Tariff regulation

TRAI-APT Workshop on Regulatory Framework

Rohan Samarajiva

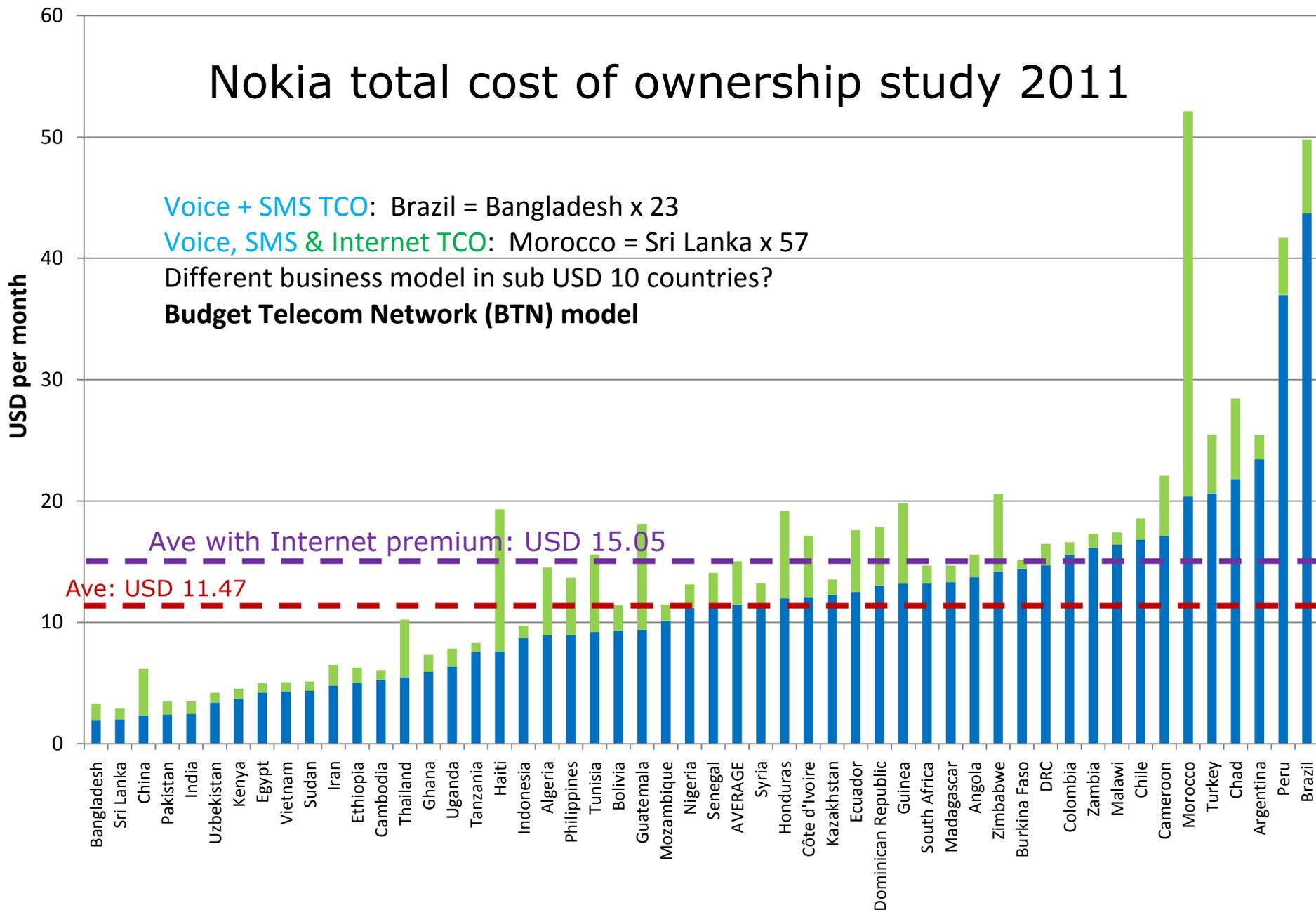7 September 2011

www.lirneasia.net

Agenda

- Tariff regulation: means and ends
- Performance on price: voice and broadband
- Regulator's contribution as indicated by TRE results
  - Forbearance
  - If not forbearance, what?
  - Proposed solution: banded forbearance
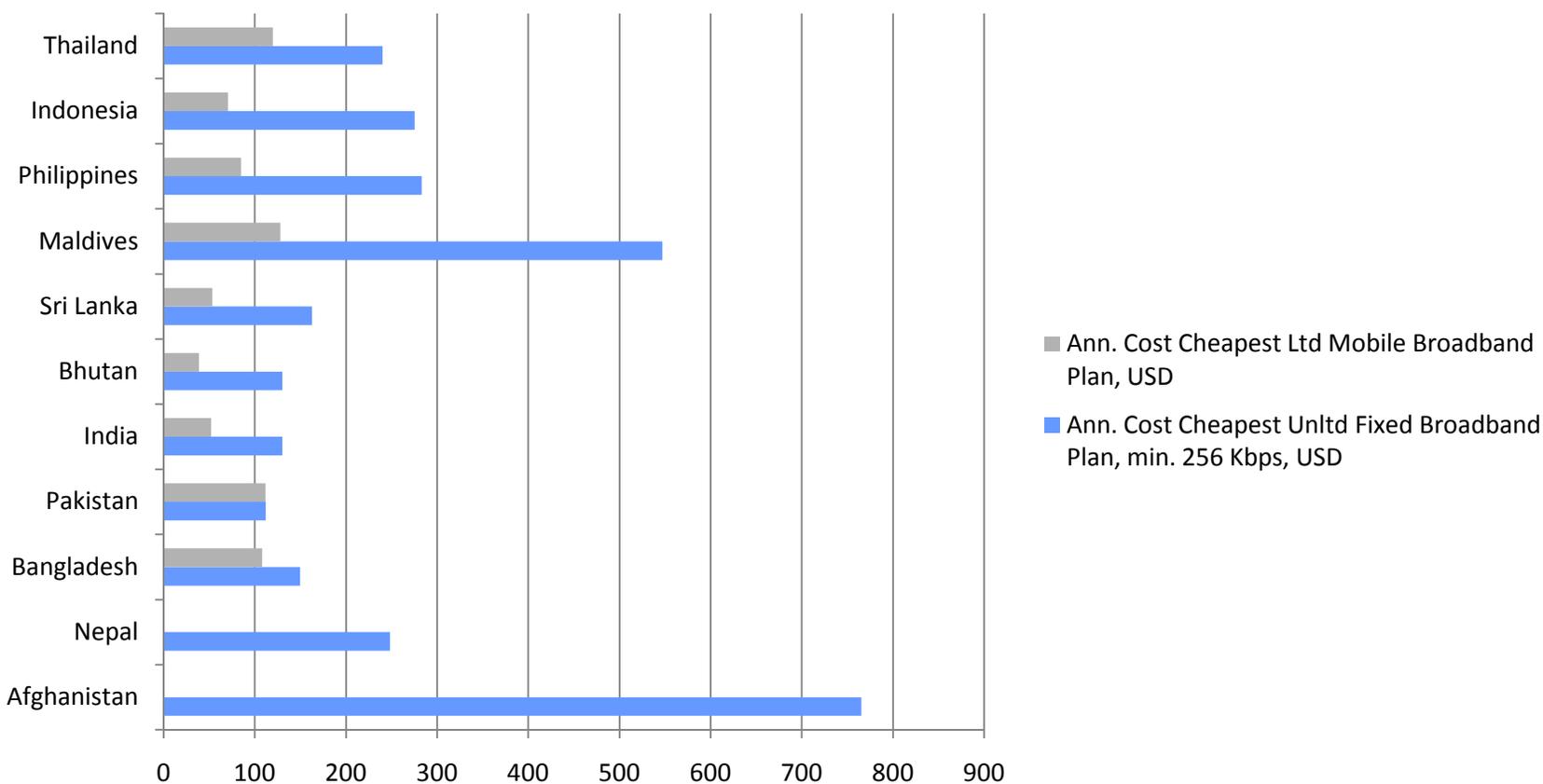
Regulation is a means, not the end

- ## What matters are
  - Tariffs of the services most people use: mobile voice
  - Tariffs of broadband services, especially in countries where mobile voice has hit bottom, increasingly important
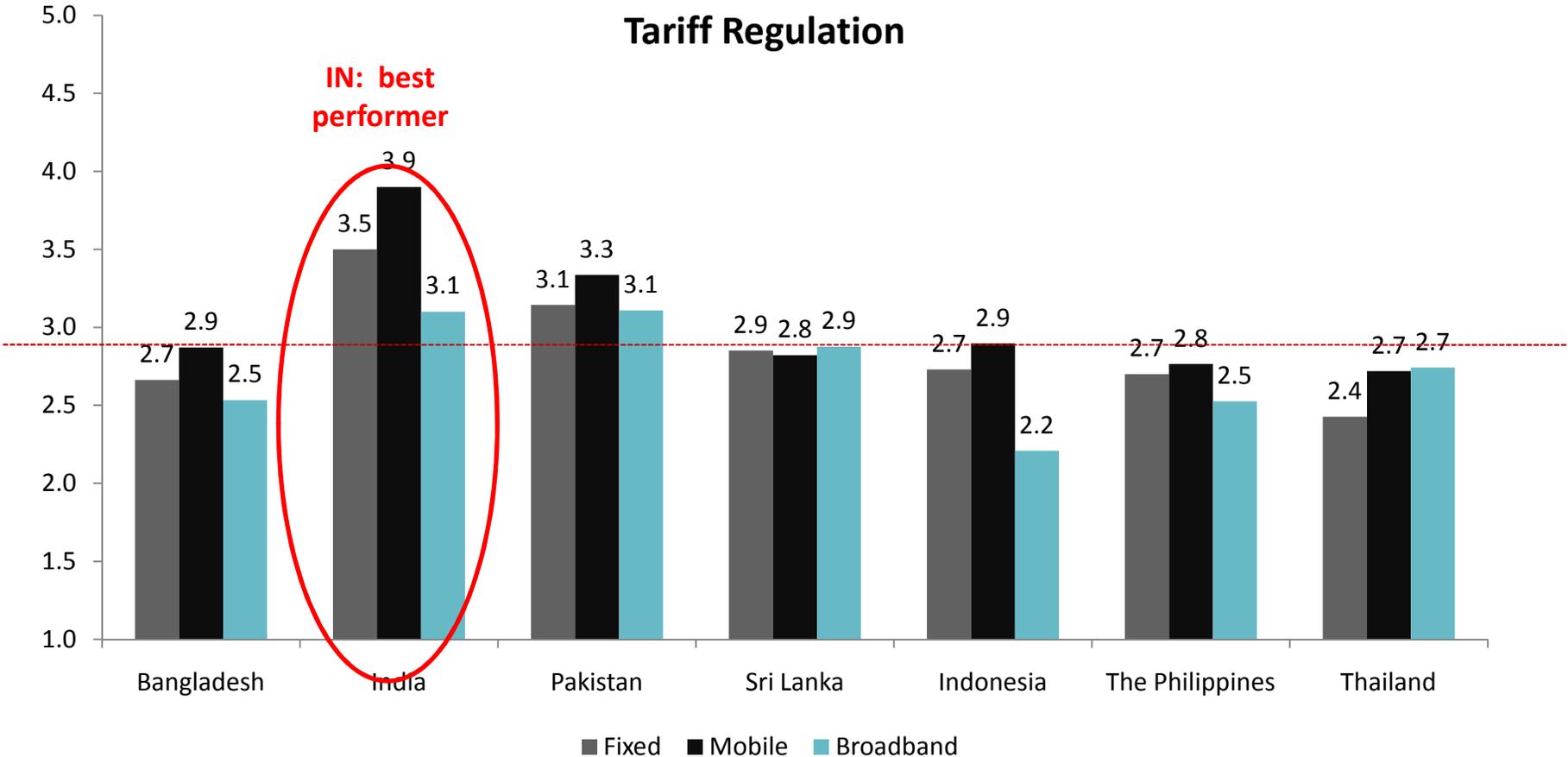
Nokia total cost of ownership study 2011

USD per month

Voice + SMS TCO: Brazil = Bangladesh x 23
Voice, SMS & Internet TCO: Morocco = Sri Lanka x 57
Different business model in sub USD 10 countries?
Budget Telecom Network (BTN) model

Ave with Internet premium: USD 15.05

Ave: USD 11.47

Countries (x-axis): Bangladesh, Sri Lanka, China, Pakistan, India, Uzbekistan, Kenya, Egypt, Vietnam, Sudan, Iran, Ethiopia, Cambodia, Thailand, Ghana, Uganda, Tanzania, Haiti, Indonesia, Algeria, Philippines, Tunisia, Bolivia, Guatemala, Mozambique, Nigeria, Senegal, AVERAGE, Syria, Honduras, Côte d'Ivoire, Kazakhstan, Ecuador, Dominican Republic, Guinea, South Africa, Madagascar, Angola, Zimbabwe, Burkina Faso, DRC, Colombia, Zambia, Malawi, Chile, Cameroon, Morocco, Turkey, Chad, Argentina, Peru, Brazil

■ Monthly TCO (USD)   ■ Internet premium (USD)

LIRNEasia
www.lirneasia.net

Fixed & mobile broadband prices in SE & S Asia, 2011 August: Mobile almost always significantly cheaper

Legend:
- Ann. Cost Cheapest Ltd Mobile Broadband Plan, USD
- Ann. Cost Cheapest Unltd Fixed Broadband Plan, min. 256 Kbps, USD

Countries (top to bottom): Thailand, Indonesia, Philippines, Maldives, Sri Lanka, Bhutan, India, Pakistan, Bangladesh, Nepal, Afghanistan

X-axis: 0, 100, 200, 300, 400, 500, 600, 700, 800, 900

LIRNE*asia*
www.lirneasia.net

All SEA countries & some SA countries offer speeds higher than 256 kbps

Tariff Regulation scores from 2011 Telecom Policy and Regulatory Environment Survey

Tariff Regulation

IN: best performer

Bangladesh: Fixed 2.7, Mobile 2.9, Broadband 2.5
India: Fixed 3.5, Mobile 3.9, Broadband 3.1
Pakistan: Fixed 3.1, Mobile 3.3, Broadband 3.1
Sri Lanka: Fixed 2.9, Mobile 2.8, Broadband 2.9
Indonesia: Fixed 2.7, Mobile 2.9, Broadband 2.2
The Philippines: Fixed 2.7, Mobile 2.8, Broadband 2.5
Thailand: Fixed 2.4, Mobile 2.7, Broadband 2.7

■ Fixed ■ Mobile ■ Broadband

LIRNEasia
www.lirneasia.net

Bangladesh, Pakistan and Sri Lanka also have low prices, but only the Indian regulator is rewarded . . .

- The value of forbearance
  - Many countries included in the TRE studies practice de facto forbearance
  - But the difference between de facto and de jure is that the latter improves certainty
    - There is no likelihood of a tariff being held hostage for extraneous reasons
    - Sensitive marketing decisions will not leak to competitors through the regulatory agency
- But, is forbearance practical only with the lowest HHIs in the world, which India has?

LIRNEasia
www.lirneasia.net

India has one of the highest levels of competition

HHI, Sep '08
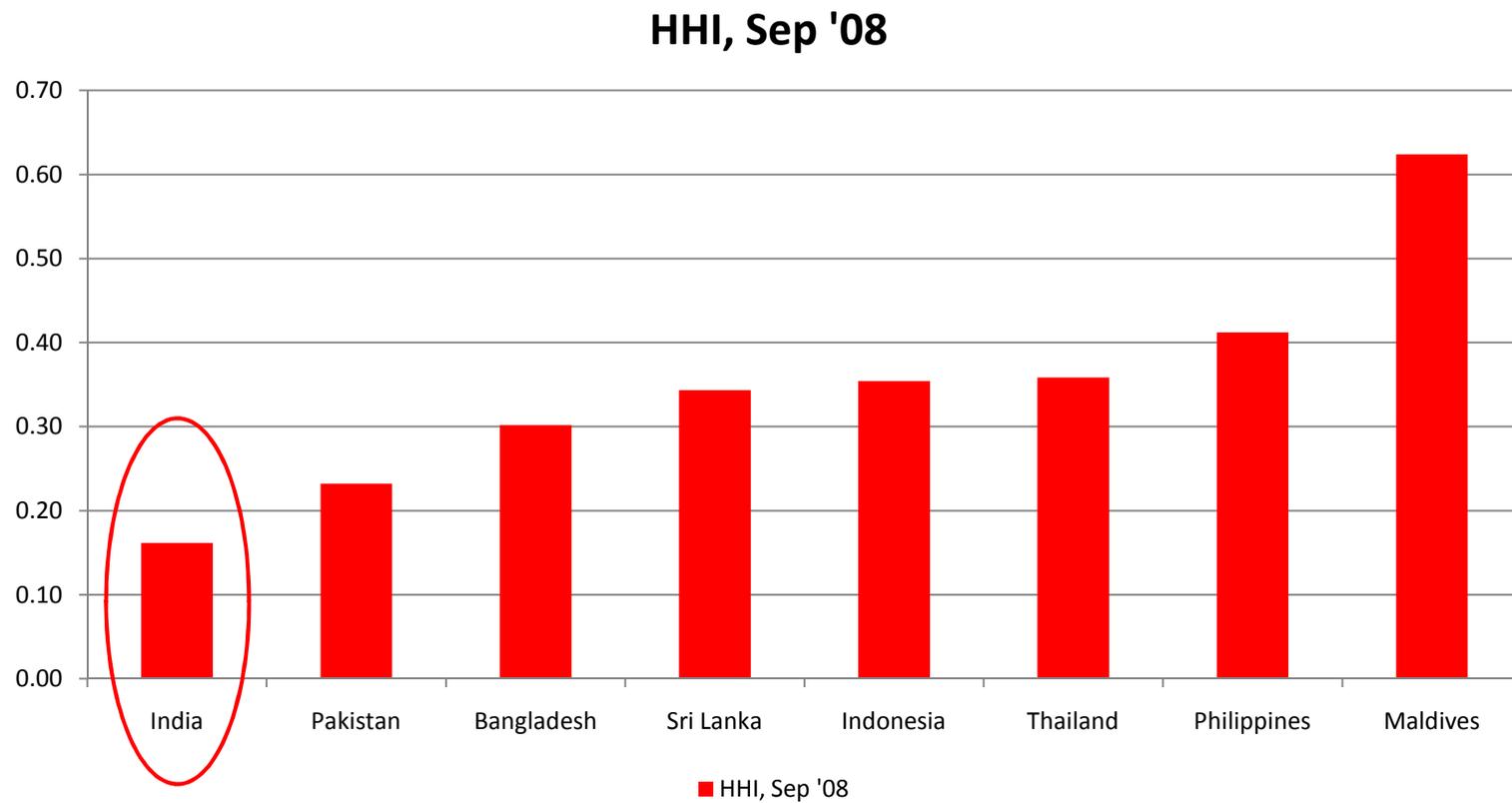
In countries with low levels of competition, operators with market power may set prices too high or too low

- Too high
  - Suppresses demand
- Too low
  - Through cross subsidization, price squeezing or predatory pricing
  - Harm competition

Therefore regulators intervene in price setting

- Through various tools/methods
  - Rate of Return regulation
  - Price Cap Regulation
  - Benchmark regulation
  - Etc.

Price Cap Regulation

- Tells how much prices of a basket of services can change in each period (e.g., year)
- Typically, allowed revision = CPI –x
  - X = efficiency factor
  - CPI = consumer price index
- $PRICE_{new} = PRICE_{previous} * (1+(CPI-x))$
- Other variations

Creates incentives for efficiency; but what is X?

- Price is regulated, not profits
  - Incentives to cut costs/be more efficient → keep the profits during approved period
- But how is X calculated?
  - X based on expected efficiency (but is usually negotiated)
  - Information asymmetries
  - E.g., if inflation 27%, x = 2% → prices can increase 25%? In mobile?
- Resource intensive to implement properly

Avoid resource constraint through Asymmetric Regulation

- Asymmetric: treat different operators different
- Regulate prices of Dominant/SMP Operator only
  - Has to file tariff plans; obtain approval
- Not regulate prices of other operators
  - Can do what they like
  - Or just file, but don't have to wait for approval

But doesn't solve all problems...

- ## How to regulate SMP operator's prices?
  - Pick a method for regulating price (Price Cap? ROR? Benchmark?)
  - Same problems as before
- ## Leaves SMP operator very unhappy
  - "Everyone except my firm gets to do what they want"
- ## Needs high level of competition to work
  - Not useful in oligopoly
  - Or if competitors shadow SMP operator's prices

Solution: Banded Forbearance (part of benchmark regulation)

- Benchmark regulation: Make regulatory decisions based on comparison with others

- Basic idea: Allow prices to freely fluctuate within a pre-determined band

- The band (the benchmark) itself moves over time

1. Pick the right indicator

- For mobile prices
  - A mobile basket, based on OECD (now also ITU) methodology, modified as needed
- For broadband prices
  - Monthly price of service plan at specified speed/download
- Etc.

# 2. Identify peer group to benchmark against

- Neighbors
  - Culturally similar; belong to regional org.
- Economic peers
  - Similar ability to pay, similar level of development
- Demographic peers
  - Similar number of people (e.g., microstates)
- Geographic
  - Island nations, land-locked countries, mountainous countries

LIRNEasia
www.lirneasia.net

3. Define benchmark period

- I.e., time frame during which the benchmark applies
  - E.g. 1 year; 1 quarter etc
- At the end of the period, the benchmark is re-calculated
  - A new target is set

4. Define the band (options available)

- E.g. Benchmark +/- specified amount x
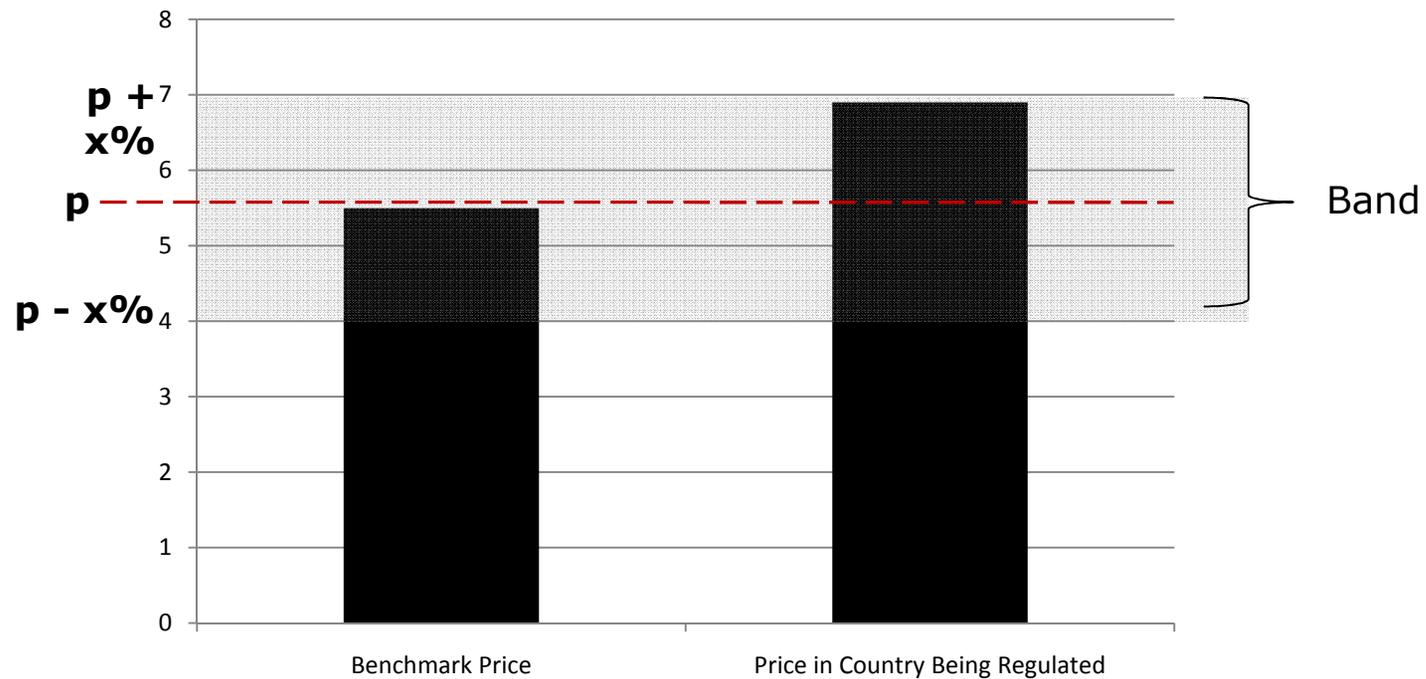
5. After the band is designed

- Players completely free to set/move prices within band
  - Just inform regulator
  - Not required to wait for approval as long as within band
- If plans are outside band, regulator investigates
  - Lower than band: investigation on stated predatory/anti-competitive behavior criteria
  - Higher than band: problem with cost structure?

Advantages of banded forbearance

- Once band is set, less resource intensive
- Operators have certainty (less regulatory risk)
  - Rules known beforehand
  - Able to check themselves if price within band
  - Easier planning (less unknowns)
- Can apply to ALL operators including SMP
  - Essentially deregulates incumbent's prices
  - But provides safeguards

But setting the band is key

- Goal 1: set the band such that most players stay within the band most of the time (less investigations)
- Goal 2: set the band so that over time it moves down (except in countries where it has hit bottom)

Setting the band best done in consultation with all stakeholders

- Less opportunity for unhappiness
- Propose band → open consultations → final band
- Once done, everyone has to play by the rules

For detail, see:

- Samarajiva , R. & Iqbal, T. (2009). Banded forbearance: A new approach to price regulation in partially liberalized telecom markets, *International Journal of Regulation and Governance*, 9(1): 19-40.