Table of contents

ACRONYMS AND ABBREVIATIONS	4
ACKNOWLEDGMENTS	6
ABSTRACT	7
OVERVIEW	i
INFRASTRUCTURE IN LAC - SOME PROGRESS, BUT NOT ENOUGH.	1
Coverage and quality have improved, but slowly	1
Slow infrastructure gains imply reduced growth and competitiveness	3
The fight against poverty and inequality has also been hampered	
AT ISSUE: INSUFFICIENT IMPROVEMENT IN THE MANAGEMENT O	
TOO FEW RESOURCES	10
Private entry could not make up for public retrenchment	10
Who or what is to blame for the growing disenchantment with PPI?	
The impact of PPI has been mixed, but positive overall	
However, there have been too many renegotiations and some well publicized	
failures	
The process has suffered from macro shocks and poor management of the	
political economy of reform	20
The critical issues: cost recovery and governments' regulatory and redistributio	
functions	23
PPI sometimes occurred amid incomplete reforms and immature regulatory	
frameworks	
Cost recovery has proved elusive	25
Poorly designed social tariffs hinder cost recovery and do too little for the po	or 28
KEY CHALLENGES	32
Improving the social and economic returns from infrastructure	32
Finding better ways to extend affordable service to the poor	32
Improving public infrastructure spending efficiency	35
Managing PPI better	
Getting the sequencing of reform and PPI right	
A stronger state role: new forms of Public-Private Partnership	38
Improving award processes and the design of concessions	39
Managing and allocating risks better	40
Enhancing the capacity of regulators and other institutions	41
Choosing the right regulatory regime	42
Raising new finance for infrastructure	
The scope for further funding through user charges	43
Improving risk coverage, to attract back private investors	
Drawing more from local capital markets	
The case for more public investment in infrastructure	
Improving local governments' access to funding	52
DEFEDENCES	57

List of Figures

Figure 1: Latin America has lost ground against the East Asian Tigers, China and Mide	dle
Income Countries	iii
Figure 2: Primary deficit and public infrastructure investment (% of GDP)	iv
Figure 3: Privatization has become very unpopular in Latin America	iv
Figure 4: Businesses that see infrastructure as a serious problem	6
Figure 5: Productivity gains from a 20% improvement in selected investment climate	
variables by country (percent)	7
Figure 6: Infrastructure investment in major countries (percentage of GDP)	. 11
Figure 7: The different forms of PPI in LAC (1990 to 2003)	. 12
Figure 8: Changing forms of PPI in LAC since 1990 (by project count)	
Figure 9: Population expressing dissatisfaction with privatizations (percentage)	. 15
Figure 10: Urban households facing affordability problems by country	
Figure 11: Urban households facing affordability problems by country (PPP)	. 45
List of Tables	
Table 1: Infrastructure coverage in LAC, China and middle income countries	1
Table 2: Piped water connections, by expenditure quintiles	
Table 3: Potential growth improvement in LAC countries due to infrastructure	
development	5
Table 4: Changes of inequality (Gini coefficient) in LAC countries due to higher	
infrastructure development	9
Table 5: The contribution of infrastructure to fiscal adjustment, average 1980-84 vs	
average 1995-98	. 12
Table 6: Overview of average residential water tariffs	. 27
Table 7: Overview of average residential electricity tariffs	
Table 8: Main project risks in emerging market infrastructure	. 41
List of Boxes	
Box 1: Infrastructure, productivity and growth: what the literature says	
Box 2: The uneven pace of reform across sectors	
Box 3: Definition of concessions	
Box 4: Some examples of government-induced concession disputes	. 19
Box 5: Hidden failures and perception management: explanations for social discontent	
about privatization	. 22
Box 6: Colombia's experience with raising residential water tariffs	
Box 7: Pilot program to use output-based aid for expanding water coverage in Paraguay	
Box 8: Peru Rural Roads Projects.	. 37
Box 9: OPIC's Liquidity Facility to protect bonds in the AES Tiête project, Brazil, from	m
foreign exchange risk	
Box 10: IFC partial risk guarantee for bond issue by Triple A, Colombia	. 48
Box 11: Tapping pension funds through bond sales, to finance infrastructure in Chile	
Box 12: Best and worst practices with significant rating value for Fitch	
Box 13: Paranacidade: Linking municipal finance to capacity building	
Box 14: Local currency financing for Mexico sub-national infrastructure needs	. 56

ACRONYMS AND ABBREVIATIONS

BOT Build-operate-transfer EAP East Asia and the Pacific GDP Gross domestic product

IADB Inter-American Development Bank

IBRD International Bank for Reconstruction and Development

IFC International Finance CorporationIFIs International financial institutionsLAC Latin America and the Caribbean

MICs Middle-income countries

OECD Organization for Economic Cooperation and Development

OPIC Overseas Private Investment Corporation
PAHO Pan-American Health Organization
PPI Private Participation in infrastructure

PPP Public-private partnerships
PCG Partial credit guarantees
PRG Partial risk guarantee

UNICEF United Nations Children's Fund USO Universal Service Obligation WHO World Health Organization WSS Water Supply and Sanitation

ACKNOWLEDGMENTS

This report is part of a joint initiative of the Inter-American Development Bank and the World Bank to examine infrastructure issues in Latin America and the Caribbean. This has entailed commissioning a number of background papers to explore areas on which more information was needed (fiscal space, cost recovery, infrastructure finance, public discontent with private participation in infrastructure) as well as a number of country studies. It has also included a conference on June 6th and 7th on the Diagnosis and Challenges of Economic Infrastructure in Latin America.

The main authors of this report are Marianne Fay and Mary Morrison but this work has also benefited from close collaboration with Nicolas Peltier-Thiberge, as well as with Paulina Beato and Juan Benavides from the Inter-American Development Bank.

The team is grateful to the following for their comments, suggestions and inputs: Luis Alberto Andres, Antonella Bassani, Antonio Estache, Susan Goldmark, Abhas Jha, Ellis Juan, Demetrios Papathanasiou, Guillermo Perry, Tomás Serebrisky, Jordan Schwartz, Sophie Sirtaine, Manuel Schiffler, Adam Schwartzman, Rob Stevens, Carlos Velez, Eloy Vidal, and Tito Yepes; and to Julieta Abad who managed the production of this report.

The authors also wish to thank Cesar Calderón, Antonio Estache, Vivien Foster, Luis Guasch and Luis Servén on whose body of work this report draws extensively.

ABSTRACT

In the last decade, most countries in Latin America and the Caribbean have not spent enough on infrastructure. Total investment has fallen as a percentage of GDP, as public infrastructure expenditure has borne the brunt of fiscal adjustment, and private investment has failed to take up the slack.

Most infrastructure services have therefore lagged behind East Asian comparators, middle income countries in general and China, in terms of both coverage and quality, despite the generally positive impacts of private sector involvement. This lackluster performance has slowed LAC's economic growth and progress in poverty reduction.

Countries of the region therefore need to focus on upgrading their infrastructure, as this can yield great dividends in terms of growth, competitiveness and poverty reduction, as well as improving the quality of life of their citizens. Catching up requires significant new investment. But first, measures need to be taken to ensure that infrastructure spending produces higher returns, both economic and social. Both these tasks involve multiple challenges.

Public investment should be better allocated, with greater priority given to maintenance and rehabilitation against higher profile new projects. Small-scale local providers and cheaper technologies should be used for infrastructure work and services where appropriate. The considerable state resources already spent on subsidies, especially for water and electricity, need to be radically retargeted, to benefit fewer of the non-poor and more of those in need. More active policies are also needed to extend affordable coverage to rural areas and the urban poor, many of whom remain underserved.

Considerable further financing will also be necessary. There is scope in many countries for user charges to generate more funding, particularly in the water and electricity sectors. Raising tariffs to cost recovery levels would be affordable to the great majority of the population in most countries, and a more effective application of the funds currently spent on subsidies would protect low-income groups.

To reinvigorate private sector investment, governments need to find ways to make the risk-return ratio of projects more attractive. Improving contract design, making award processes more transparent and competitive and strengthening regulation will promote efficiency and better service, address investor concerns and reduce the cost of capital through lower regulatory risk. Such moves will also help reduce the renegotiation of concessions, which has been too frequent in Latin America and has damaged the credibility of contracting.

However, greater care must go into risk management, and the correct identification and allocation of risks in concessions. State guarantees can be useful for attracting the private sector, but ill-considered commitments made in the past, sometimes using unrealistic demand projections or excessive compensation schedules have exposed governments to enormous contingent liabilities.

Public opposition also represents a significant challenge to private sector involvement, politically and sometimes even operationally. Better subsidies, stronger and more transparent contract awards and regulation, as well as macroeconomic strengthening, are all likely to improve sentiment. Governments also need to improve the public perception of privatization, by making