

## PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

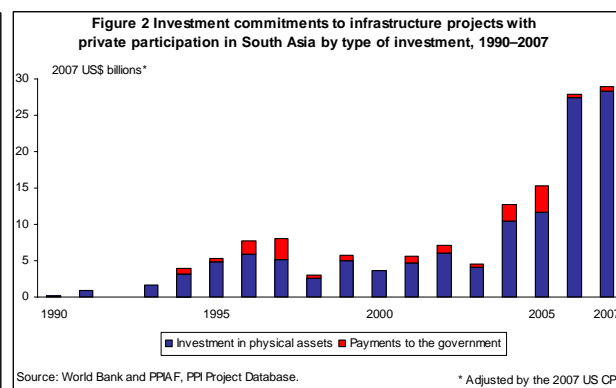
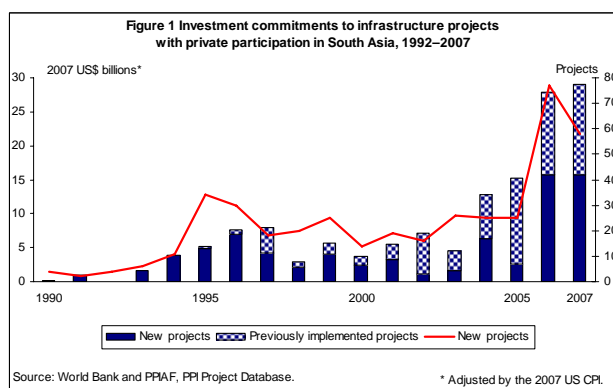
### PPI data update note 18

December 2008

#### Investment commitments in South Asia remained at a peak level in 2007

Investment commitments to infrastructure projects with private participation in South Asia amounted to almost US\$29 billion in 2007, remaining in the US\$28–29 billion range for the second consecutive year, according to just-released data from the Private Participation in Infrastructure Project Database.<sup>1</sup> With this investment level, South Asia accounted for 18% of the year's total investment commitments in developing countries.

The high level of investment commitments (hereafter, *investment*) was driven both by new projects and by projects implemented in previous years (figure 1). The 58 new projects accounted for US\$15.7 billion, while projects reaching financial closure in 1990–2006 attracted US\$13.3 billion. Commitments to physical assets, remaining in the US\$27–28 billion range, accounted for almost all the investment in the region in 2007 (figure 2). Payments to the government (such as spectrum or concession fees and divestiture revenues) amounted to US\$0.6 billion, or less than 2% of annual investment.



India dominated private activity in the region, accounting for 50 of the 58 new projects in 2007 and almost 78% of investment. India's predominance has characterized private activity in the region since the mid-1990s (figure 3). Pakistan accounted for six new projects in the region and 15% of investment. The four other countries (Afghanistan, Bangladesh, Nepal, and Sri Lanka) accounted for the remaining investment.

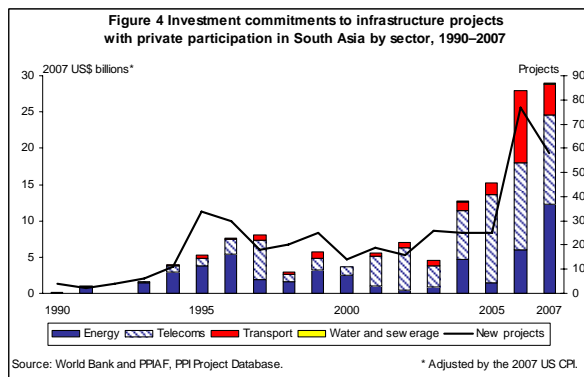
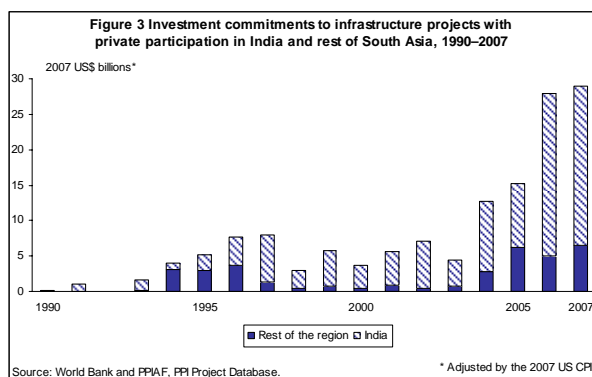
Greenfield projects (build, own, operate [BOO] and build, operate, transfer [BOT] contracts and merchant projects) were the most common type, accounting for 29 of the 58 projects and more than 80% of investment. Concessions (build, rehabilitate, operate, transfer [BROT];

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<sup>1</sup> Data on infrastructure projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. Additional investments in some projects may have been omitted for the same reason. Barbados, the Czech Republic, Estonia, and Trinidad and Tobago became high-income countries according to the 2007 World Bank country classification (released in July 2007) and are therefore excluded from the PPI Project Database beginning with the 2007 update.

rehabilitate, operate, transfer [ROT]; and rehabilitate, lease, transfer [RLT]) accounted for 26 new projects and 11% of investment. The region had just one partial divestiture, an initial public offering of Power Grid Corporation of India, and two management contracts for water sector assets.

**Activity by sector.** Investment in 2007 was concentrated in telecommunications (43%) and energy (42%). In energy investment amounted to US\$12.3 billion, a level never before seen in the region (figure 4). In telecommunications investment remained at its peak, around US\$12 billion, for the third consecutive year. In transport investment fell from a US\$10 billion peak in 2006 to US\$4.2 billion in 2007, though this was nevertheless the second highest level in 1990–2007.



In *energy* there were 19 new projects, all in India and Pakistan. India closed on financing for 12 new power plants with a capacity of 8,609 megawatts (MW) and investment of US\$9.7 billion. The plants are to be located in several states: Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh, and Uttarakhand. India also sold, through its local stock exchange, 13.6% of Power Grid Corporation of India, the country's electricity transmission company. And the country ensured funding for the east-west gas pipeline, which has a length of 1,440 kilometers (km) and a capacity of 120 million standard cubic meters per day. Pakistan closed on financing for five generation plants with a total installed capacity of 1,015 MW.

In *telecommunications* previously implemented projects attracted investment of US\$12.3 billion in six countries—Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka. Mobile and multiservice operators accounted for US\$11.5 billion of that investment. India attracted 62% of regional investment, including investment in new projects. Two new projects were implemented in the region. Bangladesh awarded a national public switched telephone network (PSTN) license to National TeleCom (NTC) for US\$1.7 million, and Sri Lanka awarded a mobile license to Indian operator Bharti Airtel for US\$4 million.

In *transport* there were 32 new projects, again all in India and Pakistan. India executed 31 new projects, all but 2 of them road projects. The 29 road projects involve more than 1,700 kilometers and US\$2.8 billion in investment. Of these projects, 24 include commitments of government payments—either annuity payments to cover the expected construction and operational costs or capital grants to cover the expected gap between project costs and revenues. India's other two transport contracts were greenfield seaport projects in Chennai (a 30-year BOT contract) and Orissa (a 34-year BOT contract). Pakistan signed a 40-year concession for Gwadar Port Phase II.

In *water and sewerage* new private activity took place only in India, where five projects involving investment of US\$140 million were implemented. Three projects are for water utilities. A 25-year BOT contract for a desalination plant (Chennai Desalination) reached financial closure. And in the city of Nagpur two management contracts were signed: a five-year contract for operating a water treatment plant and a seven-year contract for managing a water utility. The other two projects are for water treatment plants. In Latur, Maharashtra, the

local government signed a 10-year concession for its water utility system. And in the city of Kolkata the local government signed a 30-year BOT contract for a water supply and sewerage system in Section V, Salt Lake.

**Potential projects.** The region had at least 22 potential projects in energy and transport in 2007. In energy 9 potential projects were new power plants (the 1,600-MW coal-fired Krishnapatnam power plant and 4,000-MW Mundra Ultra Mega Power Project in India, the 300-MW Upper Karnali hydropower plant in Nepal, and 6 power plants for 1,070 MW in Pakistan), while 2 were power distribution franchises in India. In transport there were also 11 potential projects: 1 airport, 7 seaports, and 3 road projects.

**Canceled and distressed projects.** In 2007 one project in Bangladesh was canceled and one in Pakistan became distressed, bringing the region's total number of projects canceled or distressed by 2007 to seven. These contracts represent 1.7% of all infrastructure projects with private participation in the region and 3% of investment commitments in 1990–2007.

In Bangladesh, Thai Airways canceled its 10-year management contract for Shah Amanat Airport with the government because of delays in transferring airport management. In Pakistan the government requested termination of the mobile license of Pakcom, which had started operating in 1990, because of disagreements over license fee payments.

**Concluded projects.** No infrastructure projects with private participation in the region were concluded in 2007.

## Infrastructure projects with private participation reaching financial or contractual closure in South Asia in 2007

Note: .. = not available; n.a. means not applicable.

Energy										
	Country	Project name	Subsector	PPI type (subtype)	Private equity (%)	Investment commitments (US\$ millions)		Capacity size and type	Contract period (years)	Main sponsors
						Payments to the government	Physical assets			
1	India	East-West Gas Pipeline	Natural gas	Greenfield project (BOO)	100	0	125	1,440 km	..	Reliance Industries Limited (RIL) (100%, India)
2	India	Power Grid Corporation of India Limited (PGCIL)	Electricity	Divestiture (partial)	13.6	243	485	67,000 km	n.a.	Others (..%, ..)
3	India	Alaknanda Hydro Electric Power Project	Electricity	Greenfield project (BOT)	100	0	375	300 MW	45	GMR Group (100%, India)
4	India	Chuzachen Hydro Power Project	Electricity	Greenfield project (BOT)	74	0	112.19	99 MW	35	Gati Infrastructure (74%, India)
5	India	Shrinagar Hydro Electric Project	Electricity	Greenfield project (BOT)	100	0	517.25	330 MW	45	GVK Group (100%, India)
6	India	Teesta III Hydro Electric Project	Electricity	Greenfield project (BOT)	63	0	1,426.38	1,200 MW	35	Teesta Urja Limited (63%, India)
7	India	Teesta VI Hydro Electric Project	Electricity	Greenfield project (BOT)	74	0	750	500 MW	35	Lanco Group (74%, India)
8	India	Anpara C Thermal Power Station	Electricity	Greenfield project (BOO)	100	0	1,100	1,200 MW	..	Lanco Group (100%, India)
9	India	Kamalanga Thermal Power Plant	Electricity	Greenfield project (BOO)	100	0	1,053	1,050 MW	..	GMR Group (100%, India)
10	India	Khandke Wind Farm	Electricity	Greenfield project (BOO)	100	0	67	50 MW	..	China Light and Power Ltd. (50%, Hong Kong, China), Hydro Tasmania (50%, Australia)
11	India	Nigrie Thermal Project	Electricity	Greenfield project (BOO)	100	0	1,250	1,000 MW	..	Jaiprakash Associates Limited (100%, India)
12	India	Raj West Power Limited Phase I	Electricity	Greenfield project (BOO)	100	0	1,250	1,080 MW	..	JSW Energy (100%, India)
13	India	Ratnagiri Power Project	Electricity	Greenfield project (BOO)	100	0	1,125	1,200 MW	..	JSW Energy (100%, India)
14	India	Rosa Thermal Power Project	Electricity	Greenfield project (BOO)	100	0	675.5	600 MW	..	Reliance ADA Group (100%, India)
15	Pakistan	Atlas Power Project	Electricity	Greenfield project (BOO)	100	0	150	225 MW	25	Atlas Group (100%, Pakistan)

16	Pakistan	Attock General Limited Power Project	Electricity	Greenfield project (BOT)	100	0	148.6	165 MW	25	Attock Oil Company Ltd. (AOC) (100%, United Kingdom)
17	Pakistan	Foundation Power Company Daharki	Electricity	Greenfield project (BOO)	100	0	200	175 MW	25	Fauji Foundation (100%, ..)
18	Pakistan	Saif Power Project	Electricity	Greenfield project (BOO)	100	0	200	225 MW	25	Saif Group (100%, Pakistan)
19	Pakistan	Sapphire Power Project	Electricity	Greenfield project (BOO)	100	0	185	225 MW	25	Xenel Industries Ltd. (..%, Saudi Arabia), Sapphire Group (..%, Pakistan)

### Telecommunications

	Country	Project name	Segment	PPI type (subtype)	Private equity (%)	Investment commitments (US\$ millions)		Capacity size and type	Contract period (years)	Main sponsors
						Payments to the government	Physical assets			
1	Bangladesh	National TeleCom Ltd.	Fixed access and long distance	Greenfield project (merchant)	100	1.7	0	17,000 connections	15	Others (100%, ..)
2	Sri Lanka	Bharti Airtel Sri Lanka	Mobile access	Greenfield project (merchant)	100	4	0	..	..	Bharti Enterprises (46%, India), Singapore Telecom (16%, Singapore)

### Transport

	Country	Project name	Subsector	PPI type (subtype)	Private equity (%)	Investment commitments (US\$ millions)		Capacity size and type	Contract period (years)	Main sponsors
						Payments to the government	Physical assets			
1	India	Aurangabad-Jalna-Jintur Project on MSH-6	Roads	Concession (BROT)	100	0	74	66 km	20	PBA Infrastructure Ltd. (49%, India), Sadbhav Engineering Ltd. (51%, India)
2	India	Bhopal-Dewas Road Project	Roads	Concession (BROT)	100	0	107	143 km	25	BSBK Pvt. Ltd. (..%, India), MSK Projects Ltd. (..%, India), Chetak Enterprises Pvt. Ltd. (..%, India)
3	India	Bongalur to Tukkguda Outer Ring Road	Roads	Greenfield project (BOT)	100	0	73	13 km	15	Maytas Infrastructure Pvt. Ltd. (50%, India), Gayatri Projects Ltd. (50%, India)

4	India	Chandpur-Alirajpur Kukshi Badwani Road	Roads	Concession (ROT)	100	0	16	100 km	25	Keti Infrastructure Pvt. Ltd. (100%, India)
5	India	Chennai Second Container Terminal	Seaports	Greenfield project (BOT)	80	0	150	8 million throughput	30	Sical (32%, ..), PSA Corp. (48%, Singapore)
6	India	Delhi-Ramgarh-Alwar	Roads	Concession (BROT)	100	0	6.32	35 km	11	Vishesh Infrastructure Pvt. Ltd. (100%, India)
7	India	Dhamra Port Project Phase I	Seaports	Greenfield project (BOT)	100	0	600	25 million throughput	34	Tata Enterprises (50%, India), Larsen & Toubro Limited (50%, India)
8	India	Expressway from Narsingi to Kollur	Roads	Greenfield project (BOT)	100	0	75	12 km	15	Induni & Cie SA (..%, Switzerland), Era Group (..%, India)
9	India	Expressway from Pedda Amberpet to Bongulur	Roads	Greenfield project (BOT)	100	0	107	13 km	15	KMC Constructions Ltd. (..%, India), Infrastructure Leasing & Financial Services (..%, India)
10	India	Gwalior Bypass on NH-3 and NH-75	Roads	Greenfield project (BOT)	100	0	75	42 km	20	Era Group (..%, India), Shriram Group (..%, India), Ramky Group (51%, India)
11	India	Gwalior-Jhansi NH-75	Roads	Concession (BROT)	100	0	151	80 km	20	DS Constructions Ltd. (..%, India), Apollo Infrastructure Projects Finance Company (..%, India)
12	India	Islam Nagar-Kadtal NH-7	Roads	Concession (BROT)	100	0	137	48 km	20	Patel Engineering Ltd. (..%, India), KNR Constructions Ltd. (..%, India)
13	India	Jaora Nayagaon Road Project	Roads	Concession (BROT)	100	49.92	135	126 km	25	VIVA Highways Private Ltd. (49%, India), SREI Infrastructure Finance Ltd. (28%, India)
14	India	Jhansi to Lalitpur (km 0 to km 49.79) NH-26	Roads	Concession (BROT)	100	0	106	50 km	20	Gayatri Projects Ltd. (51%, India), Infrastructure Development Finance Company Ltd. (IDFC) (49%, India)
15	India	Jhansi to Lalitpur (km 49.79 to km 99) NH-26	Roads	Concession (BROT)	100	0	77.5	49 km	20	Infrastructure Development Finance Company Ltd. (IDFC) (49%, India), Gayatri Projects Ltd. (51%, India)
16	India	Kollur to Patancheru Outer Ring Road	Roads	Greenfield project (BOT)	100	0	125	12 km	15	Maytas Infrastructure Pvt. Ltd. (50%, India), Gayatri Projects Ltd. (50%, India)
17	India	Lakhnadon-MP/MH Border NH-7	Roads	Concession (BROT)	100	0	102	56 km	20	SREI Infrastructure Finance Ltd. (49%, India), Sadbhav Engineering Ltd. (51%, India)

18	India	Lebad Jaora Road Project	Roads	Concession (BROT)	100	0	105	125 km	25	Essel Group (100%, India)
19	India	Madurai-Tuticorin Section, NH-45B	Roads	Concession (BROT)	100	0	157	128 km	20	SREI Infrastructure Finance Ltd. (49%, India), Madhucon Projects Ltd. (51%, India)
20	India	Mandsaur-Sitamau Road	Roads	Concession (ROT)	100	0	6.3	44 km	25	Suryavanshi Infrastructure Pvt. Ltd. (100%, India)
21	India	Matkuli-Tamia-Chhindwara Road Project	Roads	Concession (ROT)	100	0	23.52	108 km	25	Keti Infrastructure Pvt. Ltd. (100%, India)
22	India	MH/AP Border to Islam Nagar NH-7	Roads	Concession (BROT)	100	0	90.1	55 km	20	Avinash (..%, India), Soma Enterprise Ltd. (..%, India)
23	India	Nelamangala-Bangalore NH-4	Roads	Concession (BROT)	100	35.51	110	20 km	20	Navayuga Group (100%, India)
24	India	Pondicherry-Tindivanam NH-66	Roads	Concession (BROT)	100	0	71.25	39 km	30	Maytas Infrastructure Pvt. Ltd. (50%, India), Navayuga Group (50%, India)
25	India	Salem to Karur (NH-7)	Roads	Concession (BROT)	100	12	63	42 km	20	JTEC (..%, India), M Venkat Rao (..%, India), MRK Prasad Rao (..%, India)
26	India	Salem-Ulundurpet NH-68	Roads	Concession (BROT)	100	0	235.25	136 km	25	Reliance ADA Group (100%, India)
27	India	Second Adityapur Toll Bridge over River Kharkali	Roads	Concession (BROT)	100	0	13.75	3 km	30	Infrastructure Leasing & Financial Services (100%, India)
28	India	Thrissur Edapalli Project on NH-47	Roads	Concession (BROT)	100	21.1	78.13	40 km	20	KMC Constructions Ltd. (51%, India), SREI Infrastructure Finance Ltd. (49%, India)
29	India	Trichy-Karur on NH-67	Roads	Concession (BROT)	100	0	129	80 km	30	Reliance ADA Group (100%, India)
30	India	Trichy Dindigul on NH-45	Roads	Concession (BROT)	100	0	144	88 km	30	Reliance ADA Group (100%, India)
31	India	Zirakpur-Parwanoo NH-22	Roads	Concession (BROT)	100	0	73.75	29 km	20	Jaiprakash Associates Limited (100%, India)
32	Pakistan	Gwadar Port Phase II	Seaports	Concession (BROT)	100	0	550	500,000 throughput	40	PSA Corp. (100%, Singapore)

Water and sewerage										
	Country	Project name	Subsector	PPI type (subtype)	Private equity (%)	Investment commitments (US\$ millions)		Capacity size and type	Contract period (years)	Main sponsors
						Payments to the government	Physical assets			
1	India	Chennai Desalination Ltd.	Treatment plant	Greenfield project (BOT)	100	0	115	100,000 cubic meters per day	25	Abengoa (25%, Spain), IVRCL Infrastructures & Projects Ltd. (75%, India)
2	India	Kolkata, Salt Lake Water Supply and Sewerage Project	Utility	Greenfield project (BOT)	65	0	16.9	13,000 cubic meters per day	30	Tata Enterprises (100%, India)
3	India	Nagpur, Pench Treatment Plant Rehabilitation Project	Treatment plant	Management contract	37	0	1.6	23,000 cubic meters per day	5	Veolia Environnement (37%, France)
4	India	Nagpur, 24x7 Water Supply Project	Utility	Management contract	100	0	0	10,000 connections	7	Veolia Environnement (100%, France)
5	India	Latur Water Supply Scheme	Utility	Concession (RLT)	100	0	8.75	100,000 connections	10	Hydro-Comp Enterprises (34%, Cyprus), Subhash Projects & Marketing Ltd. (34%, India), UPL Environmental Engineers Ltd. (34%, India)