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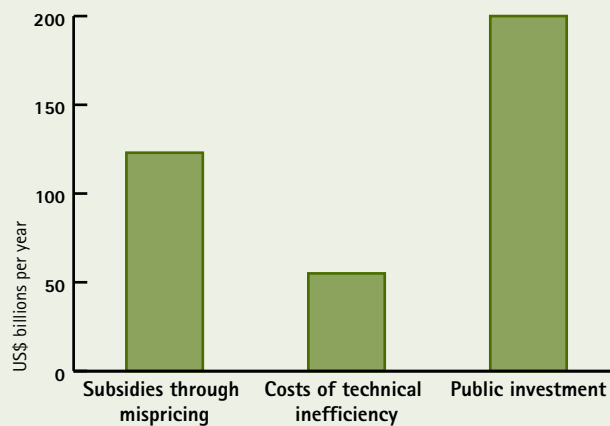
## Foreword

Governments around the world, rich and poor alike, struggle with the challenge of providing modern, efficient, and affordable infrastructure services for their people. This challenge is particularly acute for developing countries, where inadequate infrastructure acts as a significant constraint on economic growth and has a direct impact on the living standards of households. Indeed, some 1.2 billion people lack access to electricity and adequate sanitation, more than 1 billion lack access to clean water, and many have never used a telephone.

For most of the 20th century developing countries looked to their public sectors as the exclusive financiers and operators of infrastructure services. Too often, however, the results proved disappointing. State-owned monopolies were typically charged with multiple objectives, subject to relentless political interference, and plagued by inefficiency. Infrastructure prices in particular tended to be driven by short-term political considerations, often resulting in inadequate revenues even to maintain services, let alone finance service expansion. Costs of technical inefficiency and mispricing were large relative to total public investment (figure 1).

**Figure 1**

### Crying Out for Reform: Public Provision of Infrastructure in Developing Countries in the Early 1990s



Source: World Bank, *World Development Report 1994* (New York: Oxford University Press, 1994).

By the late 1980s growing frustration with these problems, coupled with budget constraints, led to a search for alternatives. Reflecting positive experience in Chile and the United Kingdom, the key feature of the new approach was for the state to focus on its role as a policymaker and a regulator and to delegate the financing and operation of services to private firms.

Involving the private sector in the financing and operation of infrastructure promised several benefits. Well-designed arrangements for private participation allow commercial discipline to be introduced in the delivery of services, improving efficiency and lowering costs. In activities where competition is feasible, private participation is a critical strategy for tapping the additional benefits competition can offer in efficiency and consumer responsiveness. And in activities where competition is not feasible—which, despite technological progress,

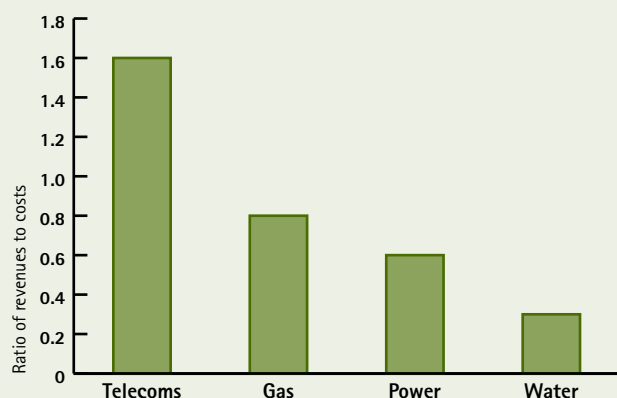
is still the case for many services—private participation can be used as a mechanism for governments to enter into credible commitments to cost-covering tariffs and commercial operation, thus helping to break past patterns of political interference and unsustainable pricing. The result can be more and better services and a reduced burden on strained public budgets.

Experience in 1990–2001—the period covered by this book—shows that the promised benefits can indeed be realized.<sup>1</sup> Involving the private sector in the management and operation of existing enterprises has in most cases been accompanied by dramatic improvements in service quality and coverage. And the private sector has helped finance and operate a range of new infrastructure assets—from power plants and telecommunications networks to roads and gas pipelines—with improvements in operating efficiency and significant savings to taxpayers. Reflecting this positive experience, in 1990–2001 nearly 2,500 private infrastructure projects were implemented in 132 developing countries, mobilizing investment of some \$754 billion.

But experience over this period also shows that implementing the new paradigm is not easy. There are myriad technical issues surrounding the design of effective policy and regulatory frameworks, ranging from details of risk allocation to the design of markets, subsidy schemes, regulatory institutions, and tariff adjustment mechanisms. Notions of best practice on these issues have been evolving rapidly, particularly on how best to adapt models from industrial countries to the circumstances of developing countries. But in many cases the key challenge is political rather than technocratic: how to manage the transition to infrastructure provision on a more commercial basis. In this respect a major challenge facing many governments has been how to implement and sustain commitments to cost-covering tariffs for services that had long been heavily subsidized under public ownership. Reflecting a legacy of past practices, this challenge is typically more acute for water and electricity than for telecommunications (figure 2). Indeed, progress in introducing private participation to a large degree reflects these sectoral differences.

**Figure 2**

**The Legacy of Public Provision of Infrastructure: Cost Recovery Levels in Developing Countries in the Early 1990s**



Source: World Bank, *World Development Report 1994* (New York: Oxford University Press, 1994).

Experience in 1990–2001 shows, too, that private participation in infrastructure is not immune from broader economic shocks. Crises in East Asia, the Russian Federation, and Argentina tested the durability of private infrastructure schemes. Those stresses were greatest for services that involved financing commitments in foreign currency yet depended on revenues in local currency. Experience in East Asia also highlighted that those stresses can be further exacerbated when governments have focused on introducing private participation in greenfield bulk supply projects before ensuring that the retail segments of these industries were operating on a fully commercial basis.

Annual investment flows to private infrastructure projects in developing countries grew dramatically from 1990 to 1997, but by 2001 had fallen back to the levels of the mid-1990s. Recent declines can be explained by several factors. Investment flows tend to be lumpy, and the record highs in 1997 and 1998 reflected major privatization transactions in Brazil that would have been difficult to sustain in any environment. But the broader environment also deteriorated from the late 1990s. Economic crises in several developing regions had a chilling effect on many investors, as did attempts by some governments to repudiate their contractual commitments. And toward the end of this period corporate-level problems affecting some of the major international investors, coupled with declining equity markets in industrial countries, also curbed interest in developing country infrastructure projects. Future prospects will depend on the willingness and ability of governments to grapple with the underlying reforms and to create opportunities attractive to private investors, who can be expected to be more discriminating than in the mid-1990s.

This book looks at how the private infrastructure paradigm played out in developing countries in 1990–2001, examining trends globally and in particular sectors and regions. The data it presents are drawn from the World Bank's Private Participation in Infrastructure Project Database. The database was created in the early 1990s by what is now the Private Provision of Public Services Group of the World Bank. At the time the database was created the trend toward private participation was still in its infancy, and few expected that private infrastructure would grow beyond a niche activity in a few countries. It is hoped that this book will help to illuminate one of the most remarkable stories in infrastructure delivery in generations.

*Warrick Smith*  
MANAGER  
Private Provision of Public Services Group  
The World Bank

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**Note**

1. See Clive Harris, "The Beginning of the End or the End of the Beginning? A Review of Private Participation in Infrastructure in Developing Countries," Report 24691-PE (World Bank, Washington, D.C., 2003).

## Acknowledgments

This book was prepared by a team led by Ada Karina Izaguirre and comprising Shelly Hahn, Kathy Khuu, and Jonathan Nellis. Timothy Irwin and Warrick Smith provided valuable comments and contributions. The book draws on the Private Participation in Infrastructure Project Database, which was launched in the early 1990s under the direction of Michael Klein and has been developed by the work of numerous consultants and research assistants since that time. Monika Kosior provided invaluable assistance with the production of the book. Preparation of the book benefited from the financial support of the Public-Private Infrastructure Advisory Facility (PPIAF).