PRIVATE INTEREST vs. PUBLIC GOOD:
Governance Dimensions of Regulatory Frameworks for Private Sector Infrastructure Development

Proceedings of an ADB/OECD Seminar
Geneva, Switzerland
28 April 1998

Asian Development Bank
This publication summarizes the discussions which took place on 28 April 1998 at a seminar on "Private Interest vs. Public Good: Governance Dimensions of Regulatory Frameworks for Private Sector Infrastructure Development," co-sponsored by the Asian Development Bank and the Organization for Economic Cooperation and Development and held in conjunction with the 31st Annual Meeting of the Bank’s Board of Governors in Geneva, Switzerland. It complements the earlier publication by the Bank of the background study for the seminar discussions, entitled "Governance and Regulatory Regimes for Private Sector Infrastructure Development."

Together, the background study and this summary of the seminar discussions focus attention on the extent to which principles of effective governance are being incorporated into the new regimes emerging in Asia to regulate privatized infrastructure.

The views expressed by participants in the seminar, as summarized in these proceedings, are those of the speakers and do not necessarily represent the view of the Asian Development Bank or any of its member governments.

Barry Metzger
General Counsel
Asian Development Bank

Manila, Philippines
31 January 1999
# TABLE OF CONTENTS

2  Background of Speakers

5  Overview

8  Introduction  
   *Mr. Barry Metzger*  
   General Counsel of ADB

9  Opening remarks  
   *Mr. Scott Jacobs*  
   Head of Programme on Regulatory Reform at OECD

11  Keynote Speech:  
   *Infrastructure and Regulatory Governance in Developing Asian Countries*  
   *Mr. Jon Stern*  
   NERA Senior Advisor and Affiliated Professor at the London Business School

17  *Whose Interest should Regulators Protect & How?*  
   *Sir Gordon Wu*  
   Chairman and Managing Director, Hopewell Holdings Limited, Hong Kong

21  *Mr. Kamal Malhotra*  
   Co-Director, Focus on the Global South, Chulalongkorn University Social Research Institute, Bangkok, Thailand

24  *Madame Dominique Ganiage*  
   Vice-President for Strategy, Marketing and Communication, Electricité de France

26  Keynote Speech:  
   *How can Regulation be made Accountable and Effective?*  
   *Mr. Ian Byatt*  
   Director General, Office of Water Services, United Kingdom

29  *Mr. Dhirendra Roy*  
   Member of the Orissa Electricity Regulatory Commission, India

35  Executive Summary of the NERA Report for the ADB: "Governance and Regulatory Regimes for Private Sector Infrastructure Development"
BACKGROUND OF SPEAKERS

Mr. Barry Metzger was appointed General Counsel of the Asian Development Bank in 1995, following a distinguished career as an international banking and finance lawyer in private practice. Mr. Metzger joined the international law firm of Coudert Brothers in New York in 1974 and became one of the founding members of the firm's Asian practices. At the Asian Development Bank, Mr. Metzger serves as the principal legal advisor to the Board of Directors and Management, supervising a multinational team of 25 lawyers.

Mr. Scott Jacobs is currently Head of Programme on Regulatory Reform at the Public Management Service (PUMA) of the Organization for Economic Cooperation and Development (OECD) and is responsible for coordinating work on regulation across the organization. He is currently responsible for launching a new program of multidisciplinary country reviews that is examining the pace, scope and results of regulatory reform in individual countries, and proposing an agenda for future progress. Mr. Jacobs authored the 1995 OECD Recommendation on Improving the Quality of Government Regulation, the first international standard on regulatory quality. In 1997, he was lead drafter for the OECD Report to Ministers on Regulatory Reform: Synthesis and Policy Recommendations endorsed by OECD member countries at Ministerial level. He has authored numerous articles and co-authored several books. Since 1991, he has been responsible for leading the work of PUMA on regulatory reform in OECD countries and for supporting work in this area for non-OECD countries. The PUMA program includes comparative work on strategies for deregulation and improving regulatory quality, regulatory impact analysis, institutional reform, public consultation, globalization of regulation, development of comparative indicators on regulation, and assessment of innovative alternatives to regulation. From 1985 to 1991, he worked in the Office of Information and Regulatory Affairs in OMB in the Executive Office of the President in Washington, D.C. on regulatory reform and information policy, where he received several OMB performance awards. Mr. Jacobs has a graduate degree in Public Affairs from Princeton University and undergraduate degrees in Economics and Political Science from the University of Georgia.

Mr. Jon Stern is a NERA Senior Adviser and an Affiliated Professor at the London Business School, where he is attached to the Regulation Initiative. He received his first degree in economics from the University of Cambridge and took a M.Sc from the University of Bristol. Before joining NERA, he worked for a number of years as an economist in the Civil Service with spells at HM Treasury, the Department of Health and Social Security and the Department of Employment where he was a Senior Economic Adviser and Director of the Employment Market Research Unit. Since joining NERA in 1989, he has worked extensively on international energy policy and electricity projects. He has played a leading role in building up NERA's international energy practice. He has worked on energy restructuring and regulation and related issues in many Central and Eastern European economies, including acting as a consultant to the World Bank. Since 1995, he has worked increasingly on energy sector and electricity reform projects in Asian and other reforming economies, including NERA projects in the Philippines, Indonesia, Vietnam, India and on regulatory governance of Asian infrastructure industries. He has worked and written extensively on regulatory governance issues and on utility and energy sector reform both in Central and Eastern Europe and in Asia.

Sir Gordon Wu, Chairman and Managing Director, Hopewell Holdings Limited, Hong Kong, China. Sir Gordon's name is well known in Asian infrastructure development. He is Founder, Chairman and Managing Director of Hopewell Holdings, one of the largest property development and infrastructure
groups in Asia. The Group has been listed in the Hong Kong Stock Exchange since 1972. Hopewell Holdings is involved in the development of infrastructure, including transport, power generation and property projects in the fast-growing economies of Asia and is one of the largest investors in China with mainland projects worth US$5 billion. The Company began as a family engineering and construction business during the 1960s. Hopewell Holdings was formed and publicly listed on the Hong Kong Stock Exchange in 1972 and since then has continued to expand its operations developing a reputation as a visionary company tackling major infrastructure projects. Its largest projects are the development of Guangzhou-Sherizhen-Zhuhai Superhighway ("GSZ Superhighway") and ancillary road projects which link the largest cities in Guangdong, China's most affluent province. Sir Gordon is a member of the APEC Business Advisory Council and the International Finance Corporation Business Advisory Council.

Mr. Kamal Malhotra, Co-Director, Focus on the Global South, Chulalongkorn University Social Research Institute, Bangkok, Thailand. Mr. Malhotra is a co-founder of Focus an the Global South, which is an international program of progressive development policy research and capacity building an issues relating to patterns and processes of globalisation. Mr. Malhotra has wide experience in issues of development and globalisation through his work in the development field in various countries, including the Philippines and Thailand, and through his work with UNDP and UNIDO. Mr. Malhotra has authored or co-authored more than 50 papers and articles on development policy issues and the global multilateral system.

Mme. Dominique Ganiage, Vice-President for Strategy, Marketing and Communication, International Division of Electricité de France. Ganiage pursued her career in the Administration up to the beginning of 1992. In 1977, she held a post of Charge de Mission for international nuclear affairs in the Ministry of Industry and, in 1981, was appointed First Secretary, then second Counsellor in the French Embassy in Libreville (Gabon). In 1984, Ganiage was named Head of the Legal Department of the Gas, Electricity and Coal Services of the Ministry of Industry. In 1988, she became the Deputy Director of the General Industry Department (consumer goods) of this same industry. In 1992, she joined the staff of Electricité de France as Deputy Vice-President of Business Development of the Company's International Division. On October 1, 1993, she was appointed Vice-President Europe. On January 1, 1997, she became Vice-President for Strategy-Marketing-Communication of that Division.

Mr. Ian C. R. Byatt, Director General, Office of Water Services, United Kingdom. Mr. Byatt was appointed as the first Director General of Water Services on 1 August 1989. He is an economist and an expert on the regulation of public utilities. His previous post was Deputy Chief Economic Adviser to the Treasury (1978-1989). Dr. Byatt has lectured in economics at both Durham University (1958-1962) and the London School of Economics (1964-1967). He is an Honorary Fellow of the Chartered Institute of Water and Environmental Management. In 1994 he was awarded an Honorary Doctorate by Brunel University.

Mr. Dhirendra K. Roy. Mr Roy is a Member of the Orissa Electricity Regulatory Commission, which is the first regulatory body of its type in the electricity sector established in any state in India. The Orissa Electricity Regulatory Commission was set up after considerable technical assistance from the World Bank. Mr. Roy has served as a Member of the Commission since its inception and has been instrumental in contributing to the formulation of policies and procedures of the Commission. Mr. Roy is a civil servant belonging to the Indian Revenue Service and has served the Government of India in various capacities, including as Counsellor in the Embassy of India, Moscow. Mr. Roy also has exposure to the US regulatory
frameworks.
OVERVIEW

On the occasion of its 31st Annual General Meeting in April 1998 in Geneva, Switzerland, the Asian Development Bank (ADB) organised a seminar on "Private Interest vs. Public Good: Governance Dimensions of Regulatory Frameworks for Private Sector Infrastructure Development", a seminar supported by the ADB with the participation of the OECD.

The seminar focused on the whole subject of regulatory governance for infrastructure industries in developing Asian economies. The subject of the first session was "Whose Interest should Regulators Protect and How?" The subject of the second session was "How can Regulation be Made Accountable and Effective?" The organisers invited distinguished panellists representing the perspectives of governments, of Asian and European investors and regulators and of consumers. This publication is a summary of these presentations.

First, Messrs. Barry Metzger and Scott Jacobs provided an overview of the opinions and recommendations of the ADB and the OECD in the area of regulatory governance.

In his opening remarks, Mr. Jacobs, Head of Programme on Regulatory Reform at the OECD, pointed out the crucial role the ADB plays in bringing Asian developing countries up to best international practice levels. Mr. Jacobs stressed that the key lesson of the past twenty years of regulatory reform in OECD countries is that it is competition that produces the greatest gains in efficiency, innovation and consumer welfare. Outlining the OECD policy in this matter, he argues that despite a rapidly changing international economic environment and increasing competition and efficiency in public infrastructure sectors, there is still considerable need for "good" regulatory governance. In the OECD's view, regulation must be considered in the context of an effective competition policy as well as the continued restructuring and unbundling of the infrastructure industries. To understand the full picture of the complexity of policy regime for universal services, regulatory governance must be understood in a context of a wide range of framework policies that are critical to effective, efficient regulatory regimes, such as social and environmental policies and competition policies as well as legal and economic policies.

Mr. Metzger, General Counsel of the ADB, pointed out that the dramatic liberalisation and opening-up of infrastructure sectors in Asia over the last ten years, had encouraged governments to develop new regulatory regimes for private sector infrastructure development. The ADB would strongly argue that the creation of a predictable regulatory framework reduces regulatory risks, balances the interests of consumers and investors and guarantees an acceptable quality of service. A predictable regulatory framework is therefore crucial in the wider context of government's supporting economic development.

The opening address was given by Mr. Jon Stern, a Senior Adviser at NERA (National Economic Research Associates) and an Affiliated Professor at the London Business School. Mr. Stern presented the findings of a NERA survey, carried out for the ADB, on the evaluation of the governance properties of regulatory frameworks for private sector infrastructure in a selection of developing countries in Asia.

The NERA report argues that good regulatory governance plays a major role in developing public infrastructure sectors in developing countries and in reassuring potential investors to invest into utility industries. It is also important that all parties involved understand "the rules of the game" which require the establishment of a credible independent regulatory agency, operating in a transparent manner. The NERA
report appraised the quality of regulatory governance according to six key criteria: (1) clarity of roles and objectives, (2) autonomy, (3) participation, (4) accountability, (5) transparency and (6) predictability.

Mr. Stern pointed out that applying these criteria to recent experience in various Asian developing countries shows a clear trend towards more effective regulatory governance, although sectors in different countries have been moving at widely differing speeds. As yet, there is no evidence of convergence of Asian developing countries towards best practice or indeed towards any common institutional framework for infrastructure regulation. Change towards better practice regulatory frameworks is most strongly associated with plans for major restructuring and privatisation.

Sir Gordon Wu, Chairman and Managing Director of Hopewell Holdings Ltd, introduced the discussion on "Whose Interest should Regulators Protect and How?" Sir Gordon explained the benefits and importance of foreign direct investment (FDI) in developing the public infrastructure sector. He stresses that foreign investment is not a "zero-sum" game between investors and the host country, but a way of increasing efficiency in the economy and creating new wealth in countries. The determination of proper profit margins is what the regulating body should concentrate on, as well as making sure that the required service is provided by the investor. Regulators have to realise that investors are only willing to invest, if there are clear ground rules and the offer of an attractive return on investment. In his final remarks, Sir Gordon mentioned the importance of multilateral agencies such as the ADB in setting up guidelines on the criteria of profit levels and arbitrating in the case of disputes between investors and host countries.

Mr. Malhotra, Co-Director of Focus on the Global South, provided an alternative view on whose interests with which regulators should be most concerned. He argued that, as a substantial segment of the population in most developing countries are poor, non-consumers, it is those long-term interests which the regulator should be protecting. Regulation cannot segregate economic from social and environmental issues and, therefore, it should be primarily accountable to the powerless non-consumers and their communities. Mr. Malhotra, therefore, emphasised the importance of distinguishing between regulation for consumers in developing countries and regulation for consumers in OECD countries. According to Mr. Malhotra, privatisation is not necessarily the solution to improve competition and efficiency in developing countries where weak institutional and enforcement capacity prevails. He concludes that although FDI can be very important in developing public infrastructure, it does not necessarily produce positive outcomes. That depends on whether there exists a regulatory framework to protect the public interest, and in particular, the interests of poor consumers.

Madame Ganiage, Vice President of Electricité de France, outlined their experience as a major international, public infrastructure investor. Madame Ganiage mentioned the importance of a fair, impartial and transparent regulatory system to protect the interests of all parties involved and to attract long-term foreign investment. Madame Ganiage concludes that lack of consistency and transparency will result in higher risk assessment of potential investors and hence to more speculative and short-term approaches.

Mr. Byatt, the regulator of the UK water industry (OFWAT), introduced the discussion on "How can Regulation be Made Accountable and Effective?". He focused on the experience of the UK and on the vast changes in the UK utility industries since the mid-1980s. He stressed that liberalisation and privatisation has led to more investment, lower prices and better services in this sector. This has mainly been achieved by applying three major principles to the utility industry: (i) increasing competition, (ii) creating incentives
for efficient business behaviour and (iii) appointing an independent regulator with statutory duties. With his first hand experience as a regulator, Mr. Byatt pointed out the political difficulties a regulator faces from different interest groups and concluded that real, formal accountability of any independent regulator should not be to consumers, companies or parliament, but to an appeals body, clearly located within the legal system.

Mr. Roy, Commissioner of The Orissa Electricity Regulatory Commission, talked about his experience as an electricity regulator in a developing country. Like Mr. Malhotra, Mr. Roy pointed out that political, judicial and historical differences in developed countries and developing nations have to be taken into account. While effective regulation is most important for supporting private investment in slow-growing economies, there are many other economic and non-economic considerations involved for infrastructure industries. The establishment of independent regulatory bodies is a new concept for developing countries and therefore regulators face stiff opposition from different interest groups. In developing countries, there are far too many factors affecting the industry which are beyond the control and competence of the regulator. Regulators can hardly be effective if the government is reluctant to support them. This can be the case when government introduces reform not out of conviction, but under pressure from international bodies and lending organisations. Mr. Roy concluded that regulators have an important mission, and despite setbacks and obstacles, the regulator can contribute to effectiveness by being proactive and by discharging his duties in a quasi-judicial manner.

The presentation of the distinguished panellists represents an important contribution to the discussion on the subject of regulatory governance. Their presentations are set out in full in subsequent sections of these proceedings.

The executive summary of the NERA presentation is attached as an annex to this report of the proceedings.
INTRODUCTION

Mr. Barry Metzger

The last ten years or so has seen a dramatic opening of infrastructure sectors to private investment in Asia. Telecommunications, electric power, road transport, and water supply and sanitation have seen, across the region, significant private sector investment. With the de-monopolisation, liberalisation or other adjustments to allow private sector investments, governments have had to develop new regulatory regimes for private sector infrastructure development. As a banking and project finance lawyer, I am only too acutely aware of the protracted and heated negotiations arising from different parties' perceptions of the regulatory framework, and particularly of the predictability of regulatory frameworks, in project financing transactions. The enormous amount of time and resources spent in defining political risk as a force majeure is a reflection of this. Political risk includes what lawyers call "regulatory risk." The regulatory risk which lawyers, sponsors, bankers and government officials negotiate, essentially deals with the different parties' perceptions and assessments of the governance dimensions of the regulatory regime in place for private sector infrastructure development. "Will the regulator act independently, free from political interference? Will the basic policies be changed?" and so on. These are some of the basic questions which animate these negotiations.

In today's seminar, we are uniquely placed to discuss not only regulatory risk, but the whole subject of governance as it pertains to regulation of private sector infrastructure development from the perspectives of the major stakeholders. We have distinguished panellists representing the perspective of government, of Asian and European investors, of regulators from Asia and Europe, and last but not the least, the consumers. In the first panel discussion, "Whose Interest should Regulators Protect and How?" three perspectives from the point of view of consumers, companies and government will be presented. An important theme in this context is the balancing of the consumers' concern for reduced prices versus their long-term interest in an adequate and acceptable quality of service, which necessarily implies an adequate rate of return on investment for investors and companies being able to earn sufficient returns for future investments. In contrast to these are the government's larger interest in achieving infrastructure to support economic development and its macroeconomic interest in reducing the pressure on taxpayers and the national budget.

In the second panel discussion on "How can Regulation be Made Accountable and Effective?" the scope of regulatory functions will be discussed along with the mechanisms to ensure accountability, transparency and the independence of regulators.
OPENING REMARKS

Mr. Scott Jacobs

Welcome to the seminar on “Private Interest vs. Public Good: Governance Dimensions of Regulatory Frameworks for Private Sector Infrastructure Development”, organised by the Asia Development Bank (ADB) and the Organisation for Economic Co-operation and Development (OECD) on the occasion of the ADB’s 31st Annual General Meeting, Geneva, Switzerland.

I am the Head of the Regulatory Programme of the OECD and I will be chairing parts of this meeting this morning. I think that it is extremely appropriate to examine the topic of governance and infrastructure regulation in Asia here in Europe. The financial and structural crises in Asia are certainly forcing change in the role of government on a rapid scale. Equally, however, the risks of the single market programme in Europe are arguably even greater in some of these industries and the common monetary policy will accentuate their impact. So in both Asia and in Europe there is pressure for change and innovation in regulatory governance and it is important to examine these developments and assess their directions. I congratulate the Asia Development Bank for suggesting this seminar and for putting together such an extraordinary group of speakers as we have here today. It is entirely consistent with the fact that the Asia Development Bank was the first international development bank to actually adopt a policy on governance and this seminar carries forward some of that important work in the ADB.

As an introduction to the discussions which are coming up in just a moment I would like to mention what we at the OECD would consider the three major purposes of regulation in private infrastructure development. They are to:

1. **Encourage efficiency and innovation by promoting vigorous market competition where this is possible.**

   Perhaps the key lesson of the past twenty years of regulatory reform in OECD countries is that the scope for competition is much wider than previously believed and that it is competition that produces the greatest gains in efficiency, innovation and consumer welfare. However, competition requires a continuing role for government. We are not talking about cowboy markets. We are talking about government that provides the environment for private sector investment which is one of the key topics on the table this morning. Government that regulates former monopolies in the difficult transition to competitive markets and government that establishes an efficient effective competition policy for the market as a whole.

2. **Ensure the right amount of investment and regulate natural monopoly elements where competition is not possible or not yet possible.**

   There are not very many "natural monopolies" today - water pipes and electricity transmissions are some, probably public transport networks in urban centres are another. Restructuring and unbundling are needed at a very early stage in the reform process to separate these special elements from those activities that are potentially competitive.
3. Provide efficient protection for other public policies and public interests such as universal service and access to these vital public or private services, including security of supply, environmental protection, consumer protection and so forth.

The point of this is to suggest that despite the steady march of competition in efficient markets in these industries, there is still considerable need for government - good government, good governance, regulatory intervention of many kinds and regulatory intervention that changes over time as the competitive situation changes. I think the report prepared by NERA which focuses on six governance aspects of regulatory frameworks helps establish the basis for how these three functions outlined above can be carried out according to good international practice.

The final point I would like to make is that regulatory governance must be understood in the context of a whole range of policies in the background that are critical to effective, efficient regulatory regimes.

In OECD terminology, these are framework policies that include corporate governance, competition policies, market openness and avoidance of corruption in the governing system. Market openness is fundamentally important for Asian and other economies trying to bring their industries up to best international practice levels. These are all important background issues to the more specific issue of regulatory governance. While the background issues are generally out of the scope of today’s discussion, I believe that they need to be kept in mind in order to give us the full picture of the complexity of the policy regime needed to bring these infrastructure sectors up to good economic performance in terms of meeting the needs of the consumers at minimum necessary costs.
KEYNOTE SPEECH

Mr. Jon Stern

INFRASTRUCTURE AND REGULATORY GOVERNANCE IN DEVELOPING ASIAN COUNTRIES: SURVEY

In the last quarter of 1997, ADB engaged the services of National Economic Research Associates (NERA) to carry out a survey and evaluation of the governance properties of regulatory framework for private sector infrastructure in the selection of Asian developing member countries. To carry out this assignment, a questionnaire was devised which was completed by various NERA staff who had worked in the relevant countries, and supplemented by inputs from specialist advisers based in the relevant countries.

In this presentation I am going to concentrate on key features of the survey and in particular on trends in regulatory governance and its implications for private investment in infrastructure. One thing I should say is that although regulation goes much wider than economic regulation, the focus of the report and the focus of the survey is on economic regulation. I am not going to deal with environmental regulation, health and safety regulation, etc. They are very important but they are not the subject of this report.

The countries and sectors covered in the report are listed below:

- Bangladesh: Electricity
- India: Electricity, Telecoms (Federal)
- Indonesia: Natural Gas and Transport
- Malaysia: Telecoms, Transport, Water
- Pakistan: Electricity
- Philippines: Electricity, Water

There are various definitions for regulatory governance. In our report, we defined regulatory governance as "the ways in which institutions and processes act so as to achieve a fair balance between the interests of firms, consumers and governments".

The point about infrastructure industries of the kind we are talking about is that they are very capital-intensive industries with long-lived, sunk assets. They are all industries where there are very extensive economies of scale (particularly associated with networks), and to some extent, economics of scope. These industries are also reckoned to be essential industries. Their outputs are consumed by and are necessary as

1 For Indian Electricity we looked at federal level regulation and also the State of Orissa where there have recently been some major regulatory reforms.
inputs to all industries, as well as for household welfare. This is most obvious in a sector like water but it is also equally important in electricity and is now becoming increasingly so in the case of telecoms.

These features mean that private investors in infrastructure industries face considerable regulatory risk. That regulatory risk is typically handled by an implicit "regulatory contract" involving producers, consumers and the government. This regulatory framework is then embodied in a set of regulatory institutions and processes.

There are six criteria that we used in our study for appraising regulatory governance. The last four are the criteria for good governance that the ADB has mentioned in its 1995 publication on Governance. The first two criteria are ones that we added because they are particularly relevant for economic regulation. All of these are discussed in more detail in the Final Report but I highlight some key points below:

(1) **Clarity of roles and objectives**

This is particularly important as it defines the crucial dividing line between (a) Government and Ministries and the regulatory agency and (b) the corresponding division between policy issues and regulatory issues.

(2) **Autonomy**

This refers to the question of the degree of independence of the regulatory agency, particularly from ad hoc political intervention. But it also includes things like security of the sources of funding, protection of regulators against unfair dismissal, etc.

(3) **Participation**

The key point under this heading is that all relevant parties (firms, consumers, etc.) should be able to contribute **effectively** to the regulatory process.

---

2 Asian Development Bank, Governance: Sound Development Management, August 1995

(4) Accountability

We have used the accountability criteria in our report to cover formal accountability and legal requirements, e.g. to the law courts and the legislature, to provide written decisions, to prepare an annual report etc. This criteria also includes the important question of appeals mechanisms.

(5) Transparency

Transparency represents the obligation to explain and justify processes, methodologies, procedures and decisions. It is as important as formal accountability. Transparency relates to the obligation to explain and justify processes, methodologies, procedures and decisions. In other contexts, I have referred to transparency and participation as the key elements of informal accountability.

(6) Predictability

The essential point on predictability is that governments, firms and consumers all need to have confidence that the regulators will behave consistently. There has to be an understanding about the "rules of the game" and a belief that the rules of the game will not suddenly change and undermine the basis under which investment decisions have previously been made.

Results for Developing Asian Economies

What were the main results of the survey?

- The first major finding was of a clear trend towards more effective regulatory governance according to the criteria that we have used. We found no empirical evidence to suggest that there had been any reduction in the powers or responsibilities of regulatory agencies in any of the sectors or countries. All of the legislative and other changes that had been made had been to improve regulatory governance. That was the case in Malaysia in the 1980's and it has also been the case in the 1990s, particularly in India and Pakistan.

- At the same time we have to remember that the recent reforms in the regulation of Indian telecoms, of electricity in Orissa and the new Pakistan electricity act, are all very recent. They set up new regulatory agencies and therefore have yet to establish their effectiveness in practice.

- A cautionary note is in order here. We know that the system of regulation in the Philippines and its legal framework is closely modelled on that of the US. However, in practice it clearly works very differently from that of the US. We will have to wait and see how well the new regulatory frameworks in India and Pakistan operate in practice in their political, legal and cultural contexts.

- The second main finding was that there does not appear to be a common trend found in the speeds of change. We observe widely differing speeds of change. Change towards better practice regulatory frameworks is more strongly associated with plans for major restructuring and privatisation than with anything else. That is true for all three of the
examples I gave before - telecoms in India, electricity in Orissa and in Pakistan. If one really wants to look for where there is going to be more radical regulatory reform, then the best indicator is whether or not there are plans for significant restructuring, privatisation and a desire to introduce competition.

- A third major finding was that, as yet, no sector has had more than one set of major regulatory changes. However, we understand that in some countries where there have been earlier less far reaching regulatory reforms, like Malaysia and the Philippines, governments are considering whether they should go further.

- The last major finding is that there is no clear evidence from any survey that countries are converging either to what we define as international OECD "best practice", nor is there any sign of convergence to any other common solution. This is true both (a) with the formal aspects of regulation, and (b) with the informal ones concerning regulatory practice. (We recognise, as discussed below, that defining regulatory "best practice" for Asian DMCs raises a number of difficult questions.)

I conclude, that on the basis of the work that we have done, progress towards regulatory "best practice" is most likely to depend on future plans regarding structural reform and privatisation. In this context, I point to Bangladesh, where the electricity company is a classic state-owned, vertically integrated monopoly. There are now major regulatory changes being discussed and they are being discussed along with the major objective of unbundling, promoting, restructuring and introducing competition to the industry.

There is also some evidence that later reforms are more likely to yield results that are closer to international best practice, particularly on formal regulation. However, with only thirteen observations and a limited number of cases, the evidence is indicative rather than conclusive.

So what are the conclusions that we draw on regulatory governance in Asian developing member countries?

We have had a lot of comments on the report questioning whether or not OECD best practice regulatory framework is the relevant model for Asian DMCs. Let us assume that the six criteria that I mentioned earlier are the relevant criteria, and that these are the things that have to be delivered by whatever set of institutions is appropriate to the countries. If we make these assumptions, than we have to conclude that it has yet to be demonstrated whether Asian DMCs can deliver regulatory agencies that meet the terms of those criteria in practice as well as on paper. A key test of this will be the actual performance of the new independent regulatory agencies like the new agencies of India and Pakistan and whether or not they can in practice consistently deliver predictable regulation over the longer term.

In terms of regulatory weaknesses, the main weaknesses were in the areas of clarity, transparency and accountability. Hence the main need that we identified for Asian DMCs in the area of economic governance was to improve performance in these areas, particularly on transparency. A particular question that we have is whether the appropriate institutions that will deliver these facets of good regulatory governance in Asia will be the ones that we observe in OECD countries, or if they will be
very different. I have to say that we have yet to see an efficient regulatory framework very different from those in OECD countries. That does not however, by any manner of means, imply that countries won't develop variants - and potentially quite different variants - that could meet these criteria for effective regulation of infrastructure industries.

**Implications for Private Investment in Infrastructure Industries**

Finally let me move on to the implications for private investment in Asian infrastructure industries. The point about regulation, particularly for economies of the kind we are talking about, is that effective regulatory governance reduces the required rate of return and hence the cost of capital for private investors. In particular it reduces the cost of capital for foreign private investment.

What happens is that effective regulatory governance reduces risk and particularly reduces the regulatory risk associated with long-lived investment in sunk assets. Thus, effective regulatory governance is essential to support private investment at reasonable cost, particularly in the unavoidable monopoly element of infrastructure industries. Moreover, this is especially true in slower growing economies.

If you have a rapidly growing economy with a large market, then the major international utility companies will want to be there. The prospect of a rapidly growing and large market means that returns are more secure (or at least a lot less insecure) so there is less need for best practice regulatory governance to bring in private investment. The experience of the People's Republic of China in recent years provides a good example of this finding.

However, that is not the case with slower-growing economies. In slower-growing economies, effective regulatory governance is essential to provide investment at reasonable cost. However, whatever the growth of the economy, effective regulatory governance always reduces the required rate of return and the cost of capital.

The main issue that we see is how to achieve effective economic regulation and the provision of much more transparent regulation. My view, (as set out here and elsewhere) and the view of NERA as set out in our report, is that transparency is essential for effective and predictable regulation.

In our survey of Asian DMCs we found that transparency was very limited. Very few countries within our sample had effective transparency of utility regulation, even on paper, and the countries that did, like the sectors in India and Pakistan, only recently enacted these reforms. Again, therefore, there is the question about whether the transparency will be fulfilled in practice as well as on paper.

Our report was dealing with regulation of infrastructure industries and utilities, not with regulation of the financial sector, which raises other and different questions. Nevertheless, I have been very struck by the fact that, increasingly, focus has been placed on the limits of transparency of Asian DMCs and the contribution of this to the Asian financial crisis. The task of effective regulation and the absence of transparency in financial sector regulation has been emphasised by many economists, e.g. Professors Paul Krugman and Joseph Stiglitz.
My concluding comment, which I pose as a question is, is it the case that after the Asian financial crisis there is now a greater need for effective and transparent infrastructure regulation to support private infrastructure investment in Asian developing countries? My answer to this question is clearly yes. I think that there is such a need. I think that this need will be realised by governments; and I think to make regulation effective and transparent, it will be necessary to attract private investment at an acceptable cost. I think a wider range of emerging market economies, including some of the "tiger" economies that perhaps in the past did not feel the need for regulation, will do so now. My expectation is that they are now more likely to be persuaded by the argument for more competition, more clarity, more transparency and more effective regulatory governance. This applies both to formal and to informal aspects of economic regulation.
Sir Gordon Wu

"WHOSE INTEREST SHOULD REGULATORS PROTECT & HOW?"

First I want to congratulate the splendid work that National Economic Research Associates (NERA) has done on the survey. Although the countries and the fields of infrastructure covered are somewhat limited in scope, the report does outline realistically the current practices of these countries.

Asian Development Bank (ADB), in inviting me here as a panellist, has asked me to comment on "Whose Interest should Regulators Protect & How?" Well, the answer is simple "The regulators should watch out for the interests of the Host Country as well as the private investors, especially the foreign direct investments (FDI), with genuine support to the projects".

REGULATORS MUST UNDERSTAND THE ROLE OF FDI

Foreign direct investment is a partnership, working together to create new wealth. Savings and wealth can originate from

1. Bridges and highways that cut travelling time and save fuel;
2. Water supplies that improve the health of the people;
3. Power stations that provide that mighty driving force called kilowatt-hours;
4. Telecommunication projects that provide instant trade and other information so vital to commerce.

The host country gets the services. The investors get their loans repaid, they recover their equity, plus some goodies called profits.

Private investors are basically motivated by opportunities and returns. They will flock to projects offering attractive returns.

They will be scared away, no matter what the returns are, by risks such as political instabilities, nationalisations, currency risks, arbitrary or biased interpretation of contracts, cancellations, terminations, etc. If the track records of the host countries are good, investors are willing to work for less returns. On the other hand, mistreatment of investors will result in dramatic drop of FDI. Host countries must honour their commitments.

In my last 18 years, I worked in many countries like the People's Republic of China (PRC), Philippines, Thailand, Malaysia, Indonesia, India and Pakistan on many of the much needed infrastructure projects, particularly power and road systems. It is not uncommon to find some officials of these countries trying very hard to jeopardise the success of projects by cutting down on the returns rightfully earned by the foreign investor. These officials often believe that: "Any profit taken away by the foreign investor equates to money lost by the country". They think FDI is a ZERO-SUM game.
REGULATOR'S TASK

Unless the returns provide sufficient margins above bank loan repayment, no bank will finance any project. The determination of proper profit margins is what the regulating body should concentrate on, as well as making sure the services are delivered by the investors.

Offering an attractive return to the foreign investor is not necessarily selling the country down the river, as long as these profits are earned through services provided in a timely and adequate manner to help the growth of the economy.

The regulatory body should formulate ground rules at the outset. And the regulatory body should also make sure that the investors do not take unfair advantage of the host country just because the country needs the capital and the expertise.

DIFFERENT ECONOMIES HAVE DIFFERENT PHILOSOPHIES

The Hong Kong Government works on the principle of "active non-interference" - let the investors work on their merits. Hence there are no regulatory bodies in Hong Kong governing FDI, because this body is not needed. Any person or corporation can:

1. come to Hong Kong;
2. establish an undertaking in 2 days by taking out a Business Registration Certificate;
3. qualify immediately as a Hong Kong company;
4. pay 16% income tax when they make a profit.

Enormous new wealth is created. Millions and millions of profits are repatriated out of Hong Kong every year. Still a lot of residual new wealth stays with the land. That is why Hong Kong has no national debt and an accumulation of more than US$90 billion of foreign exchange reserves and enjoys a level of per capita income of US$26,000. Foreign direct investors like Hong Kong, because they compete on a level playing field with everybody, whether they originate from the U.S.A., Europe, Japan, PRC, the rest of Asia or if they are native.

Cuba and North Korea work on a different model. For four decades they made sure no foreign investor could reap any benefit from their soil. They preserved 100% of the wealth. But unfortunately it is 100% of very little wealth, because there was little FDI to help them make the pie bigger.

The PRC is an interesting example. Between 1949-1979 it was like the North Korean model. Then came the open door and reform policy of Deng Shao Ping in 1979. Since then a lot of profits were taken out of PRC. But, as a result PRC has already accumulated US$140 billion of reserve. PRC now attracts about 50% of the investment in Asia. FDI made the difference.
HELP FROM MULTILATERALS

Multilateral agencies such as the Asian Development Bank and the International Finance Corporation of the World Bank Group, can help set up guidelines on the criteria of profit levels, arbitration procedures, etc. because they have the respect of both parties. Sometimes they can act as catalysts in advising on the terms of a prospective contract, before its signing, so that both sides are protected. And these agencies are in a good position to mediate in disputes occurring after contracts are in progress.

These agencies will act more or less like marriage counsellors in advising on the pre-nuptial agreements as well as trying to do a quick reconciliation job should the marriage run into trouble. An independent regulatory body, being independent, can certainly help the multilateral agencies to achieve this end.

HOPEWELL'S THAILAND EXPERIENCE

I am sure a lot of potential investors are looking at our Thailand experience with interest.

In 1991, Hopewell Holdings Limited signed a US$3,200 million Bangkok Elevated Road and Train System (BERTS) contract. It is a 38-year Build-Operate-Transfer (BOT) concession with the Ministry of Transport and Communications of the Government of Thailand. Bangkok will get a 60 km mass transit system without paying anything. And Thailand will share profits with Hopewell when the project makes money.

Whilst some officials appreciate our efforts in trying to solve the traffic problems, many officials believe that if the project is successful, why should Thailand allow a lot of money to be made by Hopewell? So why don’t Thailand bump Hopewell off and offer the contract to their Thai friends.

In the last seven years, Hopewell has had to deal with a military coup and eight governments. Hopewell has injected equity to the tune of US$640 million although the contract stipulates a requirement of only US$240 million.

In order to move the project ahead, Hopewell demanded in January 1997 that the Thai government must give genuine support to the project. Thailand must undertake the following commitments so that project finance can be finalised:

1. to sort out the route alignment with other projects controlled by various ministries;
2. to guarantee the remaining right-of-way land clearances from squatters;
3. to give official approval to the fare structure to be charged, so that the income stream can be calculated.

Apparently, the Thai authorities do not appreciate that these are minimum requirements needed from any credit committee of any bank.

In February 1998 the Ministry of Transport and Communication simply wrote Hopewell a letter saying they want to "terminate" the concession, without reference to arbitration or compensation as stipulated in the contract. Hopewell has no alternative but to fight them in the law courts. But we do not have an
independent regulatory body to turn to and a long court fight will certainly bring benefits neither to Thailand nor Hopewell. Only the lawyers will prosper. I hope the ADB can mediate!

**SUMMARY**

Lack of a quick and fair mechanism to settle disputes will be a deterrent to FDI. The multilaterals can help. An insurance programme can help. However, it is the attitudes and commitments of the Host Country that is most important.

Having a fair and Independent Regulatory Body tells the world that the Host Country wants to play by the rules, wants to be on the win-win team. ADB can help the establishment of these Bodies. Without FDI, economies can still grow, but it will be at a much slower pace.
"WHOSE INTEREST SHOULD REGULATORS PROTECT & HOW?"

1. THE OVERALL FRAMEWORK

The fundamental issue, relevant to every regulatory regime, but one which is seldom explored in detail in the course of its design, implementation or evaluation, is or should be really quite simple. What, and for whom should it be? Where am I coming from on this crucial issue and where should regulators and governments be coming from? I believe we should all be coming from the perspective of human development; particularly of the poor and the most marginalized in society and especially if privatised infrastructures relate to the provision of commonly agreed public goods such as water and electricity. Unfortunately, there is a big difference when we use the terminology of consumers in this context between developing countries and OECD countries. A substantial segment of the population in most developing countries are non-consumers of these kinds of public goods and privatisation often risks a larger number of them becoming non-consumers, or fewer people who have been non-consumers being brought in as consumers. I think, therefore, the answer to the question "whose interests should regulators protect?" is simple and clear i.e. primarily (not exclusively, but as a matter of the highest priority) the long term interests of the poorest consumers and directly and indirectly affected communities and individuals.

This is the context in which regulatory frameworks need to be designed, with the conscious needs of these kinds of groups in mind rather than private investors as the first priority. I don't think that it's a simple either/or issue but I do think that we need to be clear from the start whose long term interests we are talking about here. If utilities and public goods are to be privatised (as many of them are being in a number of developing countries), appropriate regulation will be crucial. While there is now widespread agreement that the public sector in many countries has not performed as well as was expected, it is also widely agreed that "market failure" in the area of the provision of public goods is equally, if not more widespread, than public sector failure.

It is also important to note that while foreign direct investment (FDI) can be a very important force in developing public infrastructure projects, its impact is not necessarily positive. It depends on the FDI destination, its terms and its durability and whether an enforceable regulatory framework is in place to protect the public interest. If aid agencies, like the Asian Development Bank and the World Bank or governments are to use public money for privatisation, clear criteria must be drawn up on how to select projects that maximise benefits for poorer people and the environment. Such projects also need to ensure that an open public process is followed to ensure that alternatives can be debated and negative impacts minimised. These should be the main objectives of both governments and regulators in developing countries.

2. KEY ISSUES FOR REGULATION

Firstly, we need a combination of (a) effective and transparent competition, (except when genuine economies of scale or national interest arguments can be made); and (b) accountability both to consumers (especially small and poor ones), and equally, if not more importantly, long term accountability to the
powerless non-consumers and their communities who are directly or indirectly impacted by infrastructure projects. These should be the key indicators of good, community and consumer-oriented regulatory performance. Good legally enforceable and independent regulatory frameworks and sound management are equally important and I would submit that these are much more important than the question of ownership and privatisation. Indeed, empirical evidence has demonstrated that the private sector has no monopoly on these attributes. Corporate governance failures are rampant especially in the era of globalisation and I think the major lesson of the East and South East Asian crisis has to do with the failure of corporate and private sector governance. Likewise, what is good for big, industrial or urban consumers may not be good for small, rural consumers or communities. Each have different needs and interests.

Secondly, it is necessary to treat the private sector and investors and governments merely as a means to an end, not ends in themselves and subordinate their interests to those of the poor consumers and non-consumers and the long term interests of these groups. In other words, put the poorest and the last first, not the most powerful or the wealthy first. Sadly, however, current mainstream literature on infrastructure development often appears to treat the successful attainment of foreign private capital flows as an end in itself, not as a means or a resource that will only be socially useful if it is adequately and appropriately regulated in the public interest.

Thirdly, we need to be clear about what is best practice and from whose perspective. What is best practice from an investor's perspective may actually be quite poor practice from the small consumers or non-consumer communities' perspective. We should not naively assume that "trickle-down" benefits to consumers will accrue as a result of the privatisation of utilities, particularly in countries where as much as 50% or more of the population may be non-consumers and have no voice. Regulation cannot artificially segregate economic from social and environmental issues and from the perspective of consumers and communities impacted upon by social and environmental issues. The latter may actually be much more urgent and important than economic regulation issues, which may be of the greatest importance to foreign investors. Weak institutional and enforcement capacity to effectively regulate the political economy of privatisation in many developing countries, also means that rather than encouraging competition (in a weak institutional context, where there is no independent regulatory mechanism and where there isn't the capacity to develop this overnight), privatisation could lead to the creation of greater monopolies, higher costs, the exclusion of the poor and increased corruption with reduced transparency and accountability to the consumer and communities. I think the financial sector in Thailand, which is where I am based, is testimony to this in the current Asian crisis.
All of the above has implications for the question of "how" such regulation can take place? Until governments build effective regulatory and enforcement capacity in developing countries, citizens and consumers must guard against many of the same problems in privatised infrastructure systems that they have had to endure and deal with in publicly or government owned infrastructure projects. These include the failure to obtain local community consent for infrastructure development, violations of environmental regulations, inadequate compensation when land is expropriated, etc. The need for consumers and communities to organise and act against collusion between the industry's regulators, newly privatised utilities and private companies, will remain crucial in both developing and industrialised countries. They must guard against the government's tendency for cronyism by awarding favoured foreign or domestic private companies special privileges or incentives. Communities must also continue to demand that private investors respect their property rights and internalise social and environmental costs.

It seems to me that one of the key issues from a consumer and community perspective is that privatisation may not be the most appropriate answer in countries which have large sections of their population in poverty. Again, this I think might be a very big difference between OECD countries and developing countries. As already stated, privatisation in some of these situations could compound problems of lack of accountability and transparency to the public rather than resolve them; it may also make certain public goods inaccessible to the poor, further skewing inequality of opportunity. It is likely to have a gender bias and it could lead to mass unemployment for workers, many of whom cannot be retrained for alternative jobs in the private sector. In addition, a lot of the gains of selling off privatised public monopolies do not necessarily accrue or result in wider coverage or better provision of public goods to those who need them most in a subsidised fashion.

If privatisation is going to work, there is a need for visionary, socially responsible, strong but accountable and transparent states and governments. Unfortunately, there are very few of them around. This has implications for the types and form of consultation and forms of information disclosure policies. While information about the criteria on which decisions are made or why a tender was not successful has been made available to private investors in a number of cases, equivalent information about an infrastructure project and its development impact is usually not available to local communities or consumers. Likewise, genuine and effective participation by consumers and communities directly affected by privatised infrastructure projects remains rare even in "best practice" systems. Hence, issues of the quality of participation will be key in determining equity and outcomes for the poor and will continue to remain a critical component of the answer to the question of how best to regulate for the public and small consumer and poor, non-consumer interests in developing countries.
Mme. Dominique Ganiage

WHOSE INTEREST SHOULD REGULATORS PROTECT AND HOW?

First of all I would like to thank the ADB for inviting me to this seminar on "Governance dimensions of regulatory frameworks for private sector infrastructure development" and for giving me the opportunity to express my views on regulatory issues in the power sector. My presentation will be very pragmatic and even simple, as I try to outline the experience and expectation of Electricité de France (EdF) in this matter.

To provide a context, let me first point out some background points about EdF's approach as an investor and our range of experience. Our approach in international development, which is a key point of our overall corporate strategy, is to be a global energy group. We act as a long-term industrial investor bringing all our knowledge and expertise to the companies or projects in which we are involved. We develop our investment policies on the basic principle of social consciousness and as an internationally respected utility. Under these conditions, we try to propose and to promote technically innovative, environmentally sound and economically viable formula for electricity supply in the various countries in which we operate.

Let me say a few words about our experience abroad. EdF has a relatively long international experience as an investor in the power sector. Our first investment abroad was in the Ivory Coast in 1990 and since then we have participated in the construction and operation of more than 13,000 megawatts of electricity capacity. We supply nearly thirteen million customers in fifteen countries outside France. As different countries operate different regulatory schemes, EdF has great experience in a large range of regulatory frameworks.

This leads me to the question that the panel has been asked to discuss "Whose interests should regulators protect and how?" I believe that the regulator should protect and manage the interests of all parties involved in the development and restructuring of the electricity system. Why? Because a successful power system has to provide a clean, affordable and sustainable supply and this clearly requires the regulatory authority to take a comprehensive, impartial, transparent and fair-minded approach. Taking into account all the interests at stake in the most equitable and efficient manner is in the interest of all parties: consumers, foreign investors and the national government. The aim is to develop a system where the interests of the country and its population in terms of equal access, security of supply, environment and all public interests, are taken into account. At the same time the regulator has to create a fair and transparent system in order to attract foreign investment.

If the framework for the investor is not clear enough or if the regulator tries to protect power users by maintaining unrealistic and subsidised tariffs, it will lead to a situation where potential investors are reluctant to make long-term investments to develop the power sector. If and when the regulator tries to protect the local utility (for instance by restricting the development of foreign investment in the power sector) it simply takes the risk of slowing or stopping the momentum of economic development.

In order to enter a virtuous circle of mutual respect and general welfare, industrial investors like EdF need to feel secure about both predictability and long term policies adopted and followed by the regulator. Any lack of consistency and transparency in the regulatory framework and regulatory practices will result in assessment of higher risks and hence to more speculative and short term approaches by potential investors.
To demonstrate my argument, let me give you two examples. In 1993, the Hungarian government tried to privatise the electricity sector. The regulatory and tariff framework was unclear and vague and therefore ineffective. Consequently, the privatisation process was inefficient and against the public interest and the government decided to cancel it. Two years later in 1995, having first established a more precise and predictable regulatory framework, the government launched a second campaign to privatise the power sector and invited international investors to submit their tenders. Overall, privatisation has been a real success and today, although sometimes price increases have been behind schedule, the regulatory framework is reasonably efficient, the power system operates efficiently and the investors as well as the customer, are reasonably happy. A second example is the power privatisation process in some Latin American countries, for instance in Argentina and in Brazil, where EdF has also made some investments. Because rules and regulations have been very clear, comprehensive and transparent, EdF and other companies decided to invest in the power sector.

In conclusion, I would argue that a successful and reliable foreign partner expects predictable, fair and impartial actions by the regulator. Too much is at stake in the power sector to waste time, resources and money on protracted disputes or on costly uncertainties when about two billion human beings are still deprived of stable and affordable access to electricity.
KEYNOTE SPEECH

HOW CAN REGULATION BE MADE ACCOUNTABLE AND EFFECTIVE?

I C R Byatt

Our experience of privatisation in the UK is that it has led to:

- more investment;
- lower prices;
- better services.

But this does not happen automatically.

There are three overarching principles to be followed:

- promote competition where possible (telecoms, gas, electricity, ? water);
- appoint an independent regulator with statutory duties;
- create/allow incentives to efficient business behaviour.

This is, of course, difficult politically. Utilities are rarely out of the political arena. They provide (largely) universal (?) essential) services. They are the battleground of conflicting interest groups (consumers, environmentalists, lenders). They involve issues of income distribution and cross subsidy.


How can the three principles be applied?

- The promotion of competition will often require structural changes to the integrated state enterprises that had developed in the era of planning. In the UK, the Central Electricity Generating Board had to be broken up and British Gas pushed into disaggregation. Entry needs to be encouraged, sometimes by institutional means such as restraints on the dominant firm (e.g. British Telecoms). In the case of water, separation of supply and distribution may be a precondition of significant competition.

- The Independent Regulator must:-
  - have a position where independent judgements can be made on economic matters, such as allowable costs, including the cost of capital - and to be able to set price limits on the basis he or she favours (e.g. to use Retail Price Index-X).
receive explicit guidance on any social or environmental objectives of government. Where there are significant costs falling on customers or companies, the government should take specific legal powers.

- develop a public position of respect based on knowledge and integrity; being seen to be well informed, firm and fair.

- be open and transparent, consulting on contentious matters, disseminating information on the performance of regulated companies and explaining regulatory decisions. This is essential to establishing credibility.

- adhere to a proper process, which has been set out in advance. This ensures that all interested parties know how and when they can contribute to decisions on regulation. The process needs to include the collection and dissemination of information.

- be subject to appeal by an independently constituted body such as (in the UK) the Monopolies and Mergers Commission. This body must be competent, have transparent processes and give full reasons for decisions.

- The creation/preservation of incentives requires:
  
  - clear statements of how the regulator will take decisions - i.e. the publication of a methodology;
  
  - avoidance of retrospective action such as claw-back of profits resulting from greater than expected efficiency;
  
  - a clear division between the responsibility of the regulator and the regulated companies and between regulation and management;
  
  - concentration on the outputs of the regulated business rather than on the inputs while recognising the difficulties arising from outputs, which depend on investment with long load times;
  
  - the establishment of arrangements for ensuring that failure to produce outputs is properly punished.
  
  - that cutting costs should not be at the expense of cutting corners.

In setting out these principles, all of which we have followed in OfWat, I have covered effectiveness but I have not mentioned the buzz word "accountability".

Accountable to whom and how?

- Not directly to government, otherwise the independence of the regulator from the political authorities is compromised. Nevertheless, where social and environmental objectives are concerned, regulators may be accountable to governments for the delivery of explicit objectives backed by proper guidelines and where appropriate, specific legislation. Hence I consider myself
accountable to Ministers for ensuring that water and environmental quality objectives can be financed but not for the specification of the objectives themselves.

- Not simply to the short term concerns of the consumer. The regulator has a primary responsibility (in the UK to be made a primary duty) to protect the consumer, but this must include the interest of the consumer in the provision of a viable long term service, not simply in lower prices.

- Not simply to the regulated companies (although the present primary duty in UK legislation is to secure that companies properly carry out their functions and can finance them). Dealing with companies should, however, be fair and need not be acrimonious.

- Not simply to the environment, although regulators may have environmental duties and should pay due attention to the policies of elected governments. Environmental ambitions may be unaffordable, or impose too high a burden on customers, especially those with low incomes. In such cases, it is the job of regulators to represent customers in discussions with government.

- Not simply to Parliament, which contains many diverse interests. But, regulators must expect to keep Parliamentarians well informed and to be challenged in Parliamentary Committees.

- Not simply to the public, for similar reasons. However, it is vital to inform the public and to attempt to carry them along with the arguments., otherwise credibility is lost.

Perhaps the real accountability is to the appeal body, who has to judge the issues against the same legal duties. So it is crucial to think hard about "composition of this body and its processes."

Finally, how does UK regulation match against these criteria? Reasonably well, I think. We have made big progress on competition. We now (following the government's green paper on utility regulation) have a bipartisan policy on independent economic regulation. We have and are developing processes which can give credibility to the regime, but we have had our downs as well as our ups. All that can be guaranteed is that there will not be a smooth ride.

Mr. Dhirendra Roy

HOW CAN REGULATION BE MADE ACCOUNTABLE AND EFFECTIVE?

In the background paper, National Economic Research Associates have identified three main criteria for ensuring satisfactory accountability of an independent regulator:

- Accountability to legal system through the mechanism of appeal against regulatory decision.

- Accountability to customers through participation of consumer groups and media comments.

- Accountability to the legislature through submission and discussion of the annual report.

Mr. Ian Byatt's presentation has rightly gone beyond the governance criteria and has discussed practical aspects of accountability to government, to consumers, to companies, to environmental causes, to Parliament and to the public. He has also spoken of the nature of accountability and limits to accountability.
1. While agreeing with the views of NERA and the excellent exposition given by Mr Byatt on his firsthand experience as a regulator, I would like to add a few comments on the basis of my experience and perception as a regulator in a developing country like India. The Orissa Electricity Regulatory Commission (OERC), which I represent, was launched on 1st August, 1996. This is the first independent regulatory Commission in India in infrastructure sector. I and my colleagues have been in the thick of regulatory issues and challenges almost right from day one. The validity of the Reform Act has been challenged, the legality of the Commission has been challenged, our quasi-judicial status and our procedure and rules of business have been questioned and our orders have been appealed against in the High Court. The positive side of all this is that we have been undergoing an intensive learning experience in regulation in a developing country and we have been reasonably successful in building up a credible, acceptable and purposeful regulatory institution.

2. Let me first make a few general comments. The nature and mechanism of accountability in a developing country has to be very different from that in the USA and the UK where independent regulation is well understood, has established rules of business, and has taken deep root. Secondly, the nature and extent of accountability has to be different because the regulator's primary responsibility in developed countries is to protect the consumer, whereas in developing countries the regulator has the onerous responsibility of protecting different interests of all segments of the industry in addition to consumer interest and the public policy of the government. Thirdly, the difference between conditions prevailing in the developed countries and the developing nations have to be taken into account. It is desirable to adopt the "best practices" of the Regulatory Commissions of USA and UK in the independent Regulatory Commissions which have been and are proposed to be set up in the developing nations. This will definitely improve the quality of governance in the developing countries with regard to the management of utilities and also for private sector infrastructure development. The system of accountability has to be designed in a country-specific manner taking into account the historical background, the political dynamics, the judicial and legal system and public acceptability.

3. With this background, my specific comments are as follows. Mr. Byatt has observed that regulators may be accountable to government for delivery of specific objectives backed by proper guidelines and where applicable, specific legislation. In a developing country, the concept of accountability to the government except through presentation of Annual Reports is fraught with negative consequences. The mandate of the regulator and the long term state policy it is required to achieve, have to be incorporated in the legislation and the regulator's main accountability should be to the provisions of the relevant statute. The law has to lay down specific objectives and also stipulate the procedure of decision making in a fairly elaborate manner. The interests of the state and those of the government may not be identical. Those in government may have short-term objectives and may not be personally committed to the objectives of the legislation and hence accountability to Government may not be in the interests of the State. The government may like to favour populist decisions whereas the objectives of the law may call for decisions which may be widely unpopular. For example, the necessary concomitants of reform and restructuring (such as cost based tariffs, elimination of subsidy payments, accountability of managers and employees of utilities), which have to be enforced by regulators may not be supported by political executives for fear of losing votes and the support of vested interests. It is precisely because of this that the state owned Electricity Boards in India are terminally sick and will slide further unless Regulatory Commissions, insulated from political and bureaucratic elements of government, are put fully in
charge in order to protect the larger interests of the state through open, transparent and objective decisions.

4. If the objectives of reform and the mandate of the regulator are not explicitly stated in the law and if the regulator is made accountable to the Minister or any other executive of the government, it is highly unlikely that the regulator will be allowed to take decisions in accordance with the spirit of the law and overall interest of the state. This is because in most developing countries the establishment of a regulatory commission as a concomitant of reform and the privatisation programme, is introduced not out of the convictions of the government but is due to economic compulsions and extraneous factors such as conditions imposed by the World Bank and other international lending organisations. In such circumstances the government may like the regulator to whittle down the provisions of law. To prevent such an eventuality it is desirable that accountability should be mainly to the provisions of law.

5. Even when an autonomous regulatory commission independent of the State Government is in place and the regulator is given wide authority with regard to regulation of the industry in all aspects, the policy making power has to be vested with government. The Government's short term policy may be out of sync with the long term objective laid down in the reform legislation. It is possibly because of such an apprehension that in Orissa Electricity Reform Act, 1995, the government's policy-making power has been circumscribed as follows in Section 12(1) of the Act:

   The State Government shall have the power to issue policy directives on matters concerning electricity in the State including the overall planning and co-ordination and all such policy directives shall be consistent with the objects sought to be achieved by this Act.

6. Another aspect of accountability is the desirability of public participation in the decision making process of the regulator. Every right must have a corresponding duty and every freedom must have its corresponding limit or check. Once the regulator is given independence and autonomy, there has to be a sufficient built-in mechanism so as to make it accountable. The provision for appeal against orders and the quasi-judicial process of proceedings may not be adequate from an accountability point of view because the court may take a legalistic or a highly technical view of the issue and as long as the regulatory decision conforms literally to the provisions of law, the courts may not intervene. Therefore, there must be other factors limiting possible arbitrariness and discretion of the regulator. Public participation in the decision making process of the Regulatory Commission is one of the potent methods of ensuring transparency and accountability. Sometimes the provisions of law make it mandatory for the regulator to enlist public participation. Even if such a provision is not mandatory, it is desirable to involve consumer associations and other interest groups in the proceedings in the true spirit of openness and transparency of regulatory mechanisms. While analysing the accountability aspect of the OERC, NERA have expressed reservations regarding accountability. They have observed that the degree of accountability may not be considered adequate as the regulatory decision can be challenged in the High Court only on points of law. This may not be wholly correct in an Indian context considering the existing judicial process in which the High Courts are quite liberal, if not proactive, in entertaining appeals. It is only on pure questions of fact that they may not entertain appeals. In an Indian context, mixed questions of law and facts are questions of law and therefore within the appeal jurisdiction of the
high court. However, as stated earlier, public participation as an additional means of accountability is desirable because of reasons of transparency and public acceptability factors.

7. I have a comment on another aspect from Mr. Byatt's presentation. This relates to his suggestion that the regulator must keep parliamentarians well informed and that accountability must extend to meet any challenges from parliamentary committees. This may be an ideal provision in the U.K. or even in the USA where the regulators are appointed at the discretion of the Governor and have party affiliation or partisan support. In developing countries the emphasis on judicial accountability has to be the real one and the regulator has to be insulated from legislators for very many reasons. Among the factors which have to be taken into account include: the workings of a multi-party system, coalition governments, quick changes in governments, fragmented politics, diverse opposing groups within the same party, lack of bipartisan decisions and the tendency to challenge every executive and regulatory decision on party-lines (due to inadequacy of information or because of populist approaches). Some politicians may not be adequately informed, or may not have the intellectual level needed for appreciating techno-economic issues or may not have the merit-based approach to decisions of regulators which satisfy overall interests but which adversely affect vested interests. Hence, the regulator cannot be exposed to the legislators and the legislature, except through the presentation of Annual Reports and through questions from legislators channelled through the Minister in charge. It is the minister in charge who has to keep the legislators informed and act as a buffer between the political forum and the independent regulator.

8. I shall deal very briefly with the effectiveness aspect. In the developed countries the regulatory mechanism has taken deep root. The governments have given clear mandates and wide latitude so far as the regulated industry is concerned and the governments themselves play by the rules of the game they have entrusted to the umpiring of the regulator. Hence, if the regulator performs his role competently and purposefully, the results are bound to come and the regulation is likely to be effective, unless there is a weakness in the laying down of the objectives to be attained. The advisory and monitoring roles of the US and UK regulators are taken seriously by those regulated due to public acceptability of the regulatory system. These features are not yet present in the developing countries.

9. Developing nations can hardly proceed on the hypothesis (of classical economists) of absolute gain from the market system. The state regulator has constantly to intervene to keep markets subordinate to the higher interests of the state. This is possibly more so with countries with a colonial past where the government was considered alien and hence the economic behaviour of most sections of the people was based on the perception that government business and government property was nobody's business and nobody's property. Government enterprises were doomed to failure due to the hostile attitude of its employees and the public. The socialistic patterns adopted in the post-independence era made the conditions of state utilities worse for various reasons, including political interference in management, mistaken social orientation, total lack of commercial approach, corruption, and labour problems. The avowed socialistic principles made the consumers look to the utility to provide service at the expense of the State or at least to be subsidised by the State. Liberalisation and globalisation have resulted in the integration of the economy of the state with the world outside, the introduction of principles of the market economy and the withdrawal of government support and protection. This has caused serious socio-economic dislocations adversely affecting the personal interests of the power elite - both political and administrative, as well as of employees with minimal accountability. It has also adversely affected various industrial, agricultural and other organised and protected interest groups together with a
vast number of ordinary people becoming used to being subsidised, to pilfer and to default in payment. Hence, the economic reforms resulting in corporatisation, commercialisation, unbundling and a competitive environment, have rocked the boat of most who therefore cannot welcome the new world with open arms. Some oppose, some protest and some accept grudgingly. Hence in performing the task of balancing the interests of the state, the industry and the consumers, the regulator has very few on his side.

10. The regulator can only contribute to effectiveness but may not be able to deliver the goods in spite of best efforts. It is possibly because of this realisation that NERA have observed in their background paper that while effective regulation is most important for supporting private investment in the slow-growing economies, there are many other economic and non-economic considerations involved for infrastructure industries.

11. However, the regulator can be effective by his performance, which should be proactive and yet judicious. It will be impossible for him to deliver the goods if he approaches the task at hand with a judicial detachment. He has a mission to fulfil but to achieve this he has to discharge his duties in a quasi-judicial manner. While it is difficult to chart out a route map for successful regulators in developing nations, some measures (briefly indicated below) will enable the governments of developing countries to achieve the objectives of reforms in the electricity sector through effective regulation.

- The model for restructuring the industry should be carefully selected.
- New legislation has to be enacted to reflect the new structure and the new thinking.
- Pre-reform policy initiatives have to be taken and tariff rationalisation has to be completed before the reforms are instituted.
- There have to be tangible steps for reorienting the opinion-makers, the employees and the consumers.
- The government should not only establish an autonomous Regulatory Commission but should be fully committed to it by providing necessary support.
- The Commission in its performance must satisfy criteria for good governance.
- Through the quality and content of its decisions the regulator has to make itself acceptable to all of the stakeholders.

12. In the light of the above background, it has to be appreciated that there are far too many factors affecting the industry which are beyond the control and competence of the regulator. If governments are reluctant to assign an adequate role to the regulators and do not sincerely support the regulatory mechanisms, the regulators can hardly be effective even if they adopt as their policy the best practices of governance and even if commercial functions are not within the domain of the regulator.

13. In conclusion, I would like to emphasise that the independent regulator in a developing country should adopt 'best practices' of governance as in developed countries. In addition, he should
discharge his regulatory role in a manner appropriate and purposeful in relation to public policy and to the relevant stage of economic development of the State.
GOVERNANCE AND REGULATORY REGIMES FOR PRIVATE SECTOR INFRASTRUCTURE DEVELOPMENT

EXECUTIVE SUMMARY

Introduction

In recent years, the Asia Pacific region has been a focus of considerable private sector development of infrastructure, by both domestic and foreign investors. This has taken place against the background of the introduction of a number of new regulatory frameworks, but there has been no assessment of the governance impact of these new regulatory arrangements.

The Asian Development Bank (“the Bank”) therefore engaged NERA to carry out a survey and evaluation of the governance properties of regulatory frameworks for private sector infrastructure in a selection of developing member countries (DMCs). The full results of the survey are presented in our Final Report. The survey was carried out using a detailed questionnaire. The questionnaire and the results for each sector are contained in a set of Annexes that is separately available.

The governance properties covered by this survey are discussed below. The countries and sectors to be surveyed were agreed with the Bank on the basis of our Inception Report, and are listed in Table 1. These sectors include both new regulatory frameworks and frameworks which have been in place for a considerable period of time, some for more than 20 years. The sectors and countries were deliberately chosen to cover a range of regulatory frameworks and experience. For each sector, the survey dealt not only with current regulatory governance arrangements and aspects of the conduct of regulation in practice, but also any officially proposed or approved changes in regulatory arrangements.

In considering the survey and the conclusions that might be drawn from it, two important points need to be made. First, some of the most far-reaching developments in regulatory governance (as in electricity in Orissa and in Pakistan) are very recent, so it is difficult to judge the performance of institutional arrangements which have only just been put in place. Second, although new regulatory frameworks are primarily designed to increase the flow of private investment and/or to facilitate privatisation of existing assets, the estimation of the impact of these new frameworks on private capital flows is outside the scope of this study.

Issues in Economic Regulation

The focus of our Final Report is on governance structures for economic regulation of infrastructure industries, covering issues such as prices and profitability, service coverage and quality, and investment. It excludes issues such as environmental standards, and health and safety requirements.

---

4 This project has been financed under the Asian Development Bank’s Technical Assistance Special Fund (T.A. No 5758-REG).
Table 1
Countries and Sectors Surveyed

<table>
<thead>
<tr>
<th></th>
<th>Electricity</th>
<th>Gas</th>
<th>Telecoms</th>
<th>Transport</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pakistan</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Note: X denotes country/sector selected for the survey*

Although economic regulation is largely synonymous with private ownership, it is present for all utilities whether state or privately owned. In all countries, some institution regulates the prices and investment decisions of the main utilities, but the process of regulation is often not separate from other functions; in particular, it may not be separate from policy making by government.

The highly politicised form of regulation which is sometimes applied to state-owned utilities, is not appropriate when private sector investment is introduced. The importance of utility services (water, energy, telecommunications and transport) to both domestic consumers and business, means that governments may be attracted to policies which keep prices low, even if this reduces the returns to those who have invested in those sectors. The governance elements of the regulatory framework can have a significant impact on the ease of attracting private sector investment into utility industries. The establishment of a credible independent regulatory agency is a common feature of the privatisation process in Europe (particularly in Central and Eastern Europe), in Latin America and, increasingly, in Asia. However, regulatory independence is only a part of the wider issue of regulatory governance.

Governance is concerned with the way in which regulatory institutions and processes act so as to achieve a fair balance between the interests of firms, consumers and government. Good regulatory governance can play a major role in reassuring potential investors that utilities in which state shareholdings are being privatised, or to which private capital is being attracted, will not be subject to arbitrary political interference.

Whatever the institutional arrangements, the continued acceptability of the regulatory system depends on all parties understanding the “rules of the game”. This requires that regulators observe the spirit as well as

---


7 In Norway, Sweden and other Scandinavian countries, separate regulatory bodies exist in industries with public ownership and competition (for example, in Norwegian electricity and Swedish telecommunications and posts).
the letter of legislation. It also requires regulators to justify and publicise the reasons for their decisions, their approach and any changes in methodology or procedures.

**Governance Criteria**

We have identified six interrelated aspects of regulatory frameworks which capture the main governance elements of economic regulation and these form the basis for the questionnaire which was used in our case studies:

- **clarity of roles and objectives**, particularly between Ministers and regulators, should help to make regulation more effective, by removing any possible confusion about which functions are carried out by regulators and which are carried out by Ministers or others. Regulators should have a clear statement of both their functions and their objectives in carrying out those functions;

- **autonomy** from political intervention (which will be easier to achieve if there is a clear statement of regulators’ objectives) will help to ensure that regulators are free to carry out their functions in the way they consider best satisfies their stated objectives;

- **participation**, which is present when all relevant parties contribute effectively to the regulatory process, improves the quality of regulatory decisions and increases the likelihood of the regulator receiving both support and co-operation from firms, consumers, and others;

- **accountability**, requires that regulators’ decisions which are thought to be unfair or incompetent can be challenged in an effective way, although decisions can not be challenged to a degree which renders regulation ineffective;

- **transparency** is important in its own right, since a requirement on regulators to explain their decisions and processes should reduce the likelihood of unfairness or incompetence;

- **predictability**, which means that firms can be reasonably confident that the “rules of the game” will not suddenly change, either through a change in the overall legal and regulatory framework, or through a change in the way that regulators behave within this framework.

**Summary of Survey Results**

The objective of the survey was to assess how the sectors performed in terms of each of the six criterion given above. To do this, we applied a common set of questions to every sector. The questionnaires were completed by NERA staff with relevant sector experience and/or local specialist advisers. To make this information more accessible and to facilitate its analysis, we summarised the survey information in a series of tables and reviewed the experience across sectors for each criterion. As part of this exercise, we defined categories (A to E) for each criterion.

In Table 2 we draw together all the categories allocated to the sectors in our analysis, and provide an overall view of regulatory governance. In most cases, individual sectors show a reasonable degree of consistency across the different criteria. Where, for a particular sector, the categories do diverge between criteria, the pattern which emerged is for better performance in respect of clarity, autonomy and participation.
Table 2
Overall Summary of Findings

<table>
<thead>
<tr>
<th>Country and Sector</th>
<th>Clarity</th>
<th>Autonomy</th>
<th>Participation</th>
<th>Accountability</th>
<th>Transparency</th>
<th>Predictability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, Federal</td>
<td>B</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>Electricity, Orissa</td>
<td>D</td>
<td>E</td>
<td>E</td>
<td>D</td>
<td>E</td>
<td>B</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>Telecoms</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>D</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Gas</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Transport</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecoms</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Transport</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Water</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>C*</td>
<td>D*</td>
<td>C*</td>
<td>C*</td>
<td>C*</td>
<td>B*</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Water</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
</tr>
</tbody>
</table>

* See notes in individual tables with regard to the implementation of the new law on electricity.

Overall, the survey results generally suggest that the sectors can be divided into four distinct groups:

- Orissa electricity and India telecoms have many similar properties. They represent the sectors closest to best practice among those surveyed. However, a qualification which applies to both these cases is that they have yet to establish a track record and so it remains to be seen how regulation will work in practice. It is notable that both sectors have been the subject of new regulatory legislation in the last five years, so that they have benefited from the lessons emerging from recent experience elsewhere.

- Pakistan electricity, Philippines electricity and Philippines water, have certain common characteristics. In particular, all have regulatory agencies with a reasonable degree of autonomy. But although they have many positive qualities, they currently fall short of best practice, but for different reasons. Pakistan electricity is something of a special case, as its position is dependent on effective implementation of the new law. The regulatory arrangements in the Philippines are based on US-style public service commissions, but they have failed to operate effectively in practice. An
An important factor common to Indian (Federal) electricity and Malaysia telecoms, transport and water is that the regulatory agencies in these cases are more closely associated with government. This raises concerns with participation, transparency and predictability. In general, the sectors in this group benefited from new legislative provisions in the 1980s, but they can now be seen as falling significantly short of best practice.

In the cases of Bangladesh electricity, Indian natural gas, and Indonesia gas and transport, there has been no regulatory reform and no significant use of private sector investment. They either have very old legislation applying to regulation, or no substantive legislation at all. As a consequence, all these sectors display significant shortcomings in virtually all criteria, so it is clear that they could benefit from a review of regulation on the basis of recent experience and practice.

Conclusions

As part of this study we considered trends in regulatory governance, based on the survey results, covering both the last 10-15 years and expectations for the next three to five years. The main conclusions are:

- the clear trend for all of the past and proposed changes is for movement towards more effective regulatory governance. In no case has there been a reduction in the powers of regulatory agencies, and all of the proposed changes reflect intentions to adopt more effective regulatory governance;

- however, the sectors have been moving at widely differing speeds. A number of countries have made substantial changes to their regulatory frameworks, associated with plans for restructuring and privatisation. Recent changes (in India and Pakistan) have demonstrated more radical regulatory reform. No sector has had more than one set of regulatory change. Looking ahead, the proposed speeds of change differ widely between sectors and countries;

- there is no clear evidence of convergence to best-practice or any other common solution. It remains to be demonstrated whether international “best practice” regulatory frameworks can and do work effectively in Asian DMCs.

Asian DMCs are positioned at an important threshold, and the picture emerging from our survey could change significantly within a relatively short period. The financial crisis in 1997-8 has drawn attention to regulatory failings in the financial sector, particularly the lack of transparency. It remains to be seen whether or not this will lead to a reappraisal within Asian DMCs as to the advantages and disadvantages of more independent and transparent regulatory frameworks for infrastructure industries. It could be argued that the shocks to confidence and reputation arising from the financial crisis and its aftermath mean that the need for more effective and transparent infrastructure regulation is likely to be significantly greater now than it was previously.
