Telecom Regulatory and Policy Environment 2008

Rohan Samarajiva Bangkok, October 2009



Our mission

To improve the lives of the people of the emerging Asia-Pacific by facilitating their use of ICTs and related infrastructures; by catalyzing the reform of laws, policies and regulations to enable those uses through the conduct of policy-relevant research, training and advocacy with emphasis on building in-situ expertise



Plan of presentation

- Overview of methodology
- Ways to use the results
 - Across countries
 - Over time in one country
 - Diagnostic, across dimensions



Investment by competitive operators is key to sector performance

- Good performance can be defined as
 - increasing connectivity
 - low price
 - increased quality of service
 - greater choice of services and service elements
- All 4 can only happen with sustained/long term investment
 - with competition by multiple players
 - not under pure monopoly conditions
 - not solely with high-risk capital that flows out quickly
- Less arbitrary the policies/regulation about investment and operation

 more attractive a country or sector is to an investor
 - How will I be treated compared to others?
 - How will I be treated now vs. in the future?



Evaluation of risks at point of investment (or reinvestment) is both subjective and objective

- Market risk: cost of capital, likely demand for product etc.
 - Often objectively evaluated
- Country risk: macro-level factors such as exchange rate, inflation, political stability
 - Some evaluated objectively (e.g., expected inflation rates, growth rates, etc.)
 - But others subjectively: e.g., "Doing Business" survey by World Bank, Investment Climate survey by WEF
- Regulatory risk (risk emanating from government action, including but not limited to sector regulator -- Spiller & Levy 1994)
 - Different ways to evaluate



Multiple ways of evaluating regulatory environment (institutional framework, processes, outputs)

LOW

Level of subjectivity of evaluation

HIGH

- Mostly objective
 - "Is there a RIO"?
 - Answer: Yes or No (1 or 0)
 - E.g. unpublished work by Waverman (2008)/Edwards & Waverman's work using EU Regulatory Institutions database to measure regulatory independence
- More subjective, but still objective at base
 - "Is the RIO implemented? /how often?"
 - Answer: "Yes, sometimes", "No, only 30% of the time" etc.
- Mostly subjective
 - "Is the RIO good"/ "Does is unduly benefit one party?"
 - Answer depends on who you ask
 - But ask enough people (with different interests), you get a rough idea about how good it is...

To meaningfully evaluate regulatory risk subjective evaluations are a must/best. Evaluation has to include more than what's written down on paper

- Different aspects of the regulatory environment influence risk
 - Governance/institutional framework: how independent is the regulator? To who does it report? Etc.
 - Process: How are regulatory decisions made? In real life? Does the regulator follow the same process every time?
 - Substance (outcomes/output): Are the regulatory decisions sound? Do they impact the sector positively?
- Theory and practice can often differ
 - E.g. MV and PK regulates price (in theory, as per Act)
 - But not in practice



TRE: a measure of the perceived efficacy of the overall regulatory environment

Encompasses regulatory governance (process), regulatory substance and regulatory outcomes



Starting point: Against what criteria can we evaluate? Who should supply the data for evaluation?

- Is there a set of broadly accepted measures of good regulation?
 - WTO regulatory reference paper (General Agreement on Trade in Services, Protocol 4) contains principle that were laboriously negotiated
 - Enjoys broadest consensus (and voluntary adoption) by a large number of countries, with many committing after adoption
- Who should supply the data for evaluation?
 - People who deal with, know about or are impacted directly by the regulator/regulatory environment



TRE: an evaluation of the Telecom Policy and Regulatory Environment in a country, along 7 dimensions

- Asks respondents to evaluate TRE on 7 dimensions
 - Market Entry
 - Allocation of Scarce Resources
 - Interconnection,
 - Regulation of Anti-Competitive Practices
 - Universal Service Obligations
 - Tariff Regulation —— central to most regulators' activities
 - Quality of Service becomes important as markets mature
- For 3 sub-sectors separately: fixed, mobile, broadband

Directly from GATS regulatory reference

paper



Target a minimum of 45 senior stakeholders per country, from 3 categories (micro states exception)

- Minimum of 15 respondents per category x 3 = 45
 - Category 1: those directly involved in the sector such as operators, equipment vendors
 - Category 2: those indirectly associated with the sector and those studying/observing the sector with broader interest such as consultants and lawyers
 - Category 3: those who represent the broader public interest such as media personnel, other government officials, retired regulators, civil society organizations
- Each category should get equal weight in final "score"
 - But not possible to guarantee equal # responses per category
 - Use weights to ensure equal contribution by each category



Short Questionnaire using Likert Scale. 5-7 minutes to complete, on average

- Each dimension evaluated on Likert Scale of 1 to 5
 - Minimum 1 = highly ineffective
 - Maximum 5 = highly effective
- E.g.,
 - "Please Tick the Number that best represents the quality of the regulatory environment for...

Market Entry	Highly ineffective 1				Highly effective
		2	3	4	5

- ...etc. 21 such questions/boxes
- Brevity ensures an assistant won't complete survey



Administered in person, online, fax, etc.

- Confidentiality maintained
 - Only aggregate results reported
 - Only one person has access to individual scores
- 1-2 page "summary of recent regulatory and policy events" given with each questionnaire
 - Written in neutral language
 - To refresh respondent's memory, if necessary
- Space for comments, if needed
- Not compelled to answer all questions



Ways to use the results

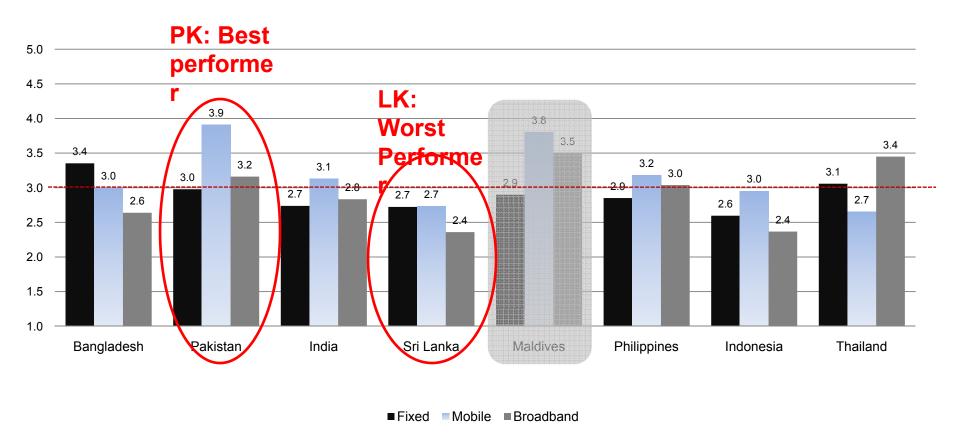
- Compare countries (by sector, by dimension etc)
 - To identify best practices
 - For regional investors, to identify/assess opportunities
 - But apples and oranges? (e.g., Maldives vs. India)
- To compare changes in perceived effectiveness of TRE over time
 - Might need to account for "lag" between regulatory action and increased/decreased TRE score/perception
- As a diagnostic tool within one country
 - Best use: same set of respondents giving different scores to each dimensions



Inter-country comparisons



Market Entry: PK leads with clear (yet expensive) licensing conditions. LK low scores related to delays in Airtel market entry (2007-09)





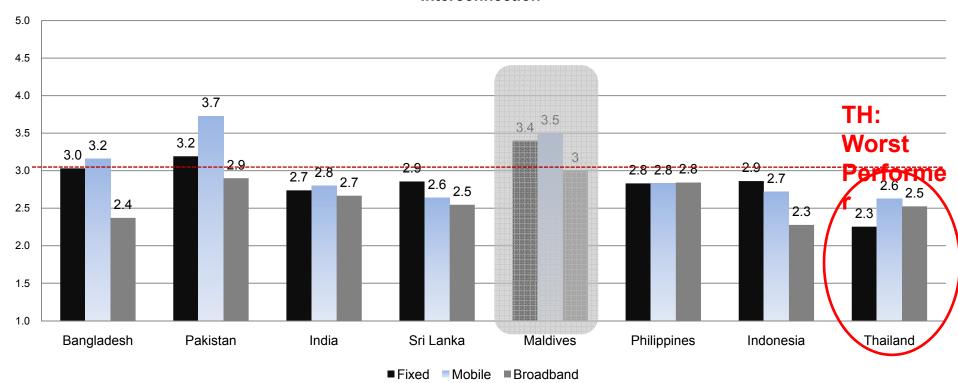
PK: Expensive but transparent licensing conditions; no restrictions on foreign ownership

- Clear rules: payment of fee guarantees license renewal
 - Even though very expensive @ USD 291 MM, price determined by auction
- Unbundled licensing for fixed
 - investors can enter, offer services in area of their choice
- Mobile Number Portability since 2007
 - even smaller (new entrants) have a fighting chance to capture market share
- No limitations to foreign ownership, M&A activity
 - USD 1.4 billion in FDI in 2007-2008
 - accounts for 27% of all FDI into Pakistan
- Result: 3rd fastest growing Telecom sector



Interconnection: Thai concessionaires subject to unsustainable IC rules by govt operators

Interconnection



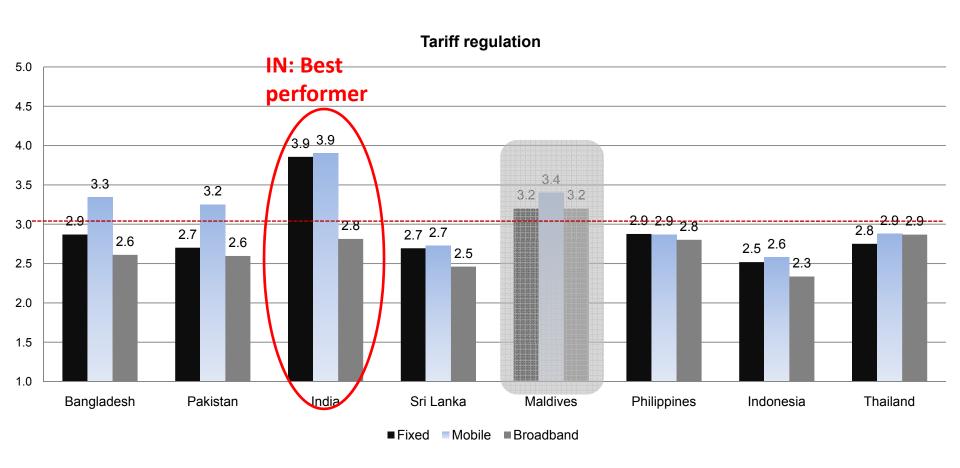


Thailand: concession regime stacks the cards against non-government-owned operators

- Private concessionaires legally owned by two state operators (TOT & CAT, the only two license holders)
- All interconnection negotiated via TOT/CAT
 - Private operators mere contractors
- E.g., CAT's concessionaires (DTAC, True Move)
 - Pay flat fee of USD 5.8 per month per post-paid SIM
 - Pay 18% of revenue per pre-paid SIM
- Concessionaires have refused to pay TOT since 2006
- Interconnect amongst themselves



Tariff regulation: India's tariffs among lowest in the world. Regulator does not regulate prices



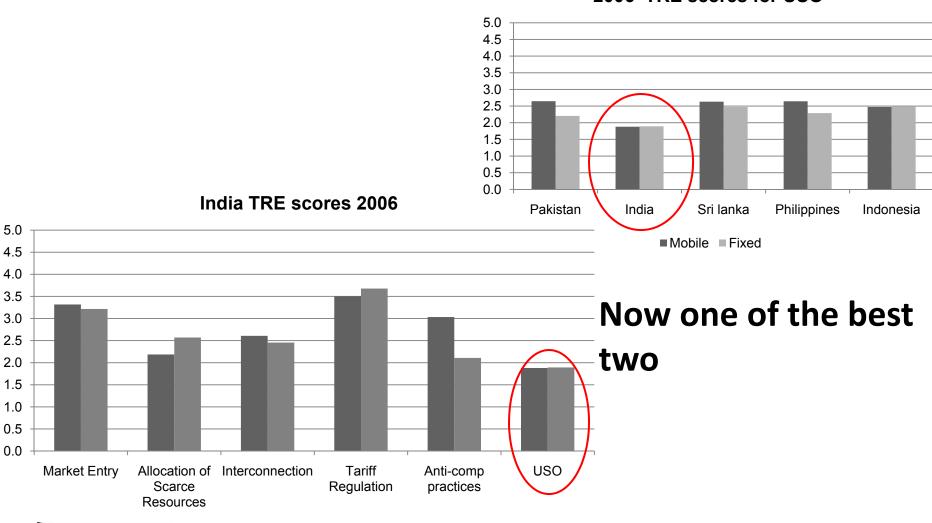


Using TRE scores to track regulatory performance over time

Are good (or bad) regulatory actions reflected in subsequent TRE scores?



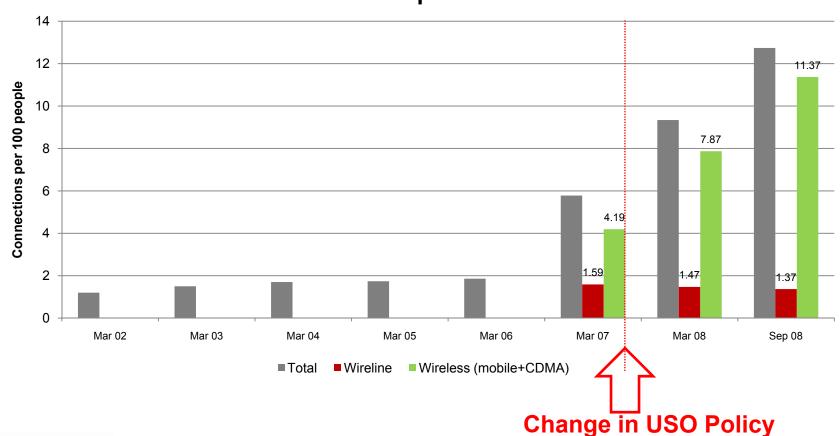
In 2006, India's was worst in USO. India also received lowest USO TRE score in the region.



■ Mobile 2006
■ Fixed 2006

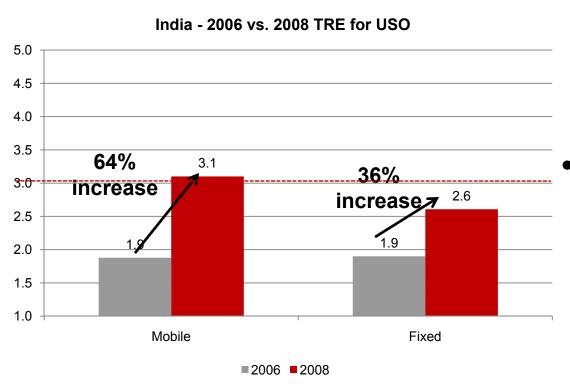
Mobile drove rural penetration. But USO policy charged 5% of mobile gross revenues and funded only fixed. 2nd largest undisbursed USF in world

India rural penetration





Post-policy change, TRE for USO increased 64%. Biggest change observed. Stakeholders rewarding policy, even though funds yet to be disbursed



- In March 2007:

 mobile sector allowed

 to receive funds
 - Increase in TRE scores
 - But still USD 4 billion undisbursed
 - TRE scores barely
 above average,
 though among highest
 in region



TRE does best in diagnosing problems with a country's regulatory functions

What works? What does not?



Internal consistency

- Same people who scored India high for tariff regulation, also gave low scores for scarce resources
- Same people who scored Thailand high for market entry, scored it low for interconnection
- Those responsible for policy and regulation should take the results seriously
 - If they believe their actions are sound, do a better job communicating the reasons and expected good results
 - Otherwise, rethink the actions



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