

III

Private Sector Investment

Most investment in infrastructure in the region has come from the public sector. Private sector investment in infrastructure did not flow in as initially expected. During 1984–2005, the total private sector investment in the region’s infrastructure was about \$284 billion, or a modest average \$12.9 billion per annum (Table 2 and Appendix tables 4.1–4.4). In 2005, as a proportion of the total GDP, private investment in infrastructure accounted for only 0.7% of that in Asia and the Pacific.

During the last two decades, private sector investment in the region’s infrastructure has fluctuated widely, reflecting the high sensitivity to macroeconomic stability and the general investment climate (Figure 16). After an impressive rise in the early 1990s, private sector investment in the region’s infrastructure peaked during 1994–1997 and fell sharply following the East Asian crisis. About 40% of the total investment during the 21-year period 1984–2004 was in 1994–1997. At the regional level, private sector investment in infrastructure has yet to recover fully to the mid-1990s level, which is a main challenge facing the region.

Private sector investment in infrastructure also showed a wide variation across countries and subregions, largely reflecting differences in development of policy and institutional environment, income levels, and approaches of governments. Southeast Asia started attracting significant private sector investment in infrastructure early and captured the lion’s share of it (about \$136.6 billion), accounting for almost half the region’s total during 1984–2005 (Figure 17). East Asia and South Asia were the next two subregions to attract significant private sector investment, each accounting for about a quarter. Private sector investment in infrastructure flowing to Central Asia and the Pacific was low or negligible.

Table 2: Cumulative Private Sector Investment in Infrastructure by Region, 1984–2005

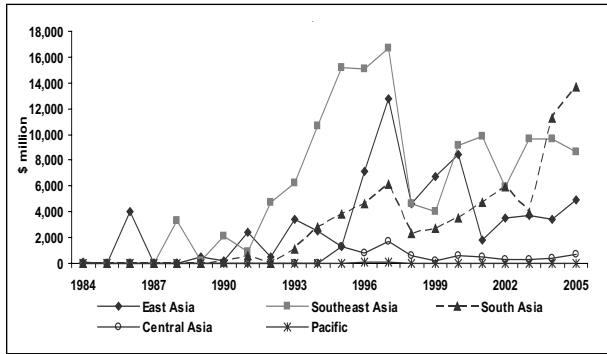
Region	Total Investment	
	(\$ million)	% Share
East Asia	72,020.8	25.4
Southeast Asia	136,569.4	48.1
South Asia	67,536.3	23.8
Central Asia	7,545.8	2.7
Pacific	336.0	0.1
Asia	284,008.3	29.5
Europe	174,529.5	18.1
Latin America and the Caribbean	424,196.9	44.1
Middle East and North Africa	42,486.0	4.4
Sub-Saharan Africa	36,617.1	3.8
Total	961,837.8	100.0

Notes: Canceled projects are not included. Asia refers to ADB’s developing member countries.

Source: World Bank, Private Participation in Infrastructure Database (http://ppi.worldbank.org/explore/ppi_exploreDetail.aspx?mode=group&panel=sector&results=0).

Private sector investment in infrastructure is highly concentrated in some countries (Appendix tables 4.1 and 4.2). The top six countries—the PRC (25.3%), India (17.0%), Malaysia (15.5%), Philippines (10.9%), Thailand (10.5%), and Indonesia (8.8%)—account for almost 90% of the total during 1984–2005. Country-level time series data indicate that private sector investment in infrastructure has not recovered to pre-crisis levels in several Southeast Asian DMCs, including Indonesia, Malaysia, Philippines, and Thailand. In contrast, private sector investment in infrastructure in the PRC and India was generally unaffected by the East Asian crisis. In fact, much of the private sector investment in infrastructure in India took place after the crisis, and has increased in recent years. This

Figure 16: Pattern of Private Investment in Asia's Infrastructure, 1984–2005



Source: World Bank, Private Participation in Infrastructure Database (http://ppi.worldbank.org/explore/ppi_exploreDetail.aspx?mode=group&panel=sector&results=0).

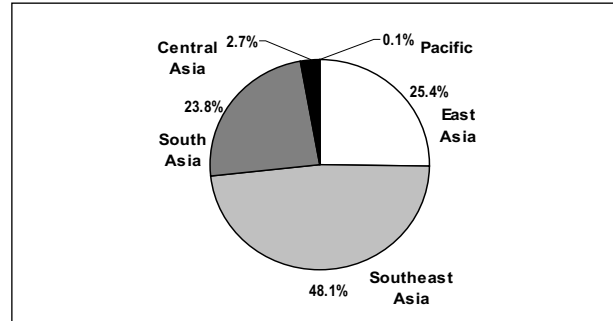
reflects the lag in reform in India compared to East and Southeast Asia and confirms that private sector investment can come back.

Figure 18 shows that energy (39.6%), telecom (35.9%), and transport (18.8%) accounted for most of the private sector investment in infrastructure in the region during 1984–2005,¹⁵ with very little going to water and sewerage. The levels of investment largely reflect basic sector characteristics (e.g., technology, competition, cost recovery, and legal and regulatory requirements) or the level of sector reforms that (1) affect private sector participation; and (2) suggest lower scope for private sector investment flows in water supply, sanitation, and waste management than in the other subsectors.

“Greenfield” projects accounted for more than two thirds of the total, attracted most of the private sector investment in infrastructure in the region (Figure 19 and Appendix table 4.2), and comprised the most investments in all subregions except Central Asia. Divestiture was the next largest form of investment in the region, including in Central Asia, East Asia, and South Asia. The flow of private sector investment under concession arrangements in the region has been small except in Southeast Asia and the Pacific. Management and lease contracts accounted for a negligible part of such fund flows. East Asia’s approach has been more cautious than that in Latin America and East Europe, which proceeded without the deep sectoral and institutional reforms required to facilitate strong private sector participation.¹⁶ The approach of the rest of Asia and the Pacific has been similar to that in East Asia. Southeast Asia attracted an early flow of private funds, including concession agreements, but the subregion’s experience with such agreements has not encouraged its expansion.

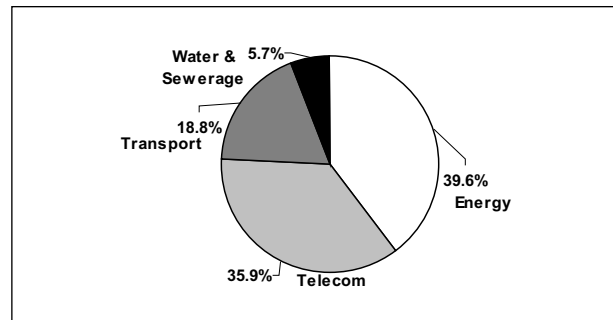
ADB has catalyzed the mobilization of private funds, either through direct involvement in projects

Figure 17: Private Sector Investment in Infrastructure by Asia's Subregion Share, 1984–2005



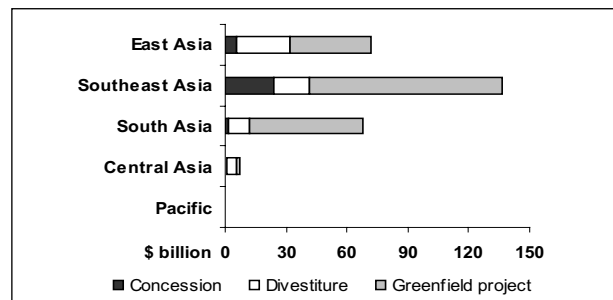
Source: World Bank, Private Participation in Infrastructure Database (http://ppi.worldbank.org/explore/ppi_exploreDetail.aspx?mode=group&panel=sector&results=0).

Figure 18: Private Sector Investment in Infrastructure by Sector Share, 1984–2005



Source: World Bank, Private Participation in Infrastructure Database (http://ppi.worldbank.org/explore/ppi_exploreDetail.aspx?mode=group&panel=sector&results=0).

Figure 19: Private Sector Investment in Infrastructure in Asia by Type, 1984–2005



Note: Management and lease contract is only 0.1% of the DMCs' total private sector investment in infrastructure.

Source: World Bank, Private Participation in Infrastructure Database (http://ppi.worldbank.org/explore/ppi_exploreDetail.aspx?mode=group&panel=sector&results=0).

or indirectly through reforms. For example, ADB was directly involved in projects such as Manila Water Company and Maynilad Water Services in the Philippines and the Chengdu Water Supply project in the PRC, and has supported reforms such as the Gujarat Power Sector Reforms in India. The region has now gained significant experience in mobilizing private finances, and can reenergize the flow of private funds. ADB has a continuing role in this area through reform, lending and guarantee operations, knowledge dissemination, and capacity building.