries both by sector and by region.

This overview of trends focuses on quantifiable outcomes and may not fully represent the additional value of the many PPPs that focus on improved operations and efficiencies, yielding value in a different form than direct and immediate revenue and investment.

## 2.2 Incorporating Local and Regional Investment Sources<sup>5</sup>

The Public–Private Infrastructure Advisory Facility<sup>6</sup> (PIIAF) has identified developing country investors as an emerging, but major, source of investment finance for infrastructure projects with private participation. For instance in 1998–2004, these investors accounted for more investment finance in transport across developing regions than did investors from developed countries. The local and regional players are also taking on greater managerial and operational roles.

**Table 1: Investment in Infrastructure Projects with Private Participation in Developing Countries, by Sector and Region 1995–2004 (\$ billion)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Sector</b>										
Energy	21.7	30.0	46.3	29.3	21.1	27.4	15.6	19.2	17.6	12.7
Electricity	18.2	27.4	43.3	23.3	18.3	24.9	14.1	10.3	14.7	12.1
Natural Gas	3.6	2.6	3.0	6.1	2.7	2.5	1.5	8.9	2.9	0.6
Telecommunications	17.2	24.6	39.9	51.8	36.1	48.9	45.2	33.0	33.2	45.0
Transport	8.2	15.7	19.4	17.5	8.2	9.1	8.1	3.6	5.0	4.5
Water and Sewage	1.5	1.7	8.4	2.2	6.5	4.8	2.4	2.0	1.4	1.9
<b>Region</b>										
East Asia and Pacific	18.8	28.0	34.9	9.7	13.1	14.3	11.0	9.7	13.0	8.7
Europe and Central Asia	8.1	10.5	14.2	12.1	9.4	25.0	12.3	16.8	12.2	12.5
Latin America and the Caribbean	17.1	25.8	49.3	71.2	37.3	38.7	33.7	19.6	15.8	17.4
Middle East and North Africa	0.1	0.3	5.1	3.1	3.0	4.1	4.4	1.6	6.2	10.9
South Asia	3.8	5.8	6.3	2.3	4.6	4.4	4.6	6.0	3.4	9.6
Sub-Saharan Africa	0.8	1.7	4.3	2.5	4.6	3.7	5.3	4.2	6.5	4.9
<b>Total</b>	<b>48.7</b>	<b>72.1</b>	<b>114.1</b>	<b>100.9</b>	<b>72.0</b>	<b>90.2</b>	<b>71.3</b>	<b>57.8</b>	<b>57.0</b>	<b>64.1</b>

Note: Date refers to projects reaching financial closure in 1990–2004. (World Bank and Public–Private Infrastructure Advisory Facility [PPIAF], Private Participation in Infrastructure Project Database.)

Source: Izaguirre, Ada Karina. 2005. Private Infrastructure: Emerging Market Sponsors Dominate Private Flows. *Public Policy for the Private Sector Note No. 299*. Washington, DC: World Bank.

Developing country investors can be anticipated to take on even greater shares of infrastructure investments as developing market capital markets deepen and expand, as the investors/operators develop more expertise, and as governments recognize the advantages (including a better understanding of social, political, and economic risks) of these firms and structure transactions (particularly prequalification and evaluation criteria) to be more inclusive of local participants.

According to PPIAF's analysis, developing country investors contributed more than half the private investment in concessions (54%) in 1998–2004, slightly less than half in greenfield projects (44%), and a smaller share in divestitures (30%). Developing country investors accounted for as much as 52% of the private investment in transport and 46% in telecommunications in 1998–2004, but only about 27% in energy and 19% in water.

South Asia had the largest share of domestic investment at 55% of the region's total investment in 1998–2004. Local investors were also active in East Asia and Pacific, accounting for 42% of private investment in 1998–2004 and acting as the main sponsors in 36% of projects. Telecommunications was again a predominant object of investment (local investors invested 65%) with transport at 48%.

### **2.3 Incorporating Social Priorities**

A further trend of note, discussed in chapter 8, relates to the restructuring of PPPs to be more focused on the requirements of low-income consumers. When a primary goal of developing countries is improved access to infrastructure (as a driver of economic growth) and when a predominant characteristic of these countries is a high incidence of poverty, developing strategies that fit the goal of universal service with the reality of poverty is sensible.

A concrete example of this shift has been the growing incorporation of output-based aid (OBA) strategies to transaction design. OBA strategies design the complementary use of donor and government financing to target social priorities specifically within the framework of a PPP transaction.