

# PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 13

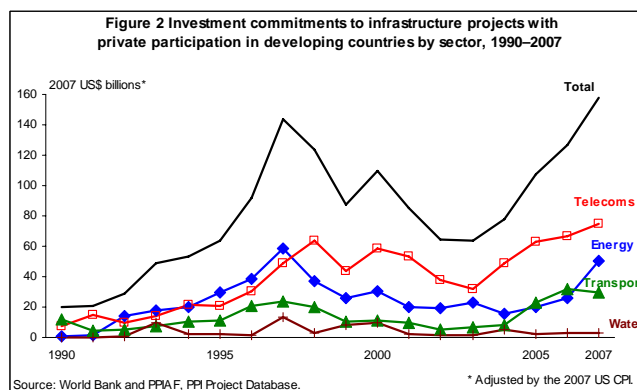
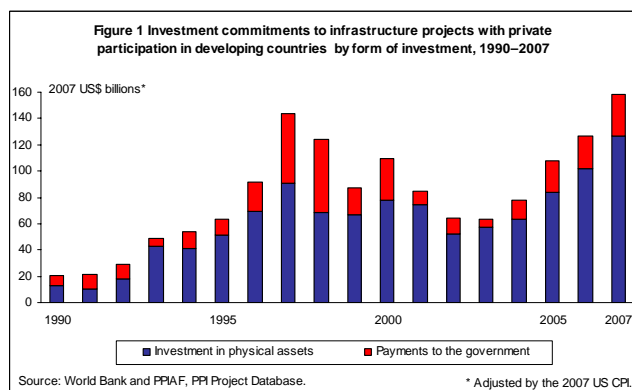
November 2008

## Private activity in infrastructure reached a new peak in 2007

Investment commitments to infrastructure projects with private participation in low- and middle-income countries grew by 25% to US\$158 billion in 2007, according to just-released data from the Private Participation in Infrastructure Project Database.<sup>1</sup>

Investment commitments (hereafter, *investment*) in developing countries grew in real terms for the fourth consecutive year, reaching a level 10% higher than the previous peak, in 1997 (table 1).<sup>2</sup> Investment in physical assets grew by 24% to US\$126.6 billion, reaching a new peak for the second consecutive year (figure 1). Payments to the government (such as spectrum or concession fees and divestiture revenues) grew by 27% to US\$31.5 billion, a level not seen since 2000.

As in previous years, the picture varied across sectors (figure 2). Energy and telecommunications drove most of the year's growth. Energy had growth of 96%, reaching its second highest level since 1990. Telecommunications saw an increase of 13% to its highest level ever. The sector accounted for 47% of investment in 2007. Transport had a 7% decline, but the level in 2007 was still the second highest for the sector. Water investment amounted to US\$3 billion, well below the peak of 1997 but within the US\$2–3 billion range of the previous three years.



The number of private infrastructure projects implemented in 2007 fell by 7% to 288 (table 2). But the situation varied across sectors. The number of projects rose by about 8% in energy and in water and sewerage, while it dropped by 12% in telecommunications and by more than 25% in transport.

Several factors explain the divergence within sectors between trends in investment and project numbers. First, new projects accounted for US\$73 billion, or 46%, of the total investment for the year,

This note was produced by Ada Karina Izaguirre, infrastructure specialist, and Edouard Perard, consultant, Finance, Economics, and Urban Development Department, Sustainable Development Network, World Bank.

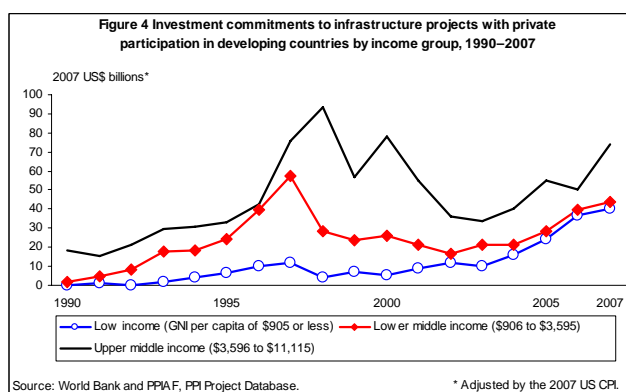
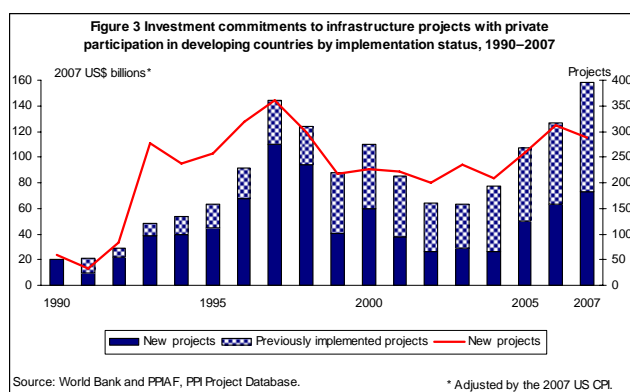
<sup>1</sup> Data on infrastructure projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. Additional investments in some projects may 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.

<sup>2</sup> All dollar amounts in this note are expressed in 2007 U.S. dollars adjusted by using the 2007 U.S. consumer price index.

while projects closing in 1990–2006 claimed the other US\$85 billion (figure 3). Telecommunications played the biggest part in this: projects reaching closure in 2007 accounted for just 6% of the year's investment in the sector, while those closing in previous years represented 94% (US\$70.5 billion). Energy also contributed: projects reaching closure in 2007 accounted for 80% of the year's investment, while those closing in previous years represented the remaining 20%.

Second, the median project size in 2007 (US\$78 million) was almost 9% larger than that in 2006 and more than twice as large as those in 2002–05. Third, a few large projects (those over US\$800 million) in energy and transport accounted for a significant share of the investment in 2007. Fourteen large energy projects accounted for 53% of the year's investment, and seven large transport projects for 36%.

All country income groups saw investment grow in 2007, though at different rates (figure 4).<sup>3</sup> Investment in upper-middle-income countries grew by 46%, driven by energy and, to a lesser degree, transport and telecommunications. Low-income and lower-middle-income countries had growth rates of about 10%. In low-income countries investment growth was driven by energy and, to a lesser degree, telecommunications. But the growth in those sectors was offset in part by a decline in transport. India accounted for most of the investment in energy and transport in this income group. In lower-middle-income countries telecommunications and energy accounted for the investment growth.



Investment grew in all developing regions except Sub-Saharan Africa (figure 5). That region saw a decline of about 10% from the level of 2006, the highest in 1990–2007. But the regional peak in that year was driven in part by an unusually large project: the US\$3.4 billion Gautrain light rail project in South Africa, which had government cash support of about US\$3 billion. With that project excluded, investment in 2007 would have been the highest ever in Sub-Saharan Africa. Telecommunications accounted for most of the year's investment.

Europe and Central Asia saw investment grow by about 80%, to reach the region's highest level since 1990. The investment growth was driven by energy (Russian divestitures of generating assets) and telecommunications. The Middle East and North Africa had investment growth of 7%, and South Asia 4%, with both reaching new peak levels.

In Latin America and the Caribbean investment grew by 28%, driven by transport and, to a lesser degree, energy. In East Asia and Pacific investment rose by about 10%, driven by energy and telecommunications. Despite the growth, these two regions, which led in investment in the 1990s, had levels in 2007 that were only around 44% of their peaks, in 1997 for Latin America and in 1998 for East Asia.

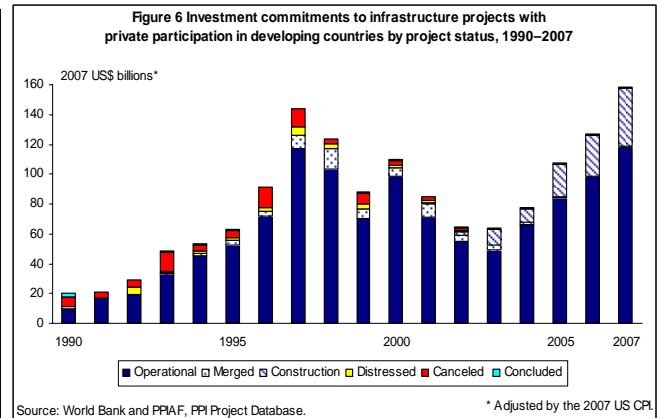
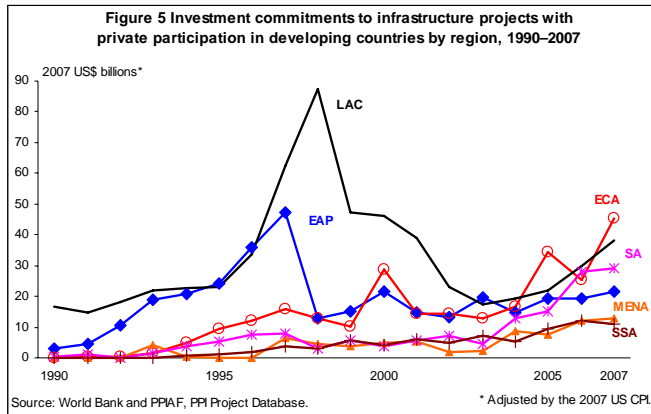
Trends in the number of projects reaching closure varied across regions (see table 2). The number of new projects rose by up to 10% in East Asia and Pacific and in Europe and Central Asia, driven by

<sup>3</sup> There are important differences with the trends by income group presented in PPI data update note 8 (2006). The reason is that four developing countries changed income classification in addition to those indicated in the previous footnote. In the World Bank country classification published in July 2007, Brazil, Bulgaria, and Kazakhstan moved from the lower-middle-income to the upper-middle-income group, while Bhutan moved from the low-income to the lower-middle-income group.

energy. By contrast, the number of new projects declined by 15% in Latin America and the Caribbean, by 23% in Sub-Saharan Africa, and by 25% in South Asia.

Continuing the trends of the previous five years, private activity in 2007 was more evenly distributed across regions than it had been during the boom of the late 1990s.

In 2007, 17 infrastructure projects were canceled or became distressed, bringing the total number for 1990–2007 to 247. Those contracts represent 6% of all infrastructure projects and 8.3% of investment commitments during the period (figure 6). In addition, 10 infrastructure projects (4 in energy, 1 in transport, and 5 in water and sewerage) concluded in 2007, bringing the total number of concluded projects to 107. Those projects represented 2.6% of all infrastructure projects with private participation and 0.5% of total investment in 1990–2007.



A forthcoming note will analyze private activity in infrastructure in more depth.

**Table 1 Investment commitments to infrastructure projects with private participation in developing countries by sector or region, 1997–2007**  
2007 US\$ billions

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Sector</b>											
Energy	58.7	37.0	25.9	30.2	20.0	19.6	23.2	15.7	19.9	25.6	50.0
Electricity	54.5	29.4	22.4	27.5	16.0	13.6	18.6	13.3	17.0	21.4	45.7
Natural gas	4.3	7.6	3.5	2.6	4.0	6.0	4.5	2.3	3.0	4.1	4.3
Telecommunications	48.5	63.7	43.8	58.8	53.0	37.6	31.7	48.7	62.6	66.5	75.0
Transport	23.6	20.2	10.0	10.8	9.5	5.3	7.0	8.0	23.0	32.1	29.8
Airports	0.9	3.8	0.7	2.4	1.6	0.2	0.7	0.9	8.0	8.4	4.3
Railways	5.9	4.2	3.6	1.4	0.9	0.2	1.1	1.3	1.5	8.9	1.4
Seaports	4.3	1.9	3.0	2.4	1.5	2.3	2.2	1.9	6.8	5.7	8.0
Roads	12.5	10.3	2.7	4.6	5.5	2.6	3.0	4.0	6.7	9.1	16.1
Water and sewerage	13.1	3.0	7.9	9.9	2.5	1.8	1.7	5.2	2.1	2.8	3.2
<b>Region</b>											
East Asia and Pacific	47.2	12.8	15.2	21.7	14.7	13.2	19.6	14.9	19.2	19.3	21.5
Europe and Central Asia	16.0	13.0	10.1	28.9	14.4	14.5	12.9	16.7	34.5	25.5	45.5
Latin America and the Caribbean	62.4	87.5	47.3	46.2	39.0	22.9	17.3	19.2	21.9	30.0	38.3
Middle East and North Africa	6.5	4.4	3.6	5.0	5.1	1.8	2.1	8.7	7.5	12.0	12.8
South Asia	8.0	3.0	5.7	3.7	5.6	7.1	4.5	12.8	15.3	27.9	29.0
Sub-Saharan Africa	3.8	3.2	5.7	4.2	6.1	4.8	7.1	5.3	9.3	12.2	11.0
<b>Total</b>	<b>144.0</b>	<b>123.9</b>	<b>87.7</b>	<b>109.6</b>	<b>85.0</b>	<b>64.3</b>	<b>63.6</b>	<b>77.6</b>	<b>107.6</b>	<b>126.9</b>	<b>158.1</b>

Note: Includes annual investment commitments to projects reaching closure in 1990–2007.  
Source: World Bank and PPIAF, PPI Project Database.

**Table 2 Infrastructure projects with private participation in developing countries by sector or region, 1997–2007**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Sector</b>											
Energy	157	96	83	84	92	111	103	78	98	99	107
Electricity	129	80	74	73	65	65	57	52	70	86	90
Natural gas	28	17	9	11	28	46	46	26	28	13	17
Telecommunications	64	71	39	39	50	14	31	30	23	33	29
Transport	100	98	57	63	39	30	56	47	77	122	90
Airports	7	13	8	17	12	3	3	5	10	16	12
Railways	12	9	10	8	3	2	7	4	5	8	3
Seaports	23	27	18	21	10	9	14	20	39	35	16
Roads	58	49	21	17	14	16	32	19	23	63	59
Water and sewerage	39	32	38	39	40	44	44	53	61	57	62
<b>Region</b>											
East Asia and Pacific	113	48	46	48	70	86	98	80	102	97	104
Europe and Central Asia	42	41	26	28	30	21	30	22	38	39	43
Latin America and the Caribbean	152	151	83	93	59	62	49	48	37	54	46
Middle East and North Africa	7	9	6	11	14	5	5	14	17	13	13
South Asia	18	20	25	14	19	16	26	25	25	77	58
Sub-Saharan Africa	28	28	31	31	29	9	26	19	40	31	24
<b>Total</b>	<b>360</b>	<b>297</b>	<b>217</b>	<b>225</b>	<b>221</b>	<b>199</b>	<b>234</b>	<b>208</b>	<b>259</b>	<b>311</b>	<b>288</b>

Source: World Bank and PPIAF, PPI Project Database.