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Governance of Asian Utilities: New Regulators Struggle in Difficult Environments

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In the span of a few years, Asian countries have created dozens of new utility regulators to oversee the economic liberalization and expansion of essential services. The performance of these utility regulators is of vital importance to Asians, particularly the almost 800 million Asians living in poverty. As the utility sectors liberalize and open up to private investment, the quality of services and access to water, energy, communications, transport, and local utilities will depend on how well the regulators function.

Unfortunately, the prognosis is not good. A few Asian countries, such as Sri Lanka, have made progress in creating credible regulators that increasingly can challenge powerful vested interests, but the performance of most utility regulators in Asia is disappointing. As a result, Asian consumers suffer.

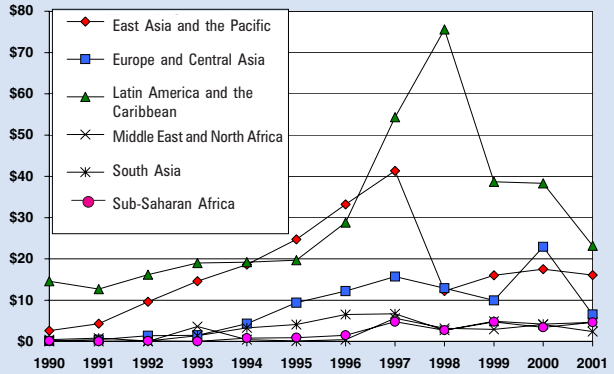
Regulatory reforms will boost private investments

Investor doubts about the quality of the regulatory environment have contributed to a shortfall in private investment in the utility sectors in Asia. Providing adequate service in Asia requires mobilizing much more private investment. The World Bank has estimated that East Asia alone needs $300 billion of private investment per year in water, sanitation, power, and transport. The region, however, received less than $20 billion in 2001.

The stark picture is shown in Figures 1 and 2. Private investment in infrastructure in Asia dropped sharply after the 1997 financial crisis, reflecting the global decline. However, as governments in the region begin to liberalize and open up these sectors, investment has not recovered. Figure 2 shows an even worse picture: Asia is one of the worst-performing regions in the world in private infrastructure investment per capita. In 2000–2001, East Asia received only 15% of the per capita investment that went to Latin America, and South Asia only 5%.

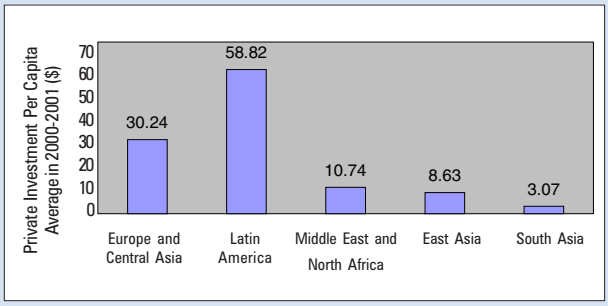
The regulators should not be blamed. They face an almost impossible task, as shown by an informal survey of 22 East Asian and Pacific utility regulators in 13 Asian economies that was conducted in June 2003 for the 4th Asia-Pacific Economic Cooperation (APEC) Privatization Forum, the Public-Private Infrastructure Advisory Facility, and the World Bank. The survey shows that, on a daily basis, utility regulators in Asia deal with regulatory challenges that are substantially more difficult than those facing their counterparts in developed countries. But the Asian regulators are less equipped, experienced, and capable.

Figure 1: Investment in Infrastructure Projects with Private Sector Participation ($ Billion)



Source: World Bank. Private Participation Infrastructure Project (PPI) Database.

Figure 2: Private Investment in Infrastructure by Region, per Capita, Average per Year 2000–2001



Source: Jacobs and Associates, based on data from World Bank PPI Database.

Some of these challenges are inherent in the environment, such as high levels of poverty, relatively low penetration rates for utilities, and less consumer capacity to finance infrastructure investments. However, many others are created by governance failures, such as incoherent public policies, incomplete privatization, and lack of investment in oversight institutions.

Asia suffers from partially completed market reforms and confused policies

The main reason for the poor performance of Asian utility regulators is that the external environment of structural, policy, and governance reforms remains extremely difficult. Structural problems, such as market abuses and control of networks and essential facilities, have crippled many liberalization initiatives. Today, markets in utility sectors are a confused mix of public and private enterprises, concessions and competition, and protectionism and openness. Most Asian countries suffer from partial privatization as well as severe conflicts of interest in the operation, ownership, and regulation of utilities. Governments still assume many risks that should be borne by private firms. These problems undermine any credible regulation of a competitive market, regardless of the regulator's capacities.

Asia is lagging behind in liberalizing the utility sectors, largely because countries in the region have neglected the underlying policy and governance reforms carried out in Europe and Latin America. During the 1990s, for example, most private investment in those other regions came from divestiture and broad reforms to create competitive markets. By contrast, most private investment in Asian infrastructure were greenfield investments into noncompetitive markets to meet growing demand. In this way, Asian governments maintained their monopolies and concessions. When privatization was carried out, governments often awarded multiyear exclusive privileges, even in potentially competitive services. These practices slowed investment and hurt consumers. This pattern began changing a few years ago. In 1999, revenues from divestitures exceeded greenfield projects for the first time in Asia. But Asian policy reforms to create markets still are proceeding slowly and reluctantly.

To enable utility regulators to do their jobs, structural reforms should be completed to create a potentially competitive environment in which markets and regulation can function. Independent regulators cannot succeed in the absence of broader policy and governance reforms that address half-finished structural reforms, conflicts of interest, and uncertain political commitment. Separation between operators and regulators, and between industry promotion and industry regulation, should be the first step. In the longer term, unbundling of incumbent firms is inevitable.

Asian utility regulators are not very independent

A successful utility regulator does not follow one model, but some good practices are generally accepted. Asian regulators show wide diversity in design, but are moving toward good practices. For example, half of East Asian regulators oversee multiple sectors that are converging or are substitutes (such as broadcasting and telecommunications, or electricity and gas). Establishing common regulatory frameworks that encourage synergies and competition between technologies is a positive trend that should produce large welfare gains.

One of the striking aspects of Asian regulators—and a reason why judgment about their performance should not be made too hastily—is their youth and inexperience. Most of these regulatory institutions were created after 2001, which implies a need for substantial staff training over the next few years. Most are preoccupied with building fundamental capacities and authorities, such as dispute resolution, and getting access to data held by incumbent enterprises.

The 13 Asian countries in the survey increasingly prefer regulators with some independence. Only 9 of the 22 responding regulators were government departments located within ministries, the traditional form of oversight for state monopolies. The other 13 regulators are more independent—a mix of commissions, authorities, and even think tanks with responsibility for advising on utility regulation. This is another positive trend. Independent regulators usually enhance stability and commitment to optimal long-run policy based on consumer welfare, compared to line ministers who are responsible for industry promotion or the operation of state-owned enterprises.

Why regulate the utility sectors?

The liberalization of utility sectors means the introduction of competition or commercial incentives by deregulation, re-regulation, and restructuring (i.e., unbundling) of utility companies. Previously, it was thought that natural monopolies would dominate utility sectors. Today, however, competition is recognized as a means to provide incentives for greater investment, while expanding services, enhancing efficiency, and lowering prices.

While technological advances have extended the potential for competition, regulation is still necessary to ensure that competition actually emerges. Utility regulation has economic and political aims relevant to public and private utilities alike:

- to correct the market failure of natural monopoly arising from economies of scale, large initial sunk costs, or economies of density. For the most part, economies of scale are found in the distribution (not production) of energy, water, and communications services. Interconnection rules are an attempt to correct this failure;
- to protect consumers from abuse by firms with substantial market power, usually the incumbents were (or still are) state-owned. Unbundling, restructuring, and asymmetric regulation are used to correct this problem; and
- to support investment by protecting investors from arbitrary action by government. Independent regulators are a common institutional remedy, although independent regulators have other justifications, such as the creation of a specialized and stable pool of expertise that promotes policy stability.

However, Asian regulators have different views about what independence actually means. This is not surprising: the word independence has created confusion in many countries. Independence of regulation from owners and operators of firms participating in the market, and from direct political involvement in market-entry decisions such as licensing, is necessary. However, this must be balanced carefully with accountability to politicians and consumers. The following are findings on Asian regulators.

- Half of the respondents are outside of ministries, but only six of those are accountable to directors appointed for fixed terms (the classical regulatory commission).
- Only a third of the independent regulators report that their decisions can never be overturned by a minister. Ministers can overturn some or all decisions made by two thirds of the independent regulators.
- The budgets of half of the regulators are set outside of a ministry, while the other half is incorporated into ministerial budgets.

Continuing participation of ministers in regulatory decisions is not necessarily negative. However, incentives and conflicts of interest should be assessed to be sure that the regulators can reliably make decisions that favor market development and consumer welfare, rather than protect incumbent firms and producer interests. Direct involvement by ministers in pricing and licensing decisions can undermine regulatory credibility and, hence, investment.

Controlling state-owned enterprises is among the most difficult challenges confronting Asian regulators. Because of incomplete privatization, substantial state ownership in utility sectors remains in the region. Almost all Asian regulators oversee sectors with substantial state ownership or government golden shares. Oversight is even more difficult in half of these sectors, where the same ministers responsible for regulatory oversight also oversee the performance of the state-owned enterprise. A regulator cannot resolve this conflict of roles. An indicator of whether a regulator can effectively control the market power of the incumbent is its use of asymmetric regulation to level the playing field for new entrants.

Even worse, in more than a third of the sectors, an incumbent firm has some regulatory authority. The result: the incumbent competes with and regulates its competitors. This is the least efficient regulatory approach because some of the key issues requiring regulation are the dominance of the incumbent firm and its ownership of network assets.

Asian utility regulation is often fragmented among ministries, autonomous bodies, state-owned or private firms, and other levels of government. In Indonesia, for example, six ministries and local governments are involved in water regulation. A coherent, efficient, and transparent regulatory regime that investors trust is difficult to establish with the proliferation of oversight bodies. Institutional simplification can improve the effectiveness of independent regulators.

Despite this oversight proliferation, competition authorities are notably absent. In developing Asian economies, competition authorities have little role in utility regulation, unlike in most developed countries. Almost 90% of the regulators said that national competition authorities did not review regulatory decisions. Deeper involvement by competition authorities in reviewing structural decisions in these sectors could speed up liberalization and add credibility to the regulatory regime.

Regulatory missions are often inconsistent

Having a clear mission is one of the key characteristics of an effective regulatory regime. Regulators in countries belonging to the Organisation for Economic Co-operation and Development (OECD) increasingly seek to maximize consumer choice and welfare. Asian regulators, by contrast, are charged with many conflicting public policy missions. Simultaneously, they must protect jobs and stability, while promoting consumer interests, reducing prices, and attracting foreign investment. Government intervention and market competition are emphasized equally.

- About 80% are responsible for protecting the financial stability of the regulated firms and for protecting consumer interests and for enforcing or monitoring competition laws and policies.
- Several regulators are legally mandated to protect jobs in the sector, but they are also required to reduce consumer prices and protect consumer interests. Given the usual overstaffing of public utilities, shedding jobs is typically part of a program to reduce prices by increasing productivity.

Coherent mandates for regulators would improve performance in the region. Regulators should be concerned with consumer interests, rather than with the profitability of individual companies and the protection of jobs in the sector.

A critical shortage of staff, training, and expertise

A lack of skills among regulatory personnel is a major constraint to improving the quality of regulatory regimes. Asia has a critical shortage of training resources, which leaves 80% of regulators with no access to training. Training is needed particularly as many new regulators are being created and taking on new responsibilities for guiding liberalization of utility sectors.

Regulators are also crippled by a scarcity of experienced human resources. Many new regulators are not fully staffed, especially for jobs requiring skills that are also valuable to the private sector. Training is not the whole answer to this wider problem. Human resource policies should be aligned with the need to hire experts from competitive private labor markets. Recruitment and pay policies should be based on market practices rather than civil service rules. In addition, more stable and adequate financing strategies are necessary if regulators are to recruit and retain expertise.

Due to a lack of financing, substantial underemployment in regulatory oversight is evident in most Asian countries. The costs of operating a full-fledged regulatory system are significant. The United Kingdom's electricity and gas regulator, the Office of Gas and Electricity Markets (OFGEM), spent

£36 million and employed 330 staff in fiscal year 2002. The Korea Electricity Commission, which has 39 employees, would have to employ 266 staff to meet the United Kingdom benchmark.

Action needed to strengthen under-equipped and unsupported utility regulators

It is not surprising that Asian utility regulators have not won the confidence of investors. Asia's governments rely too much on under-equipped and unsupported independent regulators to carry out tasks that are beyond their capabilities. Without concrete steps, assisted by the Asian Development Bank, to improve policy coherence, rationalize institutions, and boost skills and capacities, Asian utility regulators are unlikely to improve their performance. A diagnostic review of each country should outline an action plan in the following areas.

- In the short term, training is a high priority in areas such as price regulation, concepts of utility regulation, economic and financial techniques, and design and management of regulatory institutions. While the costs of adequate training are high, they could be reduced through regional training courses financed, initially, by the international community.
- Institutional reforms could be carried out fairly quickly, once governments agree. Conflicts of interest must be resolved by separating operators from regulators, and industry promotion from industry regulation. The roles of ministers and parliaments should be assessed in light of the heavy ministerial participation in tariff and licensing decisions. To build credibility for investors, more regulatory independence and transparency is necessary. In some countries with advanced regulatory regimes, such as the United Kingdom, independence is less important than carefully structured transparency in the relations between regulator and political authorities. Transparency, a powerful and neglected aspect of utility regulation, could be a low-cost method to increase credibility.
- Rationalization of multiple regulatory bodies in single sectors would increase regulatory transparency, and reduce investment risk. Where sectors are converging (e.g., electricity and gas), a multisector regulator should be considered. National competition authorities should be more involved in the review of structural and market-entry decisions in utility sectors.
- Regulatory mandates should emphasize boosting consumer welfare through efficiency gains.
- Progress on structural reforms in these sectors, including privatization and unbundling, should be resumed to improve market and commercial incentives among utility service providers.

Governments in Asia must work harder to establish a policy environment that sustains market incentives, investor trust, and citizen confidence. But they do not have to work alone. Regional networks of regulators are already assisting.

An East Asian utility regulators network should be established to parallel the network in South Asia. Recognizing the challenges facing regulatory agencies in the region, the South Asia Forum for Infrastructure Regulation was created in 1999 as a network of regulators to share experiences, build capacities, and conduct training. The two networks could increase collaboration and learning across Asia, and establish regional standards of regulatory quality by agreeing, for example, on minimum standards of policy and regulatory transparency in utility sectors.

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1 This report is by Scott Jacobs, Managing Director of Jacobs and Associates, an international consulting firm on regulatory reform (see http://www.regulatoryreform.com). Mr. Jacobs is the former head of the OECD Program on Regulatory Reform, where he worked with 30 OECD countries on improving their regulatory practices. He has written 18 books and many articles on regulatory reform.
This report is based on an informal survey of East Asian and Pacific utility regulators conducted by Jacobs and Associates for the Joint Expert Meeting on Utility Regulation in East Asia and the Pacific on 16–18 June 2003 in Bangkok. The 22 regulators included in this study were among 60 East Asian institutions that were asked to respond to a written questionnaire.

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