

PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 33

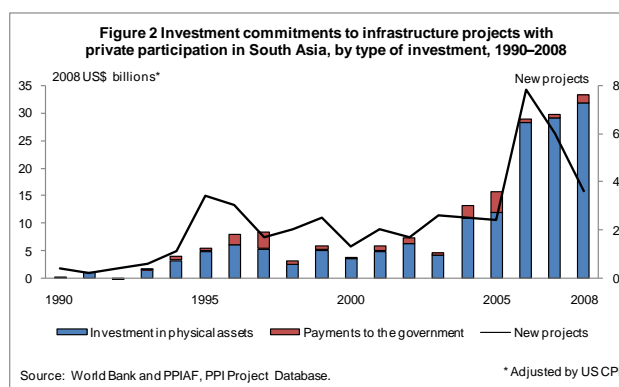
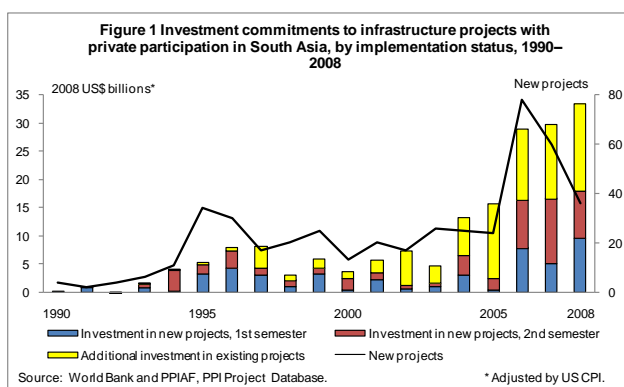
December 2009

Investment commitments reach a new peak in South Asia while the number of new projects declines

Private activity in infrastructure in South Asia showed mixed results in 2008, according to just-released data from the Private Participation in Infrastructure Project Database. Investment commitments to infrastructure projects with private participation reached a new peak thanks to additional investment in existing telecommunications operators and new energy and transport projects that reached financial or contractual closure in the first half of the year. But investment in new projects slowed in the second half of the year with the full onset of the financial crisis. This slowdown led to a decline in the number of projects for the entire year. The region accounted for 22% of the year's total investment commitments in developing countries.

In 2008, 36 infrastructure projects with private participation reached financial or contractual closure in three South Asian countries (Bangladesh, India, and Pakistan).¹ These projects involve investment commitments (hereafter, *investment*) of US\$17.9 billion. Infrastructure projects implemented in previous years had additional commitments of US\$15.4 billion, bringing total investment in 2008 to US\$33.4 billion. That represented an increase of 12% from the level reported in 2007 and a new peak for the region (figure 1).² Both new and existing projects accounted for the increase. Investment in new projects increased by 8% from the level in 2007, while investment in existing projects rose by 18%.

When investment is classified by type, investment in physical assets explains most of the growth in total investment. Such investment amounted to US\$31.9 billion in 2008, up 10% from the level reported in 2007 (figure 2). Payments to governments (such as concession or lease fees and divestiture revenues) rose by almost 140% to US\$1.5 billion.



New projects and associated investment in 2008 were more evenly distributed between the first and second half of the year than in 2006 and 2007, when new activity was concentrated in the second half of the year. Of the 36 new projects in 2008, 17 were implemented in the first half of the year. These involve investment of US\$9.6 billion, 90% more than the investment in new projects in the same

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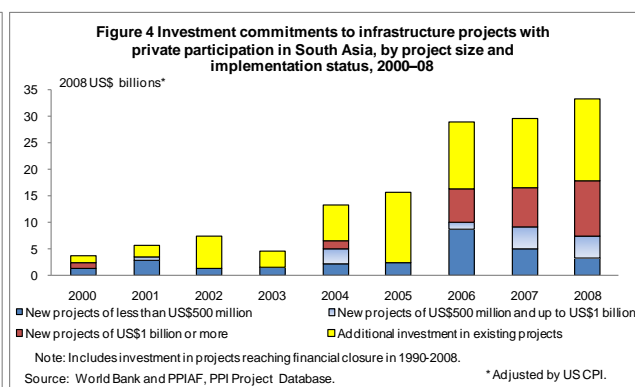
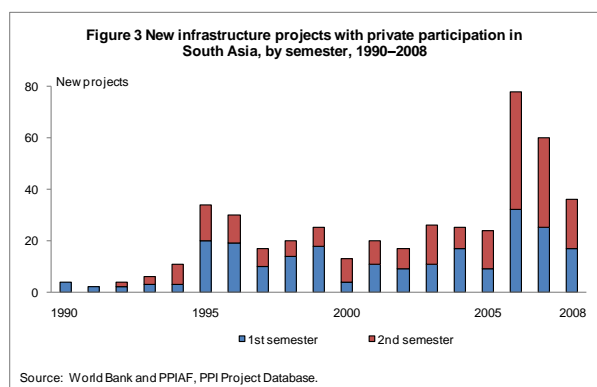
¹ The data on infrastructure projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. Additional investment in some projects may have been omitted for the same reason.

² Investment data are reported in 2008 U.S. dollars, using the U.S. consumer price index and 2008 as the base year. Data at <http://ppi.worldbank.org/> are reported in millions of current U.S. dollars unless otherwise indicated.

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period of 2007—and more than in any other first semester in 1990–2008. That suggested a continuation of the investment growth for new projects seen since 2006 (see figure 1). But in the second semester of 2008 investment in new projects declined by 28% compared with the same period of 2007, to US\$8.3 billion. Preliminary data on new projects in the first semester of 2009 suggest a strong recovery from the level reported in the second half of 2008. Investment reached US\$18.2 billion, driven by the implementation of large generation projects.³ Similar analysis is not possible for existing projects because the data do not allow the separation by semester of additional investment.

The number of projects reaching financial or contractual closure declined by 40% in 2008. The number was down in both the first and second half of the year compared with the same periods of 2007 (figure 3). The closure of larger projects explains the divergence in trends between investment and number of projects. Investment in large projects (US\$1 billion or more) grew by 40% to US\$10.5 billion in 2008, offsetting the decline in smaller projects. With the large projects excluded, investment in new projects would have fallen by 18% in 2008, to US\$7.5 billion, in large part because of the decline in projects of less than US\$500 million (figure 4).



As in previous years, greenfield projects were the most common type of private participation. They accounted for US\$27.5 billion in investment, 83% of the regional total in 2008 (figure 5).⁴ That level represented a 15% increase from 2007 and was the highest in 1990–2008. Investment in existing projects accounted for most of the increase, growing by 26% to US\$14.3 billion. Investment in new greenfield projects also contributed to the growth. The 26 new greenfield projects reaching closure in 2008 involve investment of US\$13.2 billion, up 5% from the level in 2007.

Concessions were the second most common type of private participation in 2008.⁵ Eight new concessions were signed, involving investment of US\$4.7 billion—14% of the regional total in 2008. But while new concessions attracted 40% more investment in 2008 than in 2007, they fell in number by 70%. Seven of the concessions were for transport projects, while the eighth was for a water treatment plant. The region's two other new projects were a partial divestiture of Titas Gas Transmission and Distribution Company in Bangladesh and a management contract for a water utility in Mysore, India.

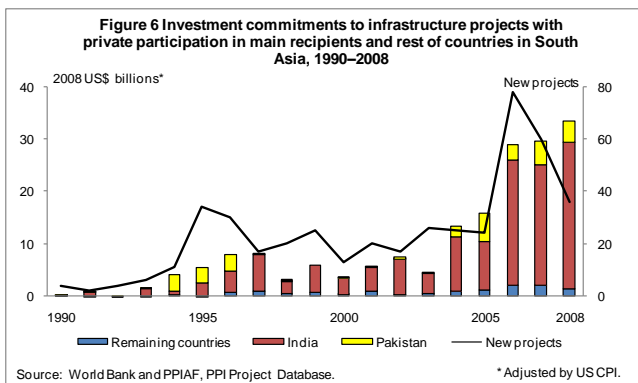
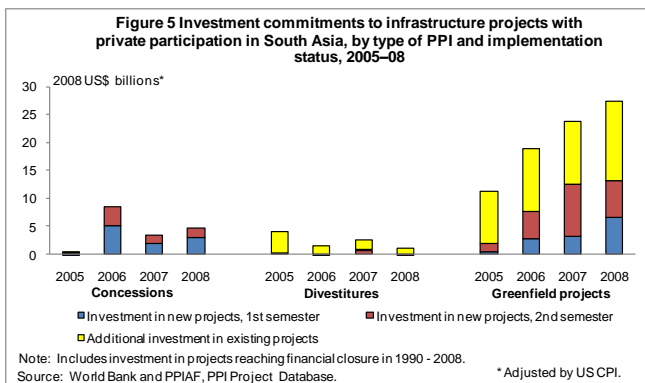
³ "Assessment of the Impact of the Crisis on New PPI Projects: Update 4," PPI data update note 24 (October 2009).

⁴ This note uses the term *greenfield project* as defined in the PPI Project Database methodology. The definition includes the following schemes: build, lease, and transfer (BLT); build, operate, and transfer (BOT); build, own, and operate (BOO); merchant; and rental.

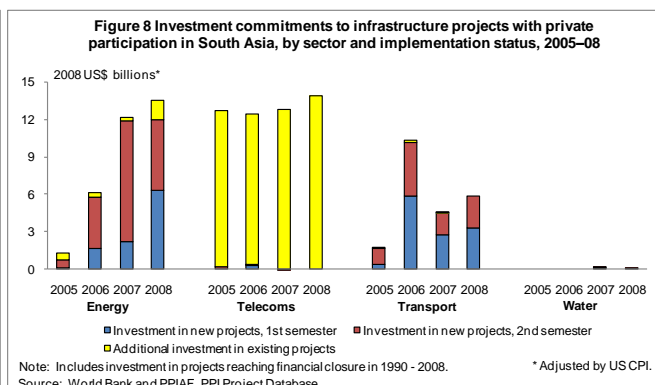
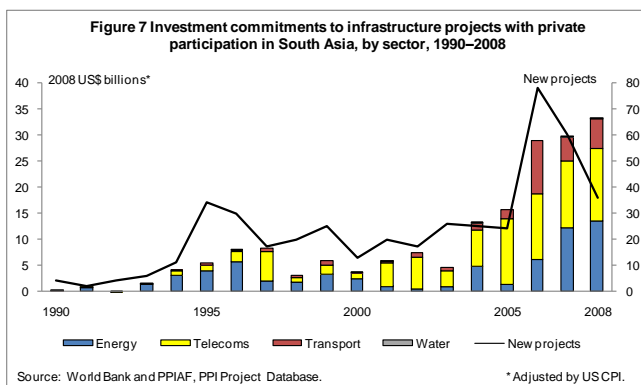
⁵ This note uses the term *concession* as defined in the PPI Project Database methodology. The definition includes contracts under which a private entity takes over the management of a state-owned enterprise or asset for a given period during which it also assumes significant investment risk. The following schemes are considered concessions: build, rehabilitate, operate, and transfer (BROT); rehabilitate, lease or rent, and transfer (RLT); and rehabilitate, operate, and transfer (ROT).

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As in previous years, India accounted for most of the regional activity (figure 6). India attracted 84% of regional investment and implemented 28 of the 36 new projects. Investment in the country rose by 21% from 2007, reaching a record US\$27.9 billion. With India excluded, investment in South Asia would have declined by 19% to US\$5.5 billion. Pakistan was the second most active country in the region, implementing seven new projects and attracting 12% of regional investment.



Activity by sector. In 2008, as in previous years, the largest shares of regional investment went to telecommunications (42%) and energy (41%). Investment in energy rose by 11% to US\$13.6 billion, the highest level in 1990-2008 (figure 7). New projects accounted for most of that investment (figure 8). Investment in telecommunications grew by 9% to US\$13.9 billion, again the highest level in 1990-2008. Network expansion by existing telecommunications operators drove the growth. In transport, investment increased by 27% to US\$5.8 billion, the second highest level in 1990-2008. In water and sewerage only two projects, representing investment of US\$76 million, were implemented in 2008.



In *energy* three countries implemented 21 new projects, involving US\$12 billion in investment. India was by far the most active, with 15 projects (table 1). Thirteen of these are for electricity generation plants, involving almost 10,600 megawatts (MW) and US\$10.8 billion in investment. Four involve investment of more than US\$1 billion: the US\$4.2 billion, 4,000-MW Mundra Ultra Mega power project sponsored by Tata Enterprises; the US\$1.4 billion, 1,005-MW Monnet Ispat power project sponsored by the Monnet Group; the US\$1.1 billion, 1,200-MW Jamnagar power plant sponsored by the Essar Group; and the US\$1 billion, 1,050-MW Maithon Right Bank power project sponsored by Tata Enterprises. India also implemented a US\$234 million electricity transmission line as well as a US\$55 million natural gas distribution project in Faridabad, in the state of Haryana.

Through an initial public offering, Bangladesh divested 25% of Titas Gas Transmission and Distribution Company for US\$31 million. Pakistan implemented five greenfield electricity generation projects with



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total investment of US\$882 million and total installed capacity of 879 MW. Two existing energy projects attracted additional investment in 2008: the Mundra thermal power project in India (US\$1.4 billion) and Karachi Electricity Supply Company in Pakistan (US\$202 million).

In *telecommunications* previously implemented projects attracted investment of US\$13.9 billion in six countries—Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka. Mobile and multiservice operators accounted for US\$13.5 billion (97%) of that investment. India attracted 71% of regional investment in telecommunications, up from 62% in 2007. No new telecommunications projects with private participation were implemented in 2008.

In *transport* the region had 13 new projects, all in India and Pakistan, involving investment of US\$5.8 billion. India implemented 11 projects. Eight of these are road projects, involving more than 1,500 kilometers and US\$4.6 billion in investment. Seven of the road projects are concessions, with contract periods ranging from 12 years to 20. The other road project is a 12-year BOT (build, operate, and transfer) contract for Katni Bypass NH-7. India's other new transport projects are a 35-year BOT contract for Mumbai Metro One (Line 1), a project involving investment of US\$542 million, and two 30-year BOT contracts for seaports (a US\$117 million contract for the Ennore iron ore terminal and a US\$238 million contract for a container terminal at Mumbai Port). In Pakistan two BOT seaport projects at Port Mohammad Bin Qasim reached financial closure (a US\$92 million grain and fertilizer terminal and a US\$211 million second container terminal).

In *water and sewerage* new private activity took place only in India, where two projects reached closure. These projects are a US\$76 million, 25-year BROT (build, rehabilitate, operate, and transfer) concession for a water treatment plant in Haldia, West Bengal, and a 6-year management contract for a water supply utility in Mysore, Karnataka.

Potential projects. In addition to the 36 new projects reaching financial or contractual closure in 2008, at least 41 other infrastructure projects, representing investment of US\$24 billion, were awarded but had not reached closure by the end of the year. Of these potential projects, 24 were energy projects—23 for power plants (13 for total installed capacity of 2,533 MW in Pakistan and 10 for a total of 8,820 MW in India) and one for an electricity transmission line in India. In transport there were 16 potential projects, all of them in India—for 9 roads, 3 railways, 2 airports, and 2 ports. There was one potential water project, a BOT contract for a water utility in Maharashtra, India.

Canceled and distressed projects. No infrastructure projects with private participation were canceled or became distressed in the region during 2008.

Concluded projects. Two infrastructure projects with private participation concluded in 2008. In Bangladesh the two-year management contract for Chittagong Container Terminal concluded. In India the ROT (rehabilitate, operate, and transfer) concession contract for Udaipur Bypass, whose term was 11 years and 8 months, concluded.



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Table 1 Infrastructure projects with private participation reaching financial or contractual closure in South Asia in 2008

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

Energy										
	Country	Project name	Project status	Sub-sector	Type of PPI	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Contract period (years)	Main sponsors
1	Bangladesh	Titas Gas Transmission and Distribution Co. Ltd.	Operational	Natural gas	Divestiture (partial)	25	31	10,890 km	..	Others (..%, ..)
2	India	Belgaum Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	33.5	24.8 MW	..	Indian Energy Limited (..%, United Kingdom)
3	India	Bhoruka Power	Operational	Electricity	Greenfield project (BOO)	100	12	6 MW	..	Bhoruka Steel Ltd. (100%, ..)
4	India	Essar Power Gujarat Limited (Jamnagar Power Plant)	Construction	Electricity	Greenfield project (BOO)	100	1,129	1,200 MW	25	Essar Group (..%, India)
5	India	Faridabad City Gas Distribution Project	Construction	Natural gas	Greenfield project (BOO)	50	55.78	20 km	25	Adani Group (50%, India)
6	India	Jaypee Powergrid Ltd.	Construction	Electricity	Greenfield project (BOO)	74	234	248 km	..	Jaiprakash Associates Ltd. (74%, India)
7	India	Jharkhand Thermal Power Plant Phase I	Construction	Electricity	Greenfield project (BOO)	100	296	270 MW	25	Adhunik Group (..%, India)
8	India	Jindal Orissa Thermal Power Plant	Construction	Electricity	Greenfield project (BOO)	100	682	600 MW	25	B C Jindal Group (..%, India), Soyuz Trading (..%, India)
9	India	Lanco Kondapalli CCPP Expansion St-II	Construction	Electricity	Greenfield project (merchant)	100	278	366 MW	25	Lanco Group (100%, India)
10	India	Maithon Right Bank Power Project	Construction	Electricity	Greenfield project (BOO)	74	1,042	1,050 MW	25	Tata Enterprises (74%, India)
11	India	Monnet Ispat Power Project	Construction	Electricity	Greenfield project (BOO)	100	1,401	1,005 MW	25	Monnet Group (..%, India)
12	India	Mundra Ultra Mega Power Project	Construction	Electricity	Greenfield project (BOO)	100	4,200	4,000 MW	25	Tata Enterprises (100%, India)
13	India	Punjab Biomass Power Ltd.	Construction	Electricity	Greenfield project (BOO)	100	13	24 MW	20	Gammon India Ltd. (..%, India)

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14	India	Rosa Thermal Power Project Phase II	Construction	Electricity	Greenfield project (BOO)	100	585	600 MW	25	Reliance ADA Group (100%, India)
15	India	Sidhi Thermal Power Plant	Construction	Electricity	Greenfield project (BOO)	100	984	1,320 MW	25	Jaiprakash Associates Ltd. (100%, India)
16	India	Usegaon Thermal Power Project	Construction	Electricity	Greenfield project (BOO)	100	152	120 MW	25	Gupta Corp. (..%, India)
17	Pakistan	Almoiz Bagasse-Fired Cogeneration Plant	Operational	Electricity	Greenfield project (BOO)	100	7.5	27 MW	10	Almoiz Industries Limited (100%, Pakistan)
18	Pakistan	Engro Power Project	Construction	Electricity	Greenfield project (BOO)	100	205	227 MW	25	Engro Chemical Pakistan Ltd. (100%, Pakistan)
19	Pakistan	Halmore Bhikki Power Project	Construction	Electricity	Greenfield project (BOO)	100	231	225 MW	..	Halmore Power Generation Company Ltd. (100%, Pakistan)
20	Pakistan	Nishat Chunian Power Project	Construction	Electricity	Greenfield project (BOO)	100	235	200 MW	25	Nishat Group of Industries (100%, Pakistan)
21	Pakistan	Nishat Power Project	Construction	Electricity	Greenfield project (BOO)	100	204	200 MW	..	Nishat Group of Industries (100%, Pakistan)

Transport

	Country	Project name	Project status	Sub-sector	Type of PPI	Private equity (%)	Investment commitment (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1	India	Khalghat-Borghat Highway	Operational	Roads	Concession (BROT)	100	185	n.a.	82.5 km	SEW Infrastructure (49%, India), Navayuga Group (51%, India)
2	India	Surat Dahisar NH-8	Operational	Roads	Concession (BROT)	100	664	n.a.	239 km	IRB Infrastructure Developers Ltd. (90%, India)
3	India	Ashok Highways-Bhandara Road Project (NH-6)	Operational	Roads	Concession (BROT)	100	176	n.a.	86 km	Infrastructure Development Finance Company Ltd. (IDFC) (..%, India), Ashoka Buildcon Ltd. (..%, India)
4	India	Katni Bypass NH-7	Operational	Roads	Greenfield project (BOT)	100	15	n.a.	35.2 km	Ashoka Buildcon Ltd. (99%, India)



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5	India	Panipat Jalandhar of NH-1	Operational	Roads	Concession (BROT)	100	1,000	n.a.	291 km	Isolux (51%, Spain), Soma Enterprise Ltd. (39%, India)
6	India	Gurgaon Kotputli Jaipur NH-8	Operational	Roads	Concession (BROT)	100	704	n.a.	225.6 km	KMC Constructions Ltd. (49%, India), Emirates Trading Agency LLC (51%, United Arab Emirates)
7	India	Chikaluripet-Vijayawada NH-5	Operational	Roads	Concession (BROT)	100	197	n.a.	82.5 km	IJM Corporation Berhad (..%, Malaysia), Infrastructure Development Finance Company Ltd. (IDFC) (..%, India)
8	India	Ennore Iron Ore Terminal	Construction	Seaports	Greenfield project (BOT)	84	117	n.a.	20 throughput (thousands)	Sical (63%, ..)
9	India	Mumbai Port Container Terminal Project	Construction	Seaports	Greenfield project (BOT)	100	238	n.a.	150 throughput (thousands)	Gammon India Ltd. (50%, India), ACS Group (Actividades de Construccion y Servicios) (50%, Spain)
10	India	Mumbai Metro One (Line 1) Project	Construction	Railways	Greenfield project (BOT)	74	542	n.a.	13 km	Reliance ADA Group (69%, India)
11	India	Halol-Godhra-Shamlaji, Ahmedabad-Viramgam-Maliya, Rajkot-Jamnagar-Vadinar	Operational	Roads	Concession (BROT)	100	1,691	n.a.	493 km	Larsen & Toubro Limited (100%, India)
12	Pakistan	Qasim Grain and Fertilizer Terminal	Construction	Seaports	Greenfield project (BOT)	100	92	n.a.	..	Akbar Group (50%, Pakistan), Fauji Foundation (50%, Pakistan)
13	Pakistan	Second Container Terminal at Port Mohammad Qasim	Construction	Seaports	Greenfield project (BOT)	100	211	n.a.	1,175 throughput (thousands)	DP World (100%, United Arab Emirates)



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Water and sewerage									
	Country	Project name	Project status	Subsector	Type of PPI	Investment commitment (US\$ millions)	Contract period (years)	Capacity size and type	Main sponsors
1	India	Haldia Water Management Limited	Operational	Treatment plants	Concession (BROT)	75.9	25	114 cubic meters per day (thousands)	Ranhill Bhd (34%, Malaysia), Infrastructure Development Finance Company Ltd. (IDFC) (34%, India), Tata Enterprises (34%, India)
2	India	Water Management Contract for Mysore City	Operational	Utilities	Management and lease contract (management contract)	n.a.	6	133,000 connections	Tata Enterprises (100%, India)