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Revival of private participation in developing country infrastructure

A look at recent trends and their policy implications

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Private participation in infrastructure projects in developing countries plummeted after the 1997 Asian crisis and followed a broadly declining trend for several years afterward. However, in 2004 and 2005 investment in such projects increased sharply. Meanwhile, the distribution of investment across sectors and regions, and the allocation of risks between public and private parties, were shifting. Private sponsors started putting more emphasis on risk mitigation strategies. To take advantage of private sponsors' renewed interest in infrastructure projects, governments need to create risk sharing arrangements that attract private operators while also benefiting governments, taxpayers, and users.

Total investment commitments to private infrastructure projects in developing countries (hereafter, simply *investment*) grew by 70 percent in 2004–05, to reach US\$95 billion.¹ As a share of developing country GDP, investment increased from 0.7 percent in 2003 to 1 percent in 2005. In nominal terms investment levels in 2005 were close to their 1997 peak. Yet in real terms they were still about 30 percent lower (figure 1)—and as a share of GDP they were almost 50 percent below the peak. But it was the first time since 1997 that investment rose two years in a row, and by any measure, the growth was substantial.

The growth was driven mainly by one sector: telecommunications. Indeed, that sector had dominated investment since 1998, and its share in 2001–05 was substantially larger than in the 1990s (figure 2). In 2005 telecommunications claimed 63 percent of the total; at US\$60 billion, investment in the sector was just 3 percent below its 1998 peak. With telecommunications excluded, investment still rose in both 2004 and

2005, though more modestly: at US\$35 billion in 2005, investment in the other sectors was a full 60 percent below its peak.

Fewer transactions

While investment increased in 2004–05, the number of projects reaching financial closure fell. In 2005, 163 transactions were concluded—among the smallest numbers since the early 1990s. Transactions declined in all sectors except water, where 41 projects reached financial closure in 2005, the largest number since 1990.²

Two main factors explain the diverging trends in investment levels and transaction numbers. First, recent investments were driven more by existing projects than by new ones. Since 2002 projects reaching financial closure each year had accounted for around 40 percent of that year's investment, while “old” projects accounted for the other 60 percent. By contrast, until 1998 new projects had accounted for 70 percent, and old ones for 30 percent.

Second, projects grew in size, with the median rising from a range of US\$20–36 million in 2002–04 to US\$60 million in 2005. In addition,

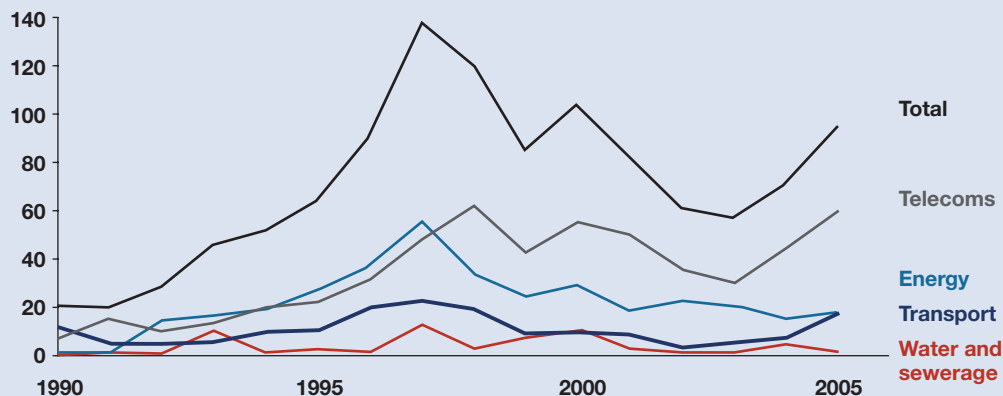
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FIGURE 1**Substantial new growth in investment**

Investment commitments to infrastructure projects with private participation in developing countries by sector, 1990–2005

2005 US\$ billions



Source: World Bank and PPIAF, PPI Project Database.

Private investment in infrastructure increased substantially in the past two years

projects of more than US\$500 million accounted for 12 percent of transactions in 2005, twice their share in the previous three years. Large transactions were most prominent in transport and energy: the five largest projects in each sector accounted for 48 percent and 33 percent, respectively, of sector investments.

A more balanced distribution

Unlike for sectors, the distribution of investment across developing regions became increasingly balanced. In 1990–2000 Latin America had by far the largest share of investment, with almost 50 percent. East Asia followed with 27 percent. Each of the other regions accounted for only a small share. In 2001–05, by contrast, investment was much more equally distributed. Latin America remained in the lead, but with only 31 percent. Eastern Europe and Central Asia followed with 27 percent, East Asia with 18 percent, and the other three regions doubled their shares.

Investment also became more evenly distributed across country income groups. Low-income countries raised their share of investment from 7 percent in 1990–2000 to 17 percent in 2001–05, reaching new peaks in the last two years of that period. Lower-middle-income countries saw their share decline from 51 to 42 percent, with invest-

ment in 2005 at about 40 percent of the peak. Upper-middle-income countries had their share drop from 42 to 40 percent, with investment in 2005 (about US\$40 billion) close to the peak.

As a share of GDP the investment levels in 2001–05 were even more similar across income groups, ranging from 0.8 percent in lower-middle-income countries to 1 percent in upper-middle-income countries and 1.1 percent in low-income countries. These compare with 0.6 percent of GDP in low-income countries and 1.2 percent in both lower-middle- and upper-middle-income countries in 1990–2000 (figure 3).

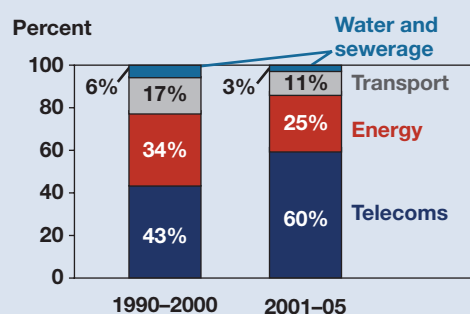
Recent private activity also became somewhat less concentrated by country. In 2001–05 the top 10 countries by investment accounted for 59 percent of the total, down from 70 percent in 1990–2000. Even so, private activity remained highly concentrated: of the 110 countries with private activity in 2001–05, 20 countries attracted 80 percent of the total investment.

A shift in project types

Greenfield projects accounted for a growing share of investment in all sectors in recent years. In telecommunications their share increased from 40 percent in the 1990s to 60 percent in

FIGURE 2**Telecoms attracting a growing share**

Sector distribution of investment commitments to infrastructure projects with private participation in developing countries, 1990–2000 and 2001–05



Source: World Bank and PPIAF, PPI Project Database.

2001–05, in energy from 54 to 59 percent, in transport from 36 to 50 percent, and in water from 9 to 36 percent.

A similar trend is apparent across regions. In 1990–2000 greenfield projects accounted for the largest share of investment in just three of the six regions (East Asia, South Asia, and Sub-Saharan Africa). In 2001–05, by contrast, greenfield projects accounted for the largest share

of investment in all regions but one (Eastern Europe and Central Asia). This shift is particularly noticeable in Latin America: in 1990–2000 greenfield projects represented only 25 percent of investment in the region, while in 2001–05 their share had grown to 46 percent.

The focus on management and lease contracts also grew somewhat. Management contracts increased from 2 percent of projects in the 1990s to 6 percent in 2001–05, while lease contracts rose from 2 percent to 4 percent.

More diversification of sponsors

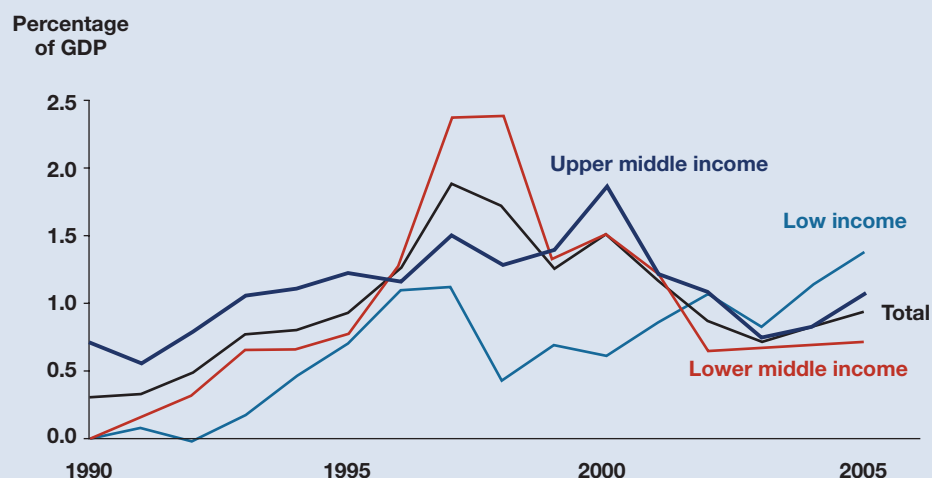
The concentration of activity by private sponsor changed little: the top 10 sponsors had projects accounting for 30 percent of investment in 2001–05, similar to their share in 1990–2001. But the list of top 10 sponsors changed substantially, with only 3 sponsors (Telefónica, Telecom Italia, and France Telecom) appearing in the lists for both periods.³ Emerging market firms became more prominent: 4 were among the top 10 in 2001–05, up from only 2 in 1990–2001.⁴

The growing diversification of private sponsors is even more apparent if the focus is limited to

Risk sharing arrangements are needed that attract private operators while also benefiting governments, taxpayers, and users

FIGURE 3**A more even distribution across income groups**

Investment commitments to infrastructure projects with private participation as a share of GDP by country income group, 1990–2005



Note: Income classifications are by the World Bank. Low-income countries are those with a gross national income (GNI) per capita in 2004 of US\$825 or less; lower middle income, US\$826–3,255; and upper middle income, US\$3,256–10,065.

Source: World Bank and PPIAF, PPI Project Database.

investments in projects reaching financial closure in 2001 onward (that is, if “old” projects are excluded). In this case the investment share of the top 10 sponsors falls from more than 30 percent in 1990–2001 to 27 percent in 2001–05. In addition, the list of top 10 sponsors changes almost completely between the two periods. Only 2 sponsors (Electricité de France and Telecom Italia) appear in both lists. Further, emerging market firms become much more prominent: 6 appear in the top 10 for 2001–05, compared with only 2 for 1990–2001.

Policy implications

The recent upward trend in investment in infrastructure projects with private participation appears to be relatively robust: a more diversified group of private sponsors (including many from emerging economies) is active in more regions and countries than ever before.

Recent trends also suggest that private sponsors now put more emphasis than before on risk mitigation strategies. First, the larger share of investment going to telecommunications suggests that sponsors are giving priority to sectors where consumer prices tend to be set at levels fully covering costs and where undue political intervention is relatively rare. Second, the focus on greenfield projects suggests that sponsors are seeking protection from some political and regulatory risks. Indeed, in energy and water, greenfield projects primarily involve bulk facilities (power plants, water treatment plants) and include off-take agreements with a public party, shielding private operators from the politically sensitive consumer market. Finally, the somewhat greater focus on management and lease contracts, which require no private investment, similarly suggests a desire to reduce private sector risks.

A healthy concern for risks among private sponsors, and the adoption of pragmatic strategies to limit their risk exposure, are certainly not bad things. But governments need to realize that limited forms of private participation may provide

only limited benefits for the health of infrastructure sectors. The emphasis on greenfield bulk facilities might not help with the maintenance of existing networks. Moreover, where projects for bulk facilities involve off-take agreements with a public buyer, they limit private operators’ incentives to ensure that consumer tariffs are set at levels that recover costs. Management and lease contracts may similarly limit such incentives, since with these contracts private operators have no need to recoup the cost of major rehabilitation or new investments.

In today’s environment, where private infrastructure operators are willing to invest but are also more concerned about taking on risk, the onus is on policymakers to ensure that the investment climate promotes risk sharing arrangements that attract private operators while also benefiting governments, taxpayers, and users.

Notes

1. Unless otherwise stated, the investment data in this note are in real terms (2005 U.S. dollars). The data are from the Private Participation in Infrastructure (PPI) Project Database and include projects that reached financial closure between 1990 and 2005. The data refer to investment commitments (not disbursements) and cover sector expansion as well as acquisition of government assets. While the data here are in real terms, those on the PPI Web site are in current U.S. dollars. Real investment data were adjusted by the U.S. consumer price index using 2005 as the base year. For more information, see the Web site (ppi.worldbank.org).

2. For an analysis of recent trends in private participation in water, see Philippe Marin and Ada Karina Izaguirre, “Private Participation in Water: Toward a New Generation of Projects?” Gridlines series, no. 13 (PPIAF, Washington, D.C., 2006).

3. For more information on top sponsors in 1990–2001, see World Bank, *Private Participation in Infrastructure: Trends in Developing Countries in 1990–2001* (Washington, D.C., 2003).

4. These data confirm the finding of a recent study that developing country investors have become a major source of investment financing for infrastructure projects with private participation. See Michael Schur, Stephan von Klauudy, and Georgina Dellacha, “The Role of Developing Country Firms in Infrastructure: A New Class of Investors Emerges,” Gridlines series, no. 3 (PPIAF, Washington, D.C., 2006).

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