



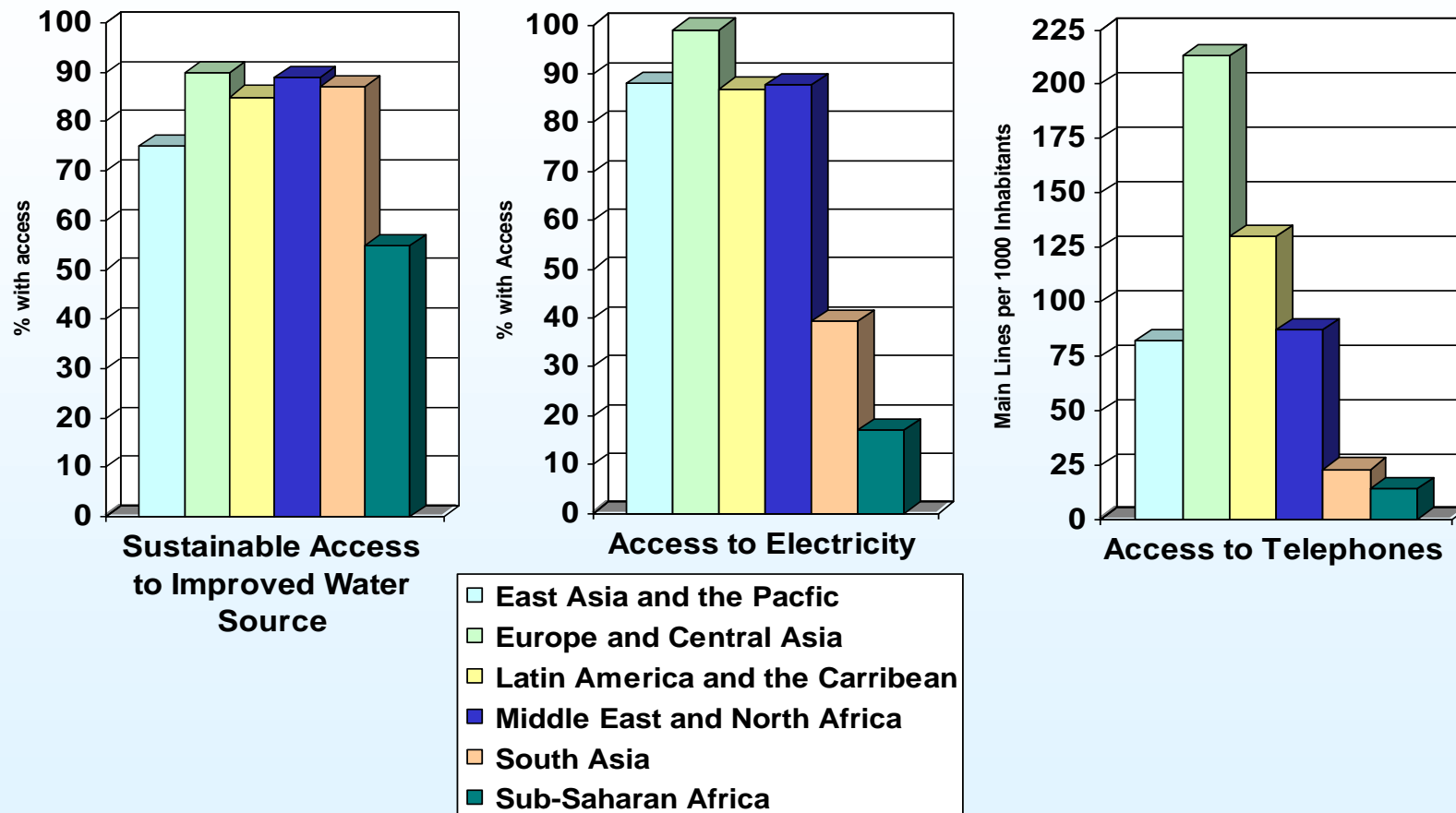
# **Evolution of East Asian Utility Regulators: Diversity and challenges<sup>©</sup>**

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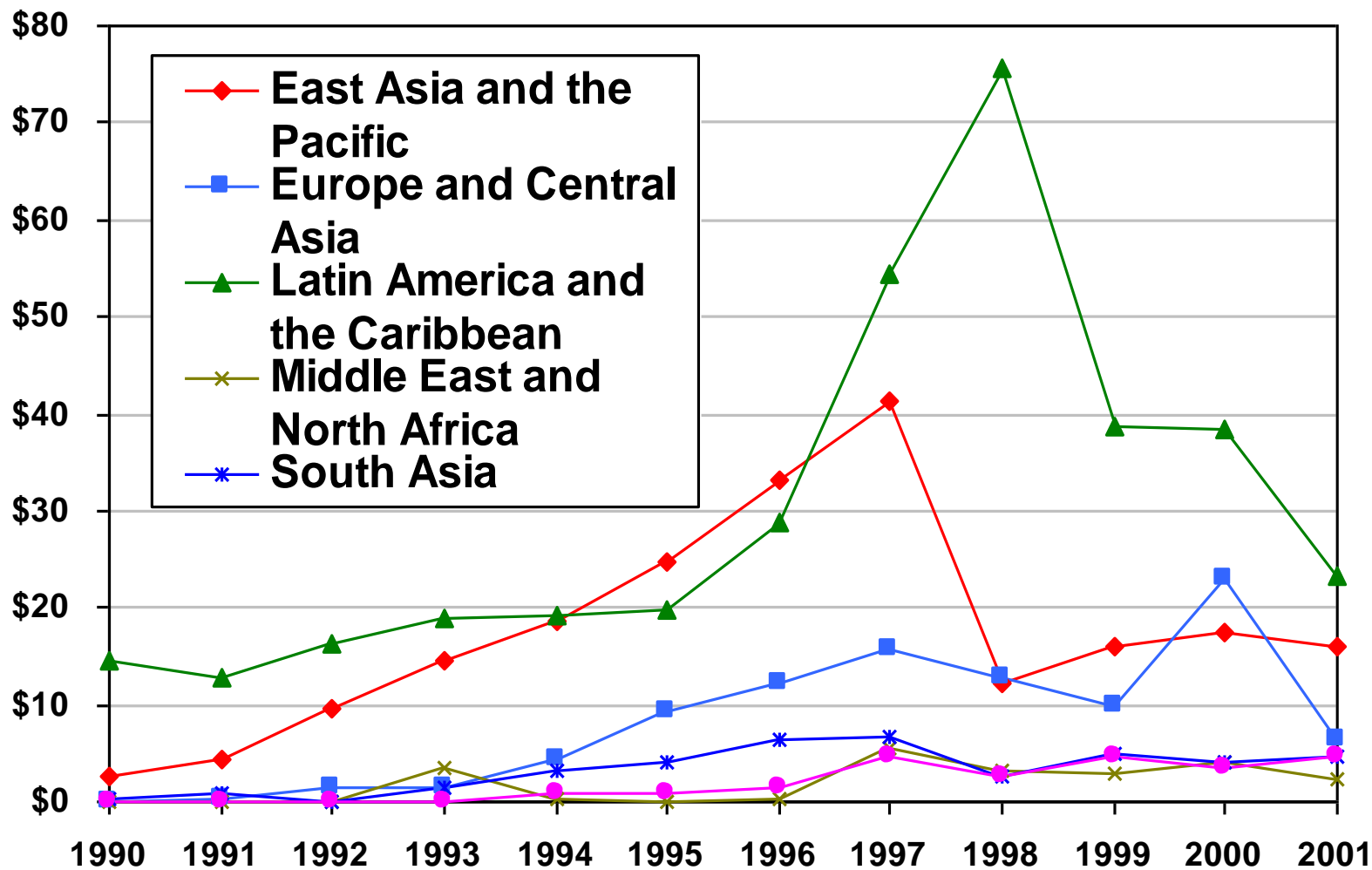
## Access to Infrastructure Remains Insufficient in East Asia





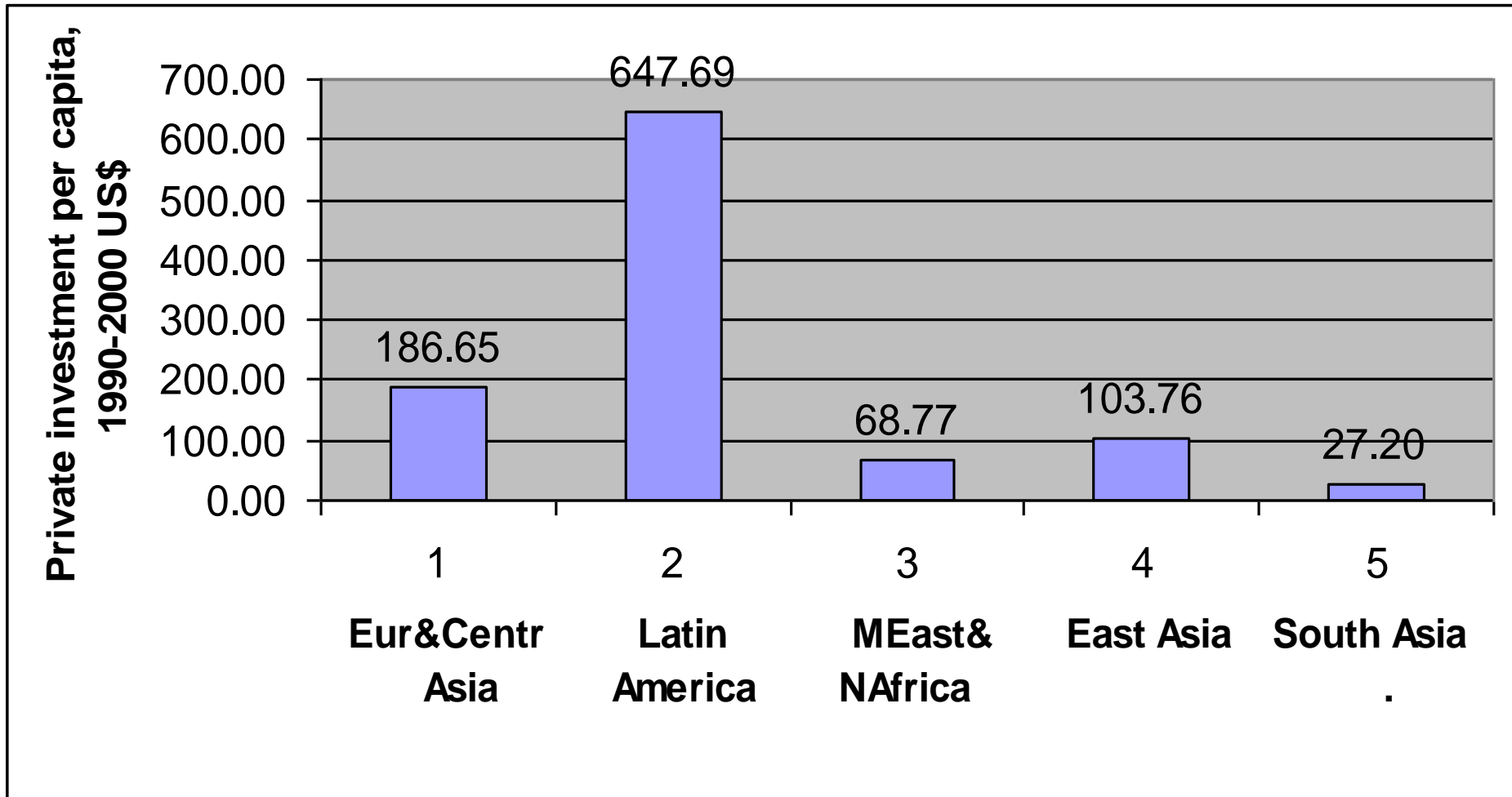
## Investment in Infrastructure Projects with Private Participation (\$bn)

(Source: World Bank PPI database)



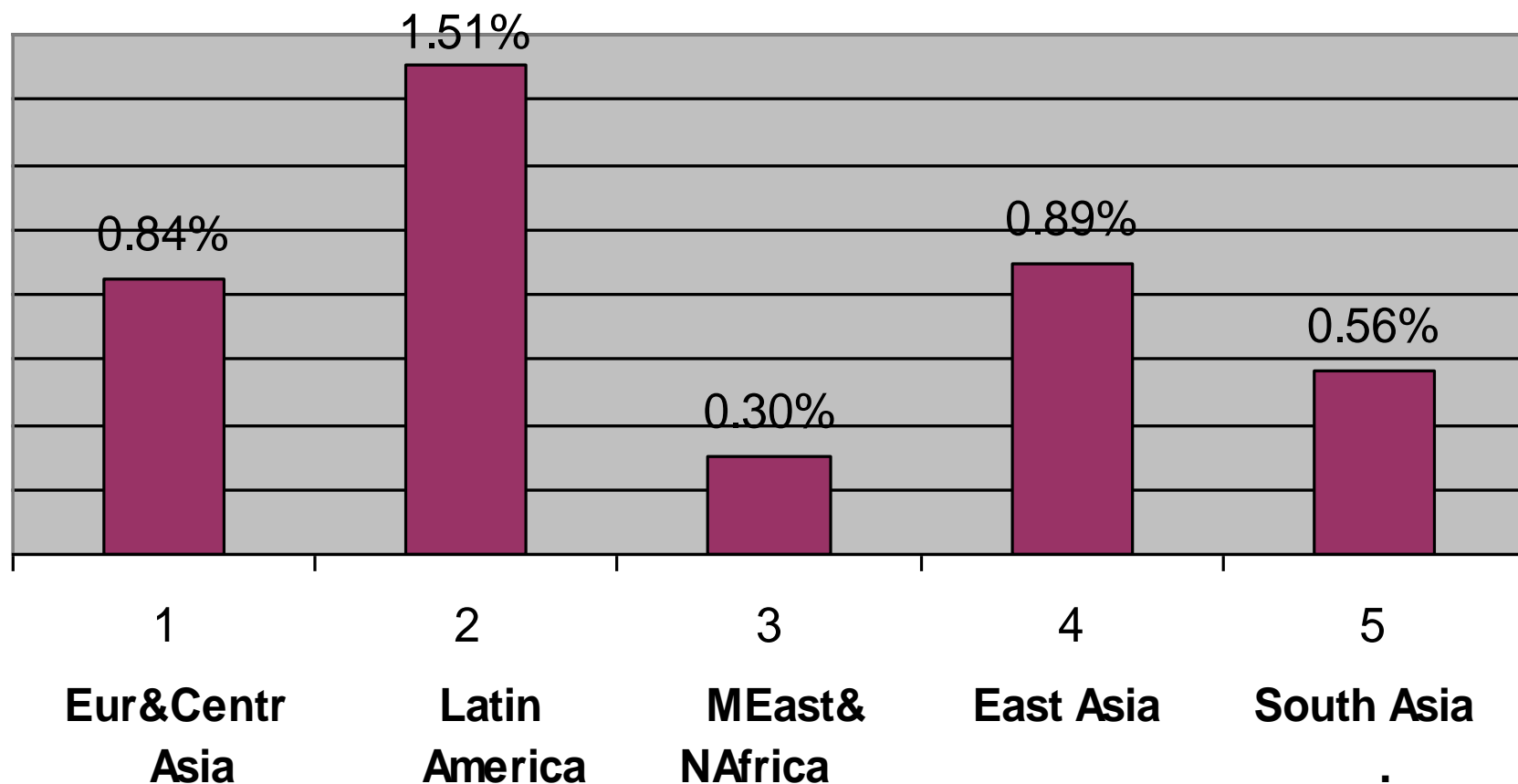


## Private investment in infrastructure in developing countries, by region, 1990-2000, per capita





## Private investment in infrastructure in developing countries, by region, 1990-2000, as % of annual GNI





## Part of the problem lies in slow policy reform...

- Asian countries have neglected the underlying policy reforms seen in Latin America and Europe.
- Most private investment in other regions came from divestiture and reforms to create competitive markets, but in Asia most private investment in infrastructure came from greenfield investments to meet growing demand. State-owned monopolies and interventions were left largely untouched,
- In 1999, for the first time, revenues from divestitures exceeded greenfield projects in Asia.



...and part of the problem has been inadequate regulatory governance.

- A 1998 survey found a trend toward independent regulators in ADB countries, but an “absence of any well-established independent regulatory agency with a reputation for fair and effective regulation....”
- Whatever institutions they use, governments will have to work hard and visibly to establish a policy environment that sustains market incentives and investor trust.
- This calls for a broad governance agenda.



# Widespread agreement that independent regulators are at the heart of regulatory governance for liberalized sectors

- International organizations recommend independent regulators – OECD, World Bank, IMF, regional development banks
- Trade agreements: the WTO Telecommunications Agreement
- European Union countries must have “functionally separate” regulators





## Why are independent regulators so attractive?

In sectors characterized by a mix of competitive and natural monopoly activities, independent regulators are meant:

- As an alternative to a mix of policy, regulation, ownership, and industry promotion tasks inside line ministries;
- To shield market interventions from political and commercial interference, and so appropriately allocate risks and establish market incentives;
- To provide a credible commitment by the government not to expropriate capital assets or the returns generated by firms.
- To improve transparency;
- To deepen expertise and technical skills;
- To enhance stability and commitment to optimal long-run policy based on consumer welfare;



## But independent regulators are no panacea during the complex transition to market competition...

- Most independent regulators are very recent even in OECD countries.
- We know little about the performance over time of independent regulators, or how performance is tied to design or to the wider governing environment.



...and much care is needed in designing  
“independent” regulators.

- Independent regulators pose potential problems with capture, complexity, rigidity, cost, fragmentation of competition policy, accountability, and lack of political clout.
- Governments tend to rely too much on under-equipped and unsupported independent regulators to carry out tasks that are beyond their capacities.



# Risks of poor regulatory performance are higher in transitional countries...

...due to the phase of economic development...

- Higher poverty rates mean more emphasis on universal service obligations, usually met by former monopolies and used, often reasonably, to justify privileges and special relationships.
- Shortages of expert skills, which mean that staff are drawn from the regulated industry.
- Lower public sector pay relative to private sector, combined with poor conflict of interest controls such as revolving-door controls. Research has shown that regulatory leniency is tied to future employment contracts.
- Less experience with other autonomous agencies such as central banks, competition offices, and auditors.
- Closer ties between industry and government due to state-led development phase.
- Newer formation of the nation requires more balancing between ethnicities and regions.



## Risks of poor regulatory performance are higher in transitional countries (2)...

...and due to fewer checks and balances on regulatory behavior:

- The transparency framework is usually not as well developed
- Inefficient judicial review functions under a weaker rule of law.
- Consumer interests are poorly organized, in line with a weaker vigilant civil society in general.
- Parliaments carry out less oversight of performance.
- Competition authorities are weaker or nonexistent.



## The most important performance measure for investors is regulatory credibility

- Credibility means sustained commitment to clear and fair rules.
- The foundation of credibility is political commitment to markets.
- Credibility can be enhanced by institutional safeguards such as independence, transparency, and checks-and-balances.
- Flexibility in institutional design is needed.



# The APEC Survey of Asian regulators (June 2003)

## ■ 22 regulators responded from 13 Asian countries

1. Cambodia Electricity Authority
2. Cambodia Ministry of Post and Telecom
3. China Institute of Economic Systems and Management (think tank for Chinese regulators)
4. China State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
5. Hong Kong Water Supplies Department
6. Indonesia Jakarta Water Supply Regulatory Body (JWSRB)
7. Indonesia Ministry of Settlements and Regional Infrastructure
8. Korea Electricity Commission
9. Laos Ministry of Telecommunications
10. Malaysia Water Supply Department Penang
11. Mongolia Communications Regulatory Commission (CRC)
12. Mongolia Energy Regulatory Commission
13. Mongolia Fuel and Energy Dept, Ministry of Infrastructure
14. Papua New Guinea Independent Consumer and Competition Commission
15. Philippines Metropolitan Waterworks & Sewerage System (WSS)
16. Philippines National Telecommunications Commission
17. Philippines National Economic and Development Authority (NEDA)
18. Singapore Energy Market Authority
19. Sri Lanka PURC
20. Thailand Dept of Civil Aviation
21. Thailand Energy Policy and Planning Office
22. Thailand Post and Telecommunications Department



## Regulators usually oversee multiple sectors

- These 22 regulators oversee a total of 67 sectors.
  - 26 communication sectors
  - 18 energy sectors
  - 12 transport sectors
  - 8 water sectors
- 11 of the regulators oversee multiple sectors that are converging or substitutes (such as telecom and cable)
- 5 regulators oversee unrelated network sectors (true multi-sector regulators)





# Who Is the Regulator?

## Wide diversity in oversight institutions

- Of the 22 responding regulators, 9 are government departments located within ministries, the traditional regulatory institutions.
- The other 13 regulators are outside ministries (a mix of commissions, authorities), the “independent” regulators.



# Independence is hard to define

- Only 6 of the 13 that are outside ministries are accountable to own directors appointed for fixed terms (classical commissions)
- 7 are separate bodies outside of a ministry, but are accountable to a minister.
- The decisions of 4 of 13 can never be overturned by a minister (but 3 regulators with appointed directors can have some decisions overturned by a minister).
- Ministers can overturn all decisions of three of the 13.
- Budgets of half of these regulators are set outside of a ministry, while the other half are incorporated into ministerial budgets



# Most are very young institutions

- Of the 10 independent regulators who provided this information, nine were created in 2001 or after, and two of these in 2003 (a 10-year lag behind OECD countries).
- Only one independent regulator predates 2000: National Economic and Development Authority (NEDA), Philippines, created 1972.
- Most are still building fundamental capacities such as dispute resolution and access to data held by incumbent enterprises.
- Lack of experience implies a substantial need for staff training.



# The regulators share oversight with numerous other institutions

- Utility sectors in Asia (as in most countries) are usually simultaneously overseen by multiple institutions.
- Only 7 of the 22 respondents are the only significant regulator in their sectors – almost all of these 7 are “independent” regulators
- The other 15 respondents share oversight of 48 sectors with 37 other institutions.
- This increases regulatory complexity, confusion, and risk.



## The total picture: a complex environment with multiple regulators sharing powers

- Regulatory agencies outside ministries
- Regulatory agencies within ministries, but functionally separate
- Regulatory bureaus within ministries
- Policy bureaus within ministries
- Ministerial level oversight committee
- SOE involved in the sector
- Sub-national levels of government



## Yet competition authorities have little role in utility regulation in East Asia

- Competition authorities have little role in utility regulation in east Asia, unlike in OECD
- 16 of 19 respondents said the competition agency is “not involved at all” in reviewing regulatory decisions
- 2 of 19 said that competition authorities review decisions after regulations are adopted
- 1 of 19 said competition authorities conduct ex ante review of regulatory decisions



# Controlling SOEs is among the most difficult challenges for regulators

- Due to incomplete privatization, there is still substantial state ownership in utility sectors in the region. Almost all (21 of 22) respondents regulate SOEs.
- In half of the cases, the same ministers responsible for regulatory oversight have some responsibility for overseeing the SOE. This conflict makes credible regulation nearly impossible.
- In 8 of the 22 regulatory regimes, an incumbent firm has regulatory authority, so that it both provides services and regulates its competitors. This is the worst-case scenario.
- Separation between operation and regulation, between industry promotion and regulation, should be a high priority for the ADB reform agenda.



# What are goals of these regulators?

- They pursue a wide range of policy goals. Promoting consumer protection and financial stability for incumbents are most common.
- Fair, not free, competition is preferred.
- They often pursue conflicting goals:
  - A third are responsible for protecting jobs AND for reducing consumer prices
  - 80 % must protect the financial stability of regulated firms AND protect consumer interests
  - Half are responsible for enforcing competition laws AND for financial stability of incumbents
- Most regulators are not responsible for universal service provision.





## Legal mandates of utility regulators (% with mandate to pursue this goal)

Promote free market competition	43%
Promote fair market competition	71%
Promote the development of the sector	64%
Promote consumer choice	71%
Enforce or monitor competition laws and policies	50%
Protect consumer interests	93%
Reduce consumer prices	50%
Protect stability and the financial sustainability of regulated firms	79%
Promote investment	79%
Ensure universal service	57%
Protect jobs in the regulated sectors	29%
Open up the regulated sectors to international trade and investment	57%



## What are their regulatory tools?

Quality control and service reliability rules	79%
Consumer protection rules and enforcement	79%
Tariff revision	74%
Operate a general licensing regime	68%
Sector planning	53%
Review or approval of mergers and market entry	53%
Dispute settlement	53%
Organization of public hearings for tariff revisions	53%
Control of market dominance of incumbents	42%
Contracts or concessions negotiations	37%
Contracts or concessions awards	21%
Others	16%



# Training Needs Assessment

- Lack of well trained staff is a major constraint on good quality regulation.
- Yet training of the staff of new regulatory authorities in Asia has been neglected. There is a huge gap in access to training: 17 of 21 respondents said that their staff did NOT have access to training courses on infrastructure regulation.
- Those with access to training rely on financing and expertise from the development banks, particularly the ADB and the World Bank.



# Training is the not the only answer

- Civil service reform and adequate budgetary support are necessary, if regulators are to recruit and retain expertise.
- Yet training can upgrade regulatory quality until the necessary reforms are achieved.



# There seems to be substantial understaffing in Asian regulatory bodies

- The regulators employ an average of 35 people per sector.
- If compared to UK per capita benchmarks:
  - Korea electricity commission would increase from 39 to 266 staff
  - Philippines NEDA would increase from 50 to 440



## Staffing is still focused on engineers, rather than economics and law

- Engineers make up the largest group of professional employees, and generalists and managers the second largest.
- Around half of total staff are administrative staff.
- Economists, lawyers, and accountants fall far behind in numbers (only 1.2 economists per regulator on average).



## Resources for training courses

- 2/3 of respondents have no training budget.
- Those with budgets average US\$2000/employee/year, with a low of \$68 and a high of \$5000.
- The low level of financing suggests desirability of lower-cost training options and need for external financing.
- According to the survey, an estimate of financing need for training is \$5000 per professional staff, or about \$5 million for these 22 regulators.



# International training sources are the most favored

- The responses showed that the best results have been from international consultants and regulators from other countries; the worst experiences were from domestic training institutions and domestic private consultants, although domestic academic institutions were found to be generally useful.
- This suggests that the pool of domestic expertise available for training is limited, and the role of the ADB is crucial.





## Priorities for training topics are applied and practical

- Alternative Forms of Price Regulation
- Conceptual Framework for Utility Regulation
- Economic and Financial Techniques in Utility Regulation
- Design and Management of Regulatory Institutions
- Non-price Aspects of Utility Regulation



# Training methods, courses, and sources

- Most respondents preferred practical and hands-on training methods such as case studies and presentations by practitioners. Distance learning was highly disliked.
- Most preferred training courses that last 2 weeks or longer (substantial investment needed)
- A Regulators Network is considered to be a cost effective way to provide regional training course, case studies, and practitioners.



# Most favored options to increase training opportunities in the region

- Sending staff members to participate in training activities in other countries in the region
- Sharing information on planned training activities among a regulators network in the region
- Sharing training materials such as course content and case studies with other regulators in the region
- Holding joint training courses for regulators in the region to reduce overall costs
- Having access to training materials used by other regulators in the region



# Key messages from the APEC survey

- New regulatory bodies are quickly emerging in Asia, but the quality of regulatory governance does not yet support market-oriented private investment in Asian infrastructure. Governance is an urgent agenda.
- Regulators are faced with difficult external environments, multiple institutions, unrealistic expectations, and inconsistent policies and mandates.
- There is wide diversity in design. Design issues such as independence are as yet unresolved and should be closely followed for good practices.
- There is a critical lack of skills and training.
- The international community has a role to play here, as do institutions such as regional utility networks.