Private sector management and financing of airports has continued to expand in developing countries. Long-term concessions for airports are the predominant model today, with governments often taking a minority shareholding in the venture. Careful attention to policy design, regulatory issues, and management of concessions will continue to be important in ensuring that private participation delivers efficient and effective airport infrastructure services.

The private sector has played a growing role in airport infrastructure over the past two decades. The United Kingdom launched the trend with the privatization of BAA in 1987. Australia, Austria (Vienna), Denmark (Copenhagen), Germany (Frankfurt, Hamburg), Italy (Naples, Rome), and New Zealand followed. France’s Aeroports de Paris will soon join the group of partially privatized airports.

Developing countries have also been active. In 1990–2005, 38 low- and middle-income countries entered into more than 100 airport contracts ranging from short-term management contracts to long-term build-operate-transfer (BOT) arrangements, concessions and divestitures. These transactions attracted investment commitments of more than US$18 billion, 14 percent of all commitments to transport projects with private participation in developing countries.

Governments often bring the private sector into airport infrastructure activities to deal with the concerns about maintenance, cost-effectiveness, and adequate capacity expansion that emerged under government provision. This move also reduces fiscal pressures and risks and can improve the government balance sheet.

For the private sector, sound airport infrastructure businesses offer financial returns, given the risks, that make private investment and management possible. Historically, growth in the demand for air travel, and thus airport infrastructure, has outpaced economic growth, and this pattern is likely to continue. Deregulation has led to growth in the airlines industry that has benefited even small, often regional airports. Moreover, users of airport services expect to pay for valuable, cost-effective services, and that usually reduces political pressures on airport tariffs and finances. As in other infrastructure businesses with substantial fixed assets, however, private participation schemes require robust, policy-driven regulatory or contractual frameworks to succeed.

Recent activity has marked the end of a slowdown that started in 2001. In 2005, 10 private airport contracts reached financial closure. Investment commitments totaled more than US$7.5 billion, the highest ever in developing countries (figure 1). The number of transactions was also up. Large transactions occurred in Hungary, India, and Turkey, intended to cope with the growth in air services resulting from economic growth and airline deregulation. Recent activity also reflects the recovery of air transport business from the effects of the terrorist attacks on September 11, 2001.

Private participation in airports has generated significant funds for governments. Of the
US$18 billion in investment commitments in 1990–2005, half reflected the price paid for the value of the existing business (or a share of it) through purchases of government equity or through concession and lease fees. The other half represented commitments for modernizing and expanding airport infrastructure.

A widening distribution of activity
Latin America and East Asia were the leading regions in 1990–2001, accounting for 61 percent of projects and 75 percent of investment flows. But recent activity, measured by number of transactions, has been more evenly distributed across regions.

Latin America has remained the most active region, though its share of transactions declined from 39 percent in 1990–2001 to 27 percent in 2002–05. Airport concessions accounted for almost 75 percent of the airport transactions in the region.

Eastern Europe and Central Asia has become the second most active region, increasing its share of transactions from 17 percent in 1990–2001 to 23 percent in 2002–05. Thanks to the Ataturk and Budapest concessions, the region accounted for 60 percent of investment flows in 2002–05. Divestitures and BOT contracts, predominant in the 1990s, were overtaken by concessions in 2002–05.

East Asia and Pacific has moved into third place with 18 percent of transactions in 2002–05. Private participation has occurred primarily through “greenfield” contracts to build new facilities and divestitures of minority stakes in state-owned enterprises.

South Asia has recently seen unprecedented activity. In 2005 two greenfield airport BOTs were implemented in India (Bangalore and Hyderabad), and a management contract in Bangladesh. In early 2006 private activity continued to expand with major concessions awarded for Delhi and Mumbai airports.

In the Middle East and North Africa greenfield transactions initially dominated, but in the past few years management contracts have taken the lead. In Sub-Saharan Africa most private activity occurred in the 1990s, mainly through concessions.

The slowdown in private activity in airports appears to have ended

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| FIGURE 1 |
| Investment commitments in 2005 the highest ever |
Investment commitments to airport projects with private participation in developing countries, 1995–2005 (US$ billions)

- **Argentina airport network concession**
- **Ataturk airport concession**
- **Budapest airport concession**
- **Rest of projects**

a. Under renegotiation.
Source: World Bank and PPIAF, PPI Project Database.

![Figure 1](image-url)
The growing and evolving business of private participation in airports

Since 2002 only one transaction (a concession for a terminal in Nigeria) has taken place.

Concessions predominant

Concessions, where the government retains ownership of assets, have remained the most common form of private participation in airport infrastructure in developing countries. They accounted for more than 40 percent of airport contracts and 60 percent of investment commitments in 1990–2005. Developed in Latin America and Sub-Saharan Africa in the 1990s, the concession model is increasingly used in Eastern Europe and Central Asia and in South Asia. The transactions in Hungary and Turkey in 2005 and in India in 2006 all used this model.

Some of the recently awarded concessions involve a greater role for the government. Under the Budapest airport concession the government took a 25 percent stake in the concession holder. The Indian transactions followed a similar approach. A minority stake of this size is usually viewed as giving veto rights over strategic decisions affecting the business and changes to the corporate constitution. But any benefit to the government from these rights needs to be weighed against the resulting risks and obligations of ownership and any adverse implications for the government’s policy and regulatory roles.

Greenfield projects have been the second most common type, accounting for 28 percent of contracts and more than 20 percent of investment commitments in 1990–2005. This type of contract has been used primarily for the construction of new terminals in East Asia and Eastern Europe and Central Asia.

Management and lease contracts have become more common, increasing from 7 percent of transactions in 1990–2001 to more than 20 percent in 2002–05. Countries as diverse as Bangladesh, China, Djibouti, and the Arab Republic of Egypt have awarded management contracts for airports since 2002.

Divestitures have become less frequent, declining from 17 percent of transactions in 1990–2001 to less than 10 percent in 2002–05. Among divestitures, the sale of airport assets (as in the BAA privatization) has played a minor role. Most airport divestitures in developing countries have instead been structured as the sale of minority, noncontrolling stakes, aimed at raising capital rather than transferring control.

Changing sponsors

Most airport contracts have been awarded to consortia of local companies and foreign construction and airport companies. The top five sponsors, ranked by number of projects, accounted for less than 20 percent of transactions in 1990–2005. These top sponsors were Spain’s ACS Group and Aeropuertos Españoles y Navegación Aérea, France’s Aéroports de Paris, Germany’s Fraport, and Argentina’s Corporación América.

Recently, new sponsors have emerged. Hochtief AirPort has played a key role in concessions of Albania’s Tirana airport. The state-owned Malaysia Airport Holdings has taken equity positions in the Delhi and Hyderabad airport contracts. Grupo Ferrovial and Macquarie Airports have been active in airports in developed and, to a lesser degree, developing countries.

Also noteworthy is the emergence of specialized infrastructure consortia, led by firms like Macquarie, that take over airport businesses through transactions usually financed with large debt relative to the value of the airport’s assets. What these highly geared financial structures will mean for the performance and development of airport infrastructure remains unclear. But if adverse shocks occur, such structures may increase the challenges facing not only the airport businesses but also governments, regulators, or both. This underlines the importance of a clear, coherent, and robust policy framework for introducing private participation.

Troubled contracts

The airport sector has seen less contract cancellation and distress (international arbitration or formal request for cancellation) than other infrastructure sectors. Of the 104 airport contracts granted in 1990–2005, only 4—representing 4 percent of investment commitments—had been canceled or were in distress by 2005. These included 2 greenfield terminal projects (in Budapest and Manila) and a concession (Margarita airport in República Bolivariana de Venezuela).

Some other airport contracts have been affected by major renegotiations, though only anecdotal information exists. Two high-profile examples are the Lima airport concession in Peru and the 33-airport concession in Argentina, both renegotiated almost immediately. In both cases the winning bids were perceived as fiscally attractive but raised questions about fundamental financial soundness.

New project sponsors and new financial structures are emerging
In Peru, for an airport with US$54 million in annual sales in 2000, the winning bidder offered an annual payment to the government of 47 percent of annual gross revenues and a commitment to invest more than US$1 billion, including to construct a second runway by the ninth year of the 30-year concession. In 2003, after two years of renegotiations, the concessionaire and the government agreed to adjust the payments and delay the investment obligations (Guasch 2004).

In Argentina the concessionaire offered to invest US$2 billion and pay annual concession fees of US$171 million during the 30-year concession granted in 1998. But once the peso crisis hit in 2000, these terms were under continual dispute. By mid-2006 the concessionaire and the government finally agreed to lower concession fees and investment commitments. Both this case and the Peruvian one show that it is in the interest of governments to carefully assess the underlying financial and economic viability of proposed bids.

**Conclusion**

Private participation in managing and developing airport infrastructure in developing countries has expanded since 1990, with the growth accelerating in the past few years. In bringing in the private sector, governments have tended to prefer concessions over divestures, with continued ownership and contractual interests.

Because concessions can be complex, governments should be clear about their policy objectives and structure the contracts accordingly. They then need to manage their ownership rights and obligations over the life of the contract so that the incentives of the private participants are effectively aligned with government objectives.

Governments can also achieve their objectives through airport divesture, a simpler option. But to do so, they need to design and implement a regulatory regime that assures efficient investors a return on—and the return of—their investment.

**Notes**

1. Data are from the Private Participation in Infrastructure (PPI) Project Database, which includes only low- and middle-income countries as classified by the World Bank. Country classifications and project information are updated annually. All U.S. dollar amounts are in nominal terms as posted on the PPI Web site (ppi.worldbank.org). The database tracks investment commitments, not disbursements. It covers airport projects with potential natural monopoly characteristics (facilities required for takeoff and landing, traffic control towers, and passenger and cargo terminals).

2. The total investment figure includes US$1.6 billion for the Argentine airport network concession granted in 1998. This contract, under renegotiation since 2002, was finally renegotiated in 2006. But no revised investment figures were publicly available at the time of printing.

3. The data do not include ongoing concession or lease fees calculated as a percentage of airport revenues under concession contracts in Bolivia, Costa Rica, Honduras, and Peru.

**References**
