Private Infrastructure—A Bibliography

A guide to World Bank publications on private participation in infrastructure

The annual global market for projects involving private participation in infrastructure (PPI) is estimated at US$60 billion for the past decade, and nearly 2,000 new investment projects, totaling US$1.4 trillion, are under preparation. The World Bank Group—the World Bank, the Multilateral Investment Guarantee Agency (MIGA), and the International Finance Corporation (IFC)—is playing a growing part in this global trend. The Bank has well over 100 PPI projects in the pipeline, the IFC has participated in 100 more PPI projects, and MIGA is increasingly involved in providing guarantees to PPI projects.

In the course of its work, the Bank Group is amassing and disseminating information on the legal, regulatory, institutional, and transactional issues confronting PPI projects. This Note is a guide to some especially useful English-language publications and reports relating to private participation in infrastructure that the Bank Group has issued since 1992. Information on how to get copies is given in the margin on the third page.

Multisectoral reports

The most wide-ranging Bank publication on PPI is World Development Report 1994: Infrastructure for Development (PUB, 1994), which explores ways in which developing countries can improve the provision and quality of infrastructure services. The report discusses and evaluates options for private provision in the light of experience in infrastructure projects. Its bibliography is a good guide to further sources of information on PPI issues.


Meeting the Infrastructure Challenge in Latin America and the Caribbean (PUB, 1994) covers lessons, investment needs, and the role of the Bank and other multilateral institutions. "Infrastructure Development in East Asia and Pacific: Toward a New Public-Private Partnership" (EAO, 1995, Kohli) reviews constraints and offers a framework for supporting PPI in the light of East Asia's experience. Decentralizing Infrastructure: Advantages and Limitations (PUB, 1995, Estache) looks at decentralization and efficient delivery of infrastructure services by local governments. A single-country, multisectoral PPI study, "Thailand: Increasing Private Participation and Improving Efficiency in State Enterprises" (PIC, 1994, #13132-th), spans the energy, power, telecommunications, transport, and water and sanitation sectors. Welfare Con-
Past Notes in this series have covered PPI topics (these Notes are also now available on-line at http://www.worldbank.org/html/fpd/notes/note-list.html). "Back to the Future—The Potential in Infrastructure Privatization" (FPD Note #30) asks whether the current privatization wave will lead to lasting welfare gains or whether it is part of a historical cycle of privatization and nationalization. Drawing on a database maintained by the PPI group in the Private Sector Development Department, "The Private Infrastructure Industry: A Global Market of US$60 Billion a Year" (FPD Note #45) provides a short overview of PPI projects since 1984. "The Private Infrastructure Industry: Company Approaches" (FPD Note #49) reviews the firms involved in PPI projects. "The World Bank Contribution to Private Participation in Infrastructure" (FPD Note #50), based on another database main-tained by the PPI group, summarizes Bank operations with PPI components in 1988–94. "Franchising and Privatization" (FPD Note #40) argues that auctioning franchises is the best way to privatize natural monopolies. "Concessions—The Way to Privatize Infrastructure Sector Monopolies" (FPD Note #59) looks at the use of leases, concessions, licenses, and similar tools in privatizing utilities. "Mitigating Commercial Risk in Project Finance" (FPD Note #69) provides a checklist of techniques used by private lenders to mitigate commercial risks.

"Competitive Contracting for Privately Generated Power" (FPD Note #47) analyzes the issues posed by independent power producers (IPPs) in a noncompetitive power sector.

"The Real World of Power Sector Regulation" (FPD Note #50) discusses the political economy of power regulation. "A Template for Power Reform" (FPD Note #54) offers guidelines for creating markets in bulk power by privatizing generation and possibly distribution. "Private Power Financing—From Project Finance to Corporate Finance" (FPD Note #56) argues that to increase IPP financing requires advancing from limited recourse financing to structures with greater balance sheet support. "Lessons from Power Sector Reform in England and Wales" (FPD Note #61) looks at the early results of sector reform.

"Post-Privatization Performance—Regulating Telecommunications in the U.K." (FPD Note #62) scrutinizes British Telecom’s share price performance, looking for signs of regulatory capture. "Subscribing to Monopoly—The Telecom Monopolist’s Lexicon Revisited" (FPD Note #53) disputes the usual rationales for monopoly provision of telecommunications services. And "End of the Line for the Local Loop Monopoly?" (FPD Note #63) takes issue with arguments supporting monopoly provision of local telephony. "Regulating Telecommunications—Lessons from U.S. Price Cap Experience" (FPD Note #65) advises developing countries to avoid rate-of-return regulation and move directly to price caps.

The Project Finance and Guarantees series of short notes from the former Cofinancing and Financial Advisory Services Vice Presidency (CFS) looks at some PPI projects. "World Bank Guarantee Sparks Private Power Investment in Pakistan" (CFS, 6/1995) examines the Hub power project. The first private sector power project to use a World Bank guarantee, this remains the largest private sector infrastructure project supported by the Bank. "Jamaica’s Rockport Private Power Project" (CFS, 1/1995) describes Bank support to Jamaica’s first build-operate-pay power project. Jamaica’s largest private sector infrastructure project, the project was also the first undertaken jointly by the Bank and MIGA. For a longer discussion of Bank guarantees to power projects (Pakistan’s Hub, the Yangzhou Thermal Power Project in China, and the Philippine’s Leyte-Luzon Geothermal Project), see "The World Bank’s Guarantees: Catalyst for Private Flows" (CFS, 1994).

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approaches in Asia, Europe, and Latin America. "Regulating Telecommunications in Developing Countries: Outcomes, Incentives, and Commitment" (PRD, 1995, Galal and Nauriyal) analyzes the experience of seven countries in designing regulatory frameworks for PPI and assesses the impact of the frameworks on private investors. "Regulation, Institutions, and Commitment in Telecommunications: A Comparative Analysis of Five Country Studies" (PRD, 1994, Levy and Spiller) looks at how the institutional endowments of five countries—Argentina, Chile, Jamaica, the Philippines, and the United Kingdom—shaped the countries’ regulatory frameworks. Telecommunications Sector Reform in Asia: Toward a New Pragmatism (PIC, 1994, Smith and Staple) focuses on the challenges of reform in the dynamic Asian economies. It examines regulation, implementation, PPI options, and supply diversification.

**Power**

"Electricity Demand in Asia and the Effects on Energy Supply and the Investment Environment" (IEC, 1995, Ishiguro and Akiyama) argues that, to meet the rapid increase in demand for energy, countries in Asia must go beyond build-operate-transfer (BOT) and build-own-operate (BOO) schemes and develop or strengthen domestic stock and bond markets. "Power Sector Experiences in Asia" (PIC, 1994, Malhotra) draws on the Asian experience for insights into reform strategies that may be appropriate at different stages of private participation. "Reform and Private Participation in the Power Sector of Selected LAC and Industrialized Countries" (LAT, 1994, Covarrubias and Maia) examines sectoral reform and PPI issues through case studies from Argentina, Chile, Colombia, Costa Rica, Jamaica, Norway, Peru, the United Kingdom, and the United States. For a more recent overview of power sector structures and PPI options, see "The Power Sector in LAC: Current Status and Evolving Issues" (LAT, 1995, Moscote, Maia, and Lorenzo).

"Bolivia—Power Sector Reform Technical Assistance Project, Technical Annex" (PIC, 1995, #T6662) reviews the different stages in privatizing Bolivia’s power sector. Another single-country study on sectoral reform is "Colombia—Energy Sector Technical Assistance Project, Technical Annex" (PIC, 1994, #T6469). For an analysis of sectoral reform issues in a country with a great deal of recent experience with private participation, see "The Philippines—Power Sector Study: Structural Framework for the Power Sector" (PIC, 1994, #13313-ph). This study focuses on the structural framework for meeting long-term power needs, providing advice on post-privatization issues. Another sector report, "China—Power Sector Reform: Toward Competition and Improved Performance" (PIC, 1994, #12929-ch), provides an overview of China’s efforts to decentralize decisionmaking and encourage private entry in its power sector as it tries to meet rapidly growing demand for electricity.


**Transport**

Regulatory Reform in Transport: Some Recent Experiences (PUB, 1993, Carbajo) presents case
studies of deregulation and private provision in shipping, railways, trucking, and bus transport in Africa, Latin America, the United Kingdom, and the United States. Single-country, multisectoral studies of deregulation and privatization include "India Transport Sector: Long-Term Issues" (PIC, 1995, #13192) and "Cameroon Transport Sector Technical Assistance Project" (PIC, 1995, #T6559).

"Airport Infrastructure: The Emerging Role of the Private Sector—Recent Experiences Based on 10 Case Studies" (CFS, 1995, Juan) evaluates private provision in the airport sector in ten developing and industrial countries. This report complements Airport Infrastructure: The Emerging Role of the Private Sector (PIC, 1995, Kapur), which looks at different ownership structures.

The Evolution of the World Bank’s Railway Lending (PIC, 1994, Galenson and Thompson) proposes a new framework for Bank lending operations in the rail sector, reviews the private participation in the sector, and evaluates the potential for further private participation. "Best Methods of Railway Restructuring and Privatization" (CFS, 1995, Kopicki and Thompson) gives an overview of private participation issues in the rail sector, and "Japanese National Railway Privatization Study II: Institutionalizing Major Policy Change and Examining Policy Implications" (CFS, 1994, Fukui, Nakamura, Ozaki, Sakamaki, and Mizutani) evaluates Japan’s privatization experience. "Restructuring Regulation of the Rail Industry for the Public Interest" (PSD, 1995, I. Kessides) suggests principles for railway restructuring based on a rethinking of the public sector’s traditional role (also see "Restructuring Regulation of the Railroad Industry, FPD Note 58, October 1995").


Urban water and sanitation