Competition and Pricing Regulation

Pricing Regulations

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Agenda

The agenda for today's presentation is the following:

1. Why regulate prices?
2. Useful Economic Concepts and Pricing Principles
3. Methods of Price Regulation
4. Setting the Level and Structure of Prices
5. Tariff Rebalancing
6. Tariff Principles

1. Why regulate prices?
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Meaning of Prices

It is important to be clear about what is meant by “prices”.

- A price for a given telecommunications service is more than just the charges for that service. It is described as a tariff.
- A tariff consists of a description of the service, the terms and conditions of service provision and the applicable charges
- Different regulatory approaches apply to retail tariffs and to wholesale tariffs reflecting different policy objectives

Why Regulate Tariffs?

Regulation is the deliberate and conscious action of governments to intervene in the free workings of the market

Regulation is generally only justified on two grounds:

- To prevent or to correct market failure
- To pursue specific policy objectives

Why Regulate Tariffs?

Intervention to regulate tariffs may be readily justified.

Retail

To ensure that certain services are affordable to users

(i.e., pursuit of policy objective)

To prevent excessive charges for services

To prevent below cost charging for services

(i.e., guard against market failure)

Wholesale

To ensure that certain services are available to competitors, e.g., ULL, bitstream

(i.e., pursuit of policy objective)

To prevent excessive charges for services

(i.e., guard against market failure)

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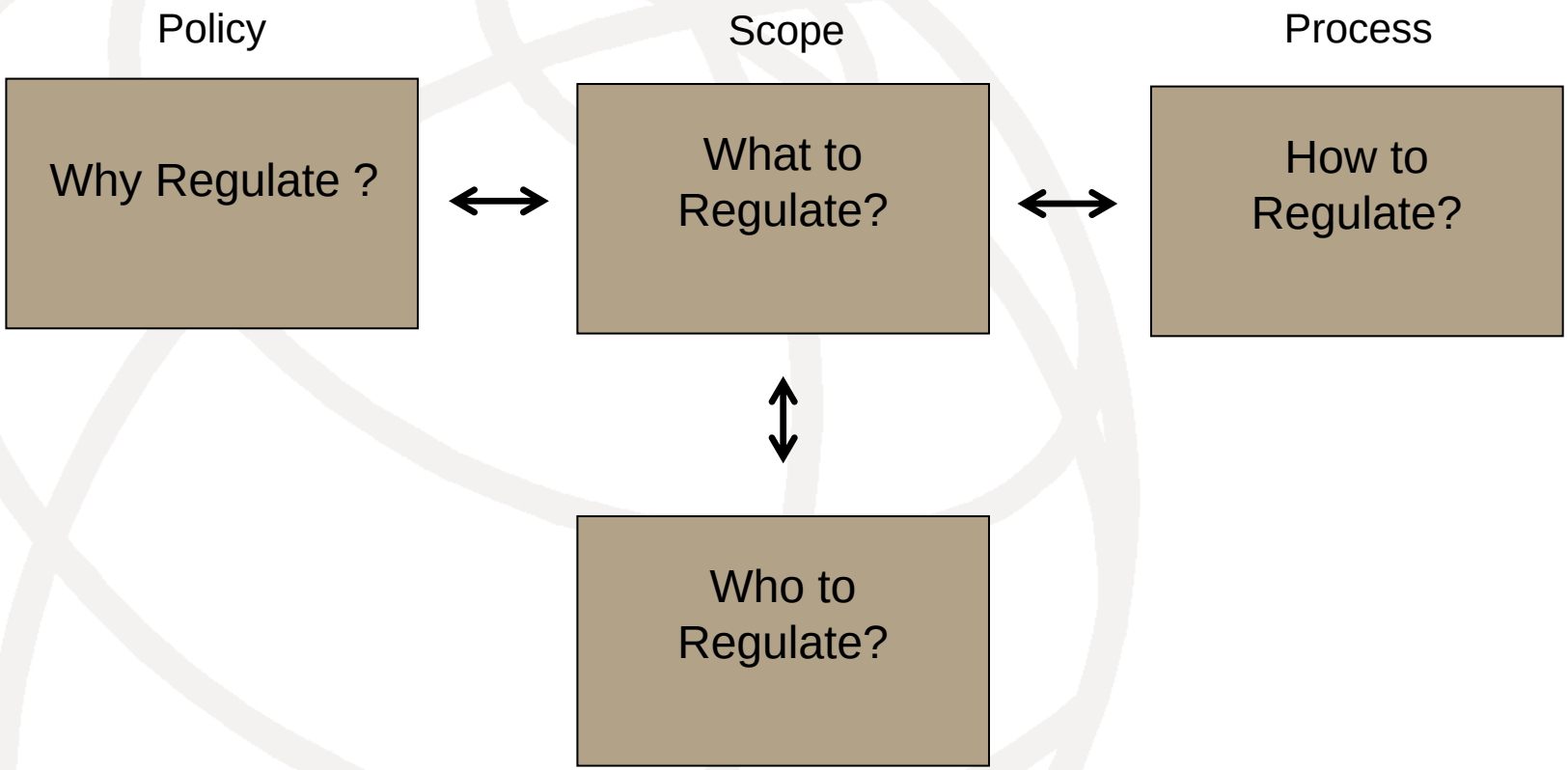
Retail tariff regulation is addressed in a four part framework



Regulation of retail tariffs is a key competitive safeguard - particularly in the early stages of market liberalisation.

- Basic fixed line service charges have typically been regulated because of their social importance and the absence of effective competition
- Regulation helps ensure that the costs of each service are recovered, i.e., cross-subsidisation of services is eliminated
- Regulation helps ensure that consumer interests are protected, (i.e., price, quality, fair trading, misleading advertising)

Regulatory requirements may differ across the range of services that operators provide on the basis of market competitiveness.

- Fixed line rentals and service charges have typically been regulated (limited competition and social importance)
- Mobile services have not generally been subject to close regulation especially in developed countries (regarded as competitive)
- Internet services have rarely been regulated (considered competitive or too difficult)
- Some markets, (e.g., US) draw a distinction between competitive and monopoly markets

Regulatory requirements may differ between operators.

- Incumbent operators or operators with SMP are often subject to tariff regulation while other operators are not
- SMP regulation or dominant carrier regulation is intended to promote competition through creating a level playing field
- Mobile operators and ISPs may fall outside the scope of tariff regulation on the basis of the services that they provide but this is changing in emerging markets (eg encouraged price reductions vs price floors to avoid unsustainable competition)

Regulation of wholesale services is a key regulatory safeguard.

- Regulation helps ensure that essential input services are available in the marketplace
- Regulation helps to promote competition by encouraging new market players
- Regulation guards against “margin squeeze”, i.,e., inflating wholesale prices to reduce available retail margin

Wholesale services have been regulated because:

- Wholesale services have been fundamental to the success of competition policy
- Significant differences exist in market power between incumbents and new operators
- Complex technical, legal and economic issues are involved
- Interconnection has been a stumbling block to effective competition

Services at the wholesale level comprise three categories.

Interconnection

- Services to enable traffic to pass between networks
- For example, call termination, call origination
- Service scope and terms subject to regulation

Access

- Services which enable the network facilities of one operator to be used by another operator
- For example, unbundled local loops
- Service scope and terms subject to regulation

Other Wholesale

- Services which enable the network facilities of one operator to be used by another operator
- For example, directory services
- Service scope and terms subject to commercial negotiation

While “interconnection” and “access” are related they are distinct.

- Interconnection is a bridge between different networks to enable customers of each network to communicate with each other
- Access enables an operator to use the facilities and / or services of another operator

Wholesale tariff regulation applies to specific operators.

- Incumbent operators when markets are liberalised
- Operators which are deemed to have SMP or are declared to have SMP through a formal process

In the light of current industry pressures, interconnection pricing trends are emerging.

Trends

- Interconnection charges are falling
- Differentials in interconnection charges between fixed and mobile networks are eroding
- Interconnection charges are becoming reciprocal
- Interconnection pricing structures are being simplified

Key Drivers

- IP technology reduces costs
- Incumbent power eroded
- Fixed mobile convergence
- Power shift from fixed to wireless operators given substitution

Best practice interconnection pricing principles include the following.

- Prices are based on underlying cost using an acceptable methodology, LRAIC, FDC
- Prices are non-discriminatory
- Prices are transparent

Basics of Long Run Incremental Cost:

- LRIC is a forward looking cost methodology;
- It measures the direct additional cost of providing interconnection allowing for the replacement of assets and the cost of capital
- Marginal cost of providing an additional unit of service (eg next minute of traffic, next subscriber
- May not provide sufficient returns to incumbents over the long run

Variations of LRIC include TSLRIC, TELRIC and LRAIC

Key Features of Fully Distributed or Allocated Cost:

- Is a historical cost based methodology
- Measures the direct and indirect costs of providing interconnection
- Captures the volume sensitive and fixed costs which are directly identified with interconnection plus a share of common overhead cost
- Necessarily includes in the cost of interconnection, a share of costs which are arbitrarily allocated and which have no casual relationship with interconnection
- Is usually considered to result in interconnection charges which exceed those under competitive conditions

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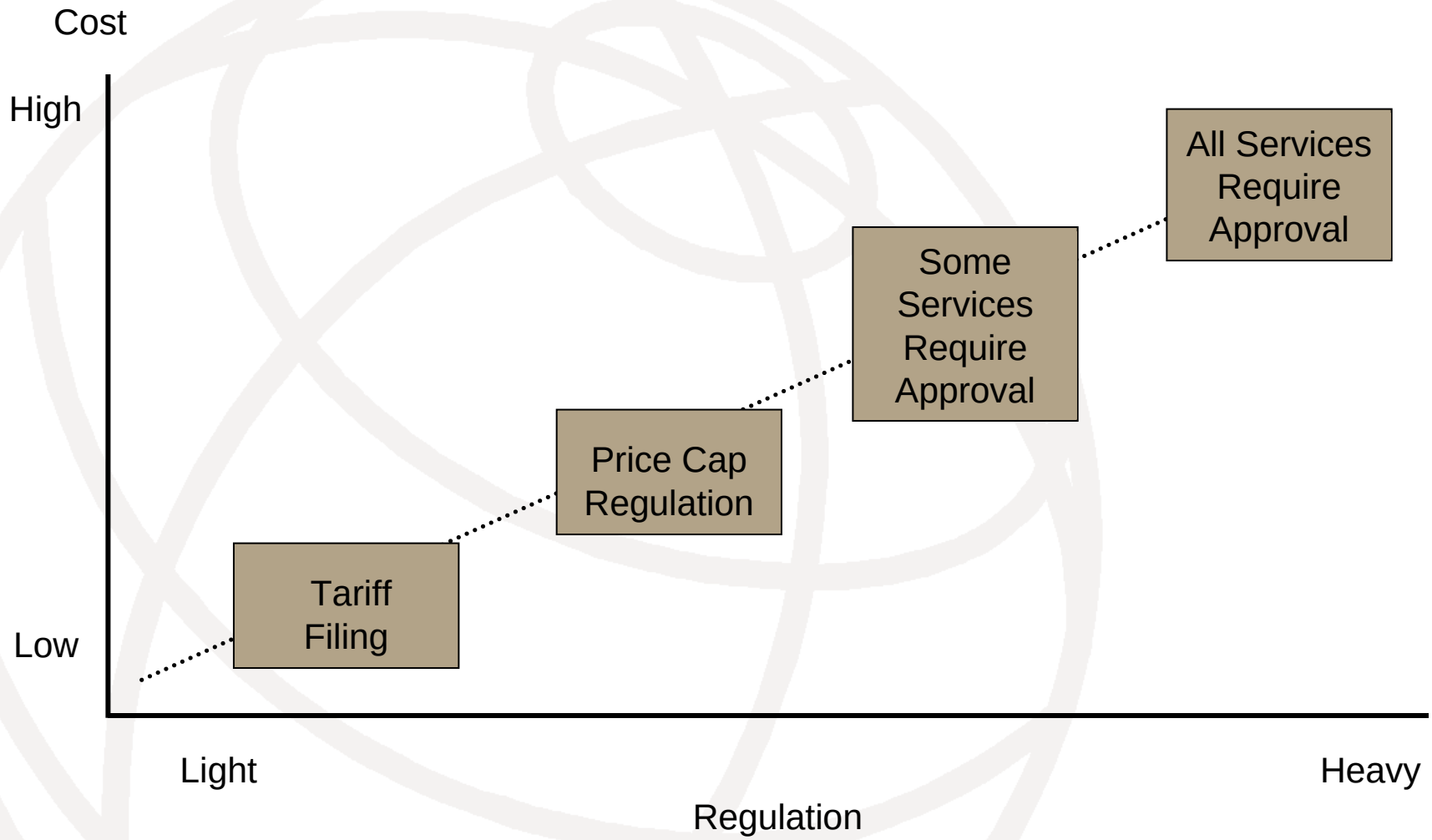
Regulation of retail tariffs may be applied in different forms



All Services Require Approval

- Regulator must approve tariffs for all new services and any changes to tariffs for existing services
- Emphasis is on general regulatory control

Some Services Require Approval

- Regulator must approve tariffs for specified services only
- Emphasis is on critical services
- Possible Price Floor for some services (eg on-net)

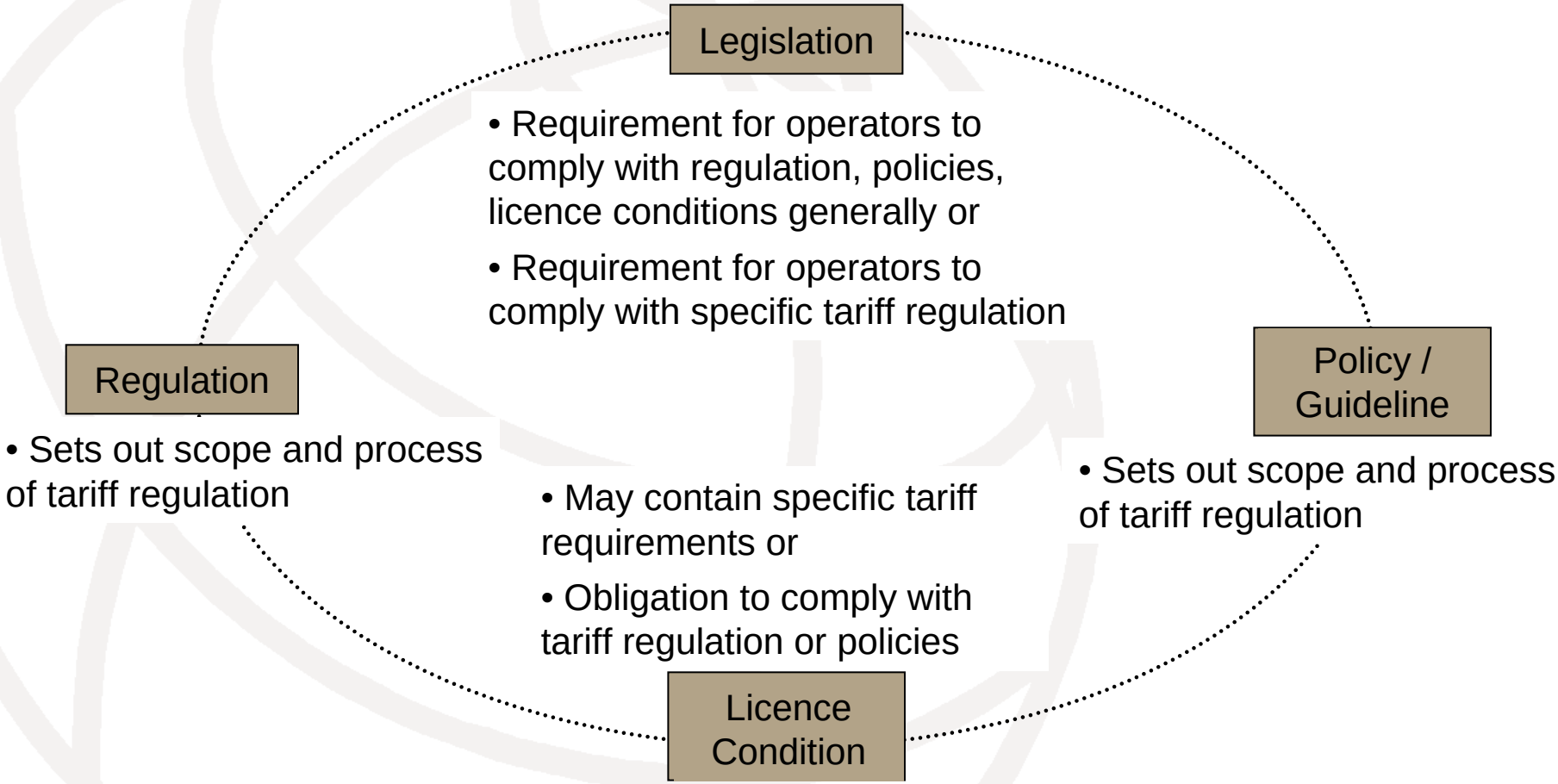
Price Cap Regulation

- Operator must manage tariffs across a group of specified services
- Emphasis is on charges and consumer benefits

Tariff Filing

- Operator files tariffs with regulator
- Emphasis is on transparency and consumer interests

Regulation of retail tariffs may be applied through different yet reinforcing regulatory instruments



Wholesale tariff regulation may be applied in different forms.

Interconnection

- Reference Interconnection Offer (RIO)
- Regulator establishes RIO requirements, decides which operator prepares RIO and approves RIO
- Interconnection requirement typically in legislation and reinforced through regulations, guidelines and licence conditions

Access

- Reference Access Offer (RAO) similar to RIO
- Access services list or “declared” services subject to specific supply requirements

Other Wholesale

- General principles apply only
- Commercial negotiation

The key components of a RIO are the following:

- RIO is presented as an Access Provider's offer to an Access Seeker
- Comprehensive description of services and terms & conditions of service provision
- Charges for services
- Service quality requirements

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A generic Tariff Regulation may contain the following:

- Regulator may require operators to file tariffs for specific services
- Services must be supplied in accordance with tariffs
- Charging principles (fair, cost based, non-discriminatory)
- Tariffs are deemed approved if not rejected within 30 days
- Applicable charges for specific services
- Tariffs must be publicly available

Interconnection prices can be set via a range of cost and non-cost based approaches:

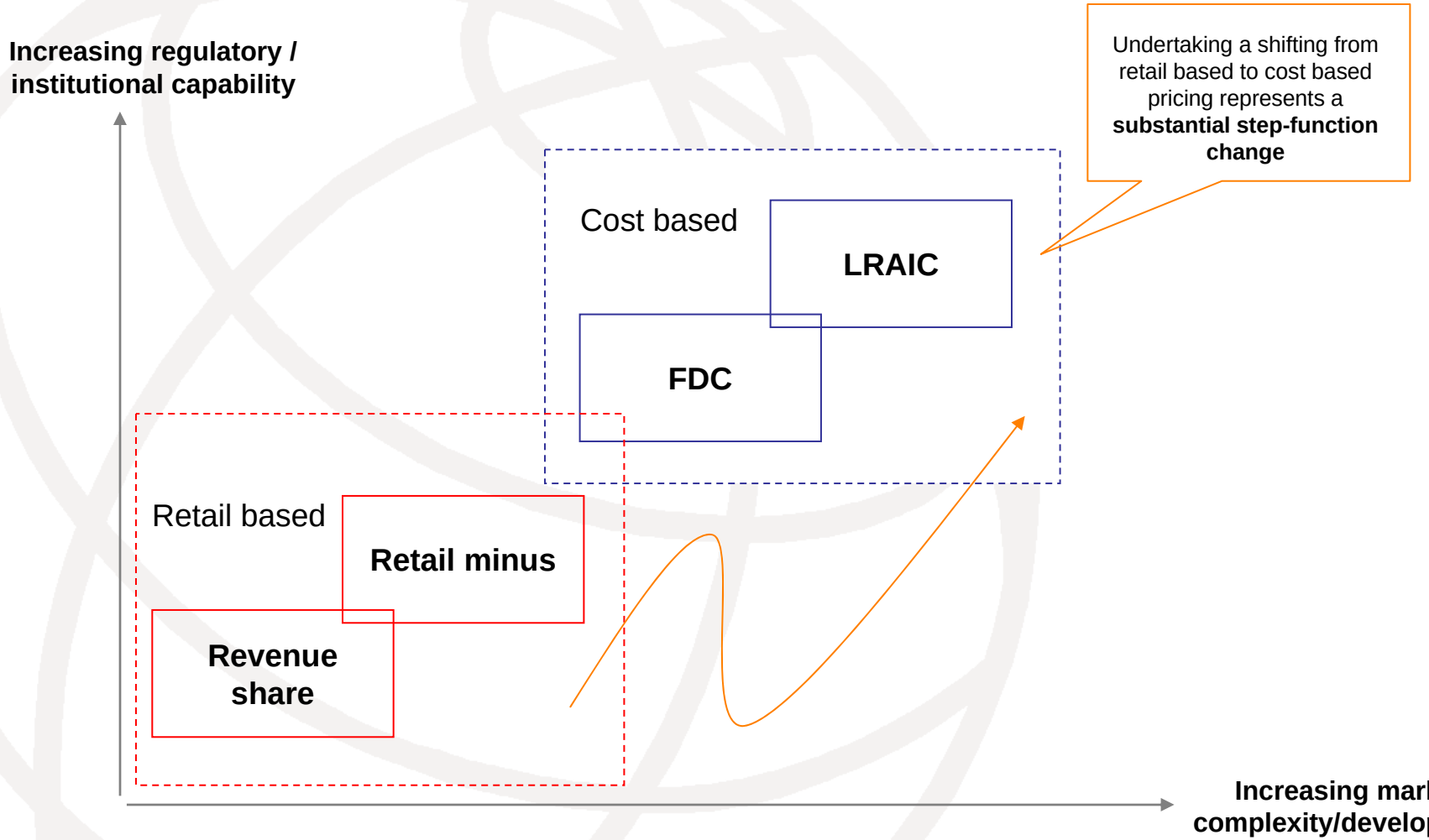
Cost Based

- Long run average incremental cost (LRAIC)
- Fully distributed cost (FDC)

Non Cost Based

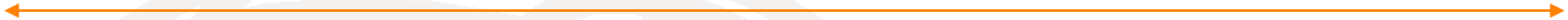
- Retail minus
- Revenue Sharing
- Sender Keeps All
- Negotiated
- Benchmarking

As telecommunications markets become more complex and institutional capabilities develop, there is a common shift to cost-based models



Interconnection Costing Models

Extent to which regulatory environment is conducive to market entry and development of competition



Revenue sharing	Retail minus	Fully Distributed Cost (FDC)	Long Run Incremental Cost (LRIC)

Illustrative examples: cost of interconnect relative to retail tariffs for mobile to fixed interconnect

- Generally very high
- 1994-1998, China, 92% of Unicom's retail tariffs for long-distance traffic
- Historically, Philippines, 70% for mobile-fixed long distance traffic
- Generally prohibitive to market entry and competition development

- Generally high
- Eg: mobile operator in Southeast Asia paying approx 40-60% of retail tariffs according to service type

- Generally low to moderate
- Dependent on allocation methodologies
- Percentage of tariffs taken as interconnection charges can vary from 5% to 20%

- Generally low
- For example, in Europe, interconnection charges as percentage of retail tariffs vary from 2-10%
- Generally conducive to market entry and competition development

Basic Charging Alternatives

Sender Keeps All (SKA') which involves mutual agreement between interconnecting operators to waive charges for terminating each other's traffic:

- Works where traffic flows are balanced between operators
- Is administratively simple
- Is used as reference model for Internet interconnection (now changing)

Basic Charging Alternatives

Revenue Sharing Involves a sharing of revenue by fixed amount or percentage generated on traffic passing between two operators:

- Is sustainable only while price distortions exists. As it is difficult to argue for cost-based wholesale services when at the retail level charges are not based on underlying costs
- Applies to premium call services such as international services, long distance services and mobile services
- Involves negotiation between the operators on the amount of (retail) revenue shared. Often relates to the use of network resources/assets

Basic Charging Alternatives

Retail Based Charging involves discounting from an agreed retail based tariff

- However, this approach tends to perpetuate price distortions embedded at the retail level
- The discount amount represents the retail margin over the wholesale cost of interconnection (or avoided cost)

Basic Charging Alternatives

Negotiated Charges involves arbitrarily setting interconnection charges through commercial negotiation

- Benchmark charges for the same services in different markets or similar services in the same market provides a starting point
- Relative bargaining strength of the negotiating parties determine the outcome

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Overview

Tariff rebalancing is a necessity for all government and operators. This is because:

- In a monopoly, service tariff structures are generally designed to meet policy and financial considerations.
- Technological advances and development of new international calling procedures (e.g. callback and refile).
- Gradual liberalization of telecommunication markets and private sector acquisition of incumbent operator capital.

Objective of Tariff Rebalancing

The basic idea of tariff rebalancing is to increase access prices, and reduce prices for services that have traditionally subsidised low access prices.

The objective is to ensure that the price for each service reflects the underlying cost of providing service.

Countries which have implemented a tariff rebalancing policy have systematically orientated tariffs for various basic services towards costs by abolishing any tariff averaging at national level.

Tariff Balancing Machinery

Tariff rebalancing consists of gradually eliminating the access shortfall by adjusting several variables:

- Increasing the prices for local and trunk services
- Increasing monthly subscription charges
- Increasing the local line charge
- Obtaining a multi-year subsidy to offset the cost of universal service obligations

Implementation of Tariff Rebalancing

While there are numerous economic benefits from implementation of tariff rebalancing, it has been a difficult policy to implement.

In implementing tariff rebalancing, policy makers should *inter alia*:

- Implement rate rebalancing over several years and avoid a tariff rebalancing program where full subsidy is removed instantaneously.
- Create specially targeted subsidies for those users who may be in jeopardy of dropping the network in response to tariff rebalancing.

- Tariffs must be based on an objective criteria and be cost-oriented. The fixing of actual tariff level will continue to be regulated under national legislation.
- Tariffs must be transparent and published. Where technology permits, tariffs must be unbundled.
- Tariffs must be non-discriminatory and guarantee equality of treatment.
- Different tariffs may exists to take into account of high traffic load during peak hours and low traffic load during off-peak hours.
- Charges for access to network facilities or services must comply with the above principles.

Thank You

I would be pleased to answer any questions you might have ….