

# ***Cost-based and demand-based tariffs***

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The views expressed in this paper are those of the author and do not necessarily reflect the opinions of the ITU or its Membership. Dr Kelly can be contacted by e-mail at [Tim.Kelly@itu.int](mailto:Tim.Kelly@itu.int)



## **Cost-based and demand-based tariffs**

### **Agenda**

- **Supply and demand**
  - ⇒ **The functions of the tariff**
  - ⇒ **Pricing strategies**
- **Approaches to pricing**
  - ⇒ **Demand-based**
  - ⇒ **Cost-based**
  - ⇒ **Market-driven**
- **Tariff structures**
- **Tariff rebalancing**

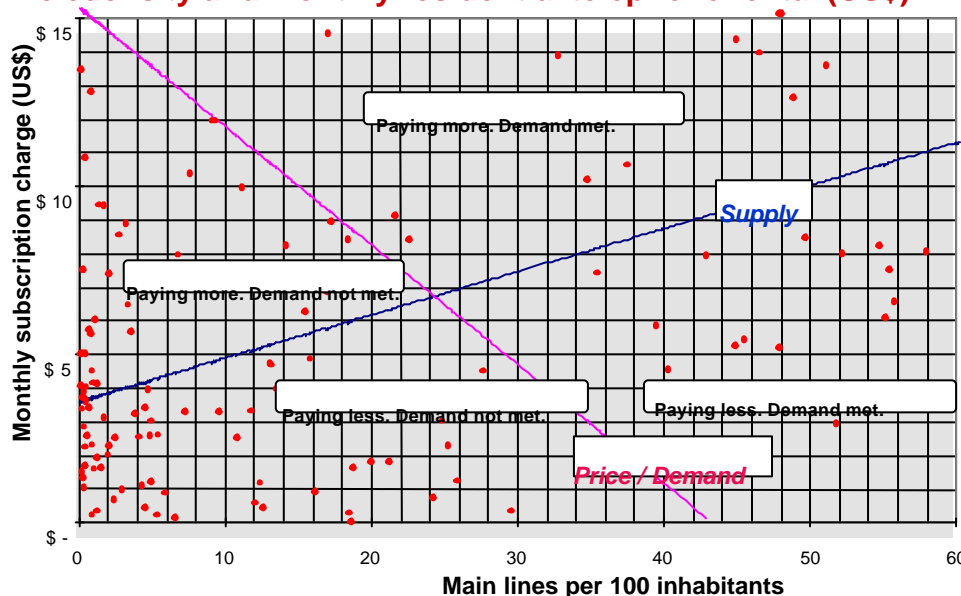


## The functions of pricing

- To forge a link between supply and demand
- To generate revenues and cover costs of providing service
- To convey information to customers concerning the service
- To provide a platform for competition

## Demand is a function of price

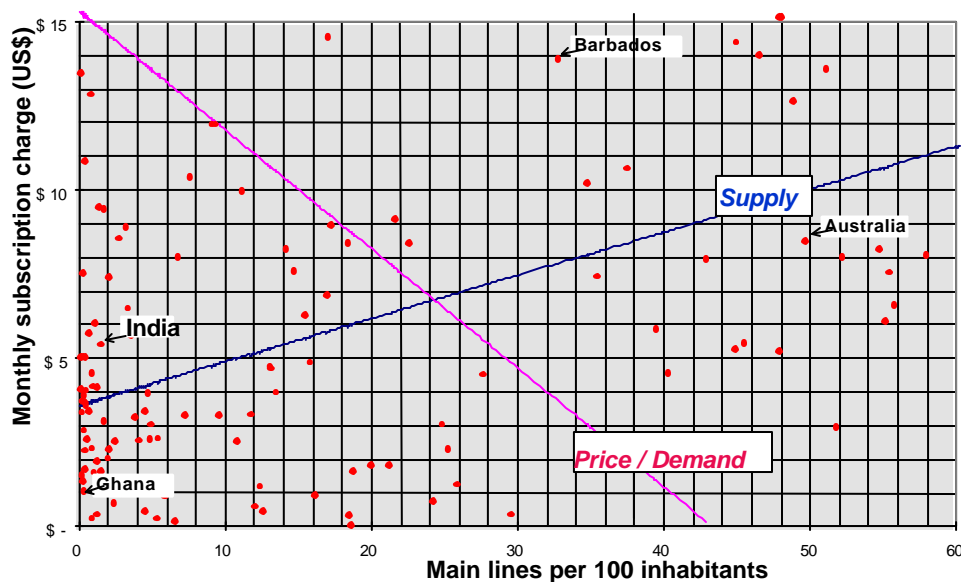
Teledensity and monthly residential telephone rental (US\$)



Source: ITU "World Telecommunication Development Report, 1998: Universal Access"

## Pricing strategies, selected countries

Teledensity and monthly residential telephone rental (US\$)



Source: ITU "World Telecommunication Development Report, 1998" (forthcoming).



### Cost-based and demand-based tariffs

## Approaches to pricing

### ● Demand-based pricing

- ⇒ Pricing according to what the customer is able to pay
- ⇒ May be required by politicians (monopoly environment)

### ● Cost-based pricing

- ⇒ Pricing according to what the service costs to supply
- ⇒ May be required by regulators (regulated environment)

### ● Market-based pricing

- ⇒ Pricing in order to compete with other suppliers in the marketplace
- ⇒ May be required by shareholders (competitive market)



## Reasons for cost-based pricing

- To cover the full costs of providing the service
- To recognise cross-subsidies between services and between users
  - ⇒ to eliminate them
  - ⇒ to make them explicit, e.g., for Universal Service
- To prepare for competition
- To prevent abuses of competitive position



## Approaches to costing

- Fully-allocated pricing models (e.g., TAS cost model)
  - ⇒ total costs for providing service (including historical, depreciated investment costs) divided by the volume of service provided (e.g., minutes of use, number of subscribers)
- Incremental pricing models (e.g., LRIC)
  - ⇒ marginal cost of providing an additional unit of service (e.g., next minute of traffic, next subscriber)
- 1001 different flavours of the above



## Cost-based and demand-based tariffs

### Traditional pricing structures

- **Cross-subsidies to network access**
  - ⇒ Connection charges cover only a fraction of costs
  - ⇒ Low-cost monthly rental
- **Cross-subsidies to local loop**
  - ⇒ High-cost international and long-distance charges
  - ⇒ Free, unmetered or low cost local calls
- **Geographical and social averaging of costs**
  - ⇒ Uniform charges for connection & rental
  - ⇒ “One price fits all”



## Cost-based and demand-based tariffs

### Market-oriented pricing structures

- **Cost-oriented**
  - ⇒ Connection charges reflect real underlying costs
  - ⇒ Monthly rental includes only a small element of usage
- **Reflecting technology trends**
  - ⇒ moving towards distance-independent tariffs
  - ⇒ biggest price cuts in international call charges
- **Market-driven**
  - ⇒ Tariff options for different user groups
  - ⇒ Discounts, special offers, promotional prices ....



#### Cost-based and demand-based tariffs

### Typical evolution in monthly subscription charge

- Social*
- Monthly fee kept well below cost
  - Monthly fee includes free local calls plus rental of handset plus services
  - Unbundling of monthly subscription
    - ⇒ handset rental;
    - ⇒ local calls
    - ⇒ extra services, e.g., Directory inquiry
  - Split between residential and business subscriptions
- Cost-based*
- Progressive rise towards costs



#### Cost-based and demand-based tariffs

### Typical evolution in local call charges

- Social*
- “Free” local call charges included in monthly subscription
  - Limited number of free calls included in subscription, others charged
  - Local calls timed and metered
  - Size of pulse unit shortens
  - Size of local call zone shrinks
- Cost-based*



## Cost-based and demand-based tariffs

### Typical evolution in long distance prices

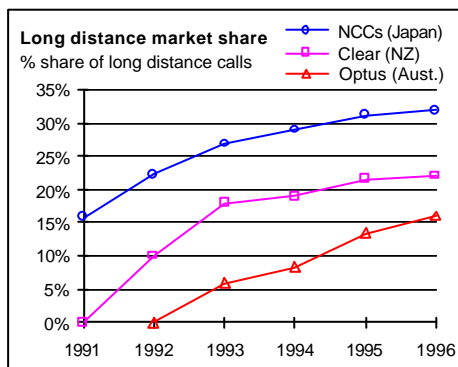
*Social*

- Highly distance sensitive charges.  
Long distance call >100 times cost of local call

- Introduction of off-peak rates
- Reduction in number of bands
- Reduction of distance and duration elements

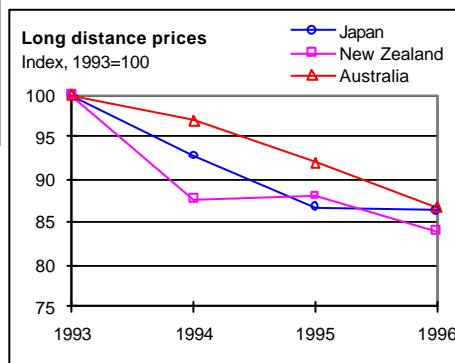
*Cost-based*

- Long-distance call <3 times cost of local call



**Long distance prices come down ...**

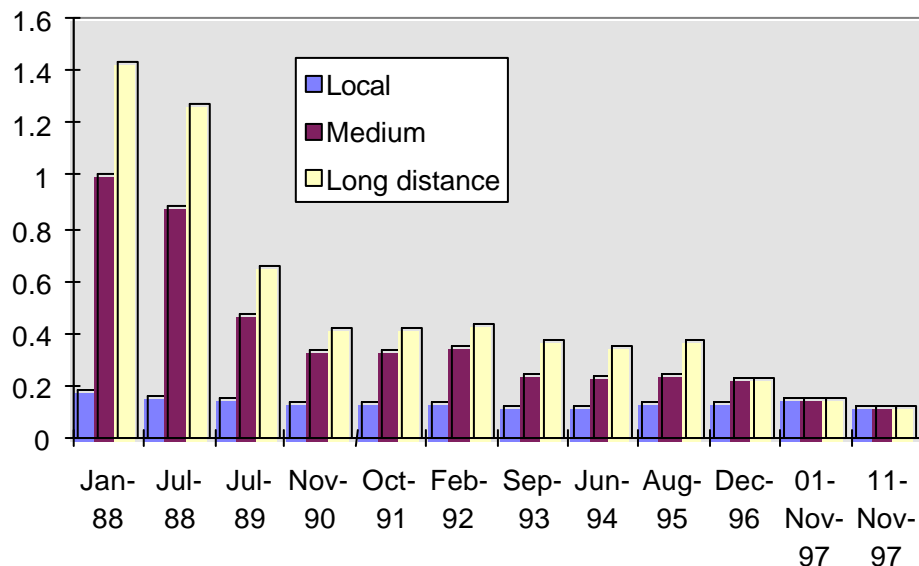
**As competitors gain market share ...**



Source: ITU Asia-Pacific Telecommunication Indicators, 1997.

## Rebalancing in action:

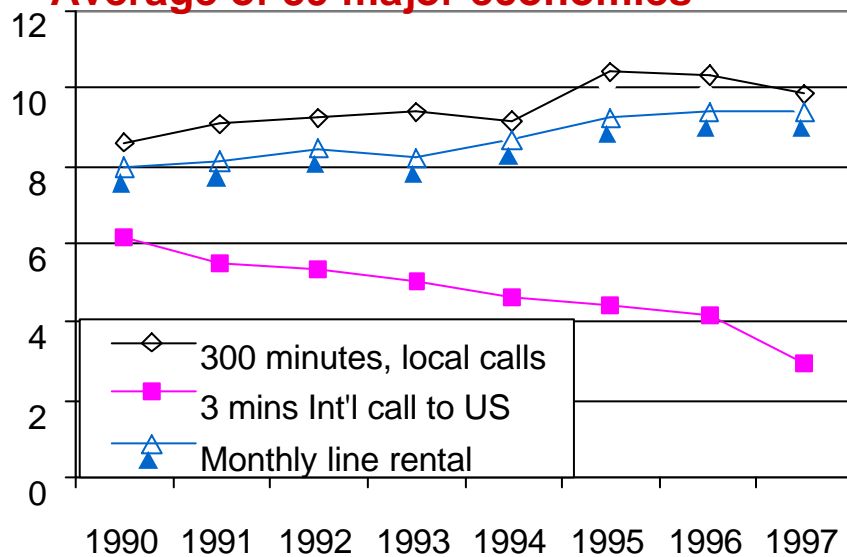
Iceland Telecom, price of 3 minute, peak-rate call, includ. tax



Source: Iceland Telecom, OECD.

## Tariff rebalancing trends, in US\$

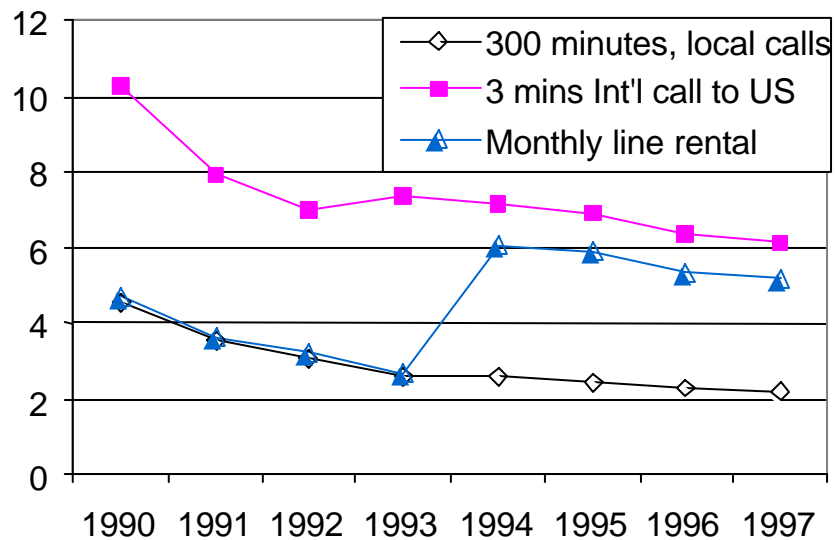
Average of 39 major economies



Source: ITU World Telecommunication Indicators Database.



## Tariff rebalancing trends, in US\$ For India



Source: ITU World Telecommunication Indicators Database.



### Cost-based and demand-based tariffs

## Conclusions

- Introduction of competition requires fresh approach to tariff strategy
- Under monopoly, social-pricing or demand-based pricing was possible
- Under competition, pricing which is not cost-oriented will be rapidly undermined
- Market-driven pricing means understanding customer requirements
- Tariff rebalancing should be gradual, but the best time to start was yesterday