



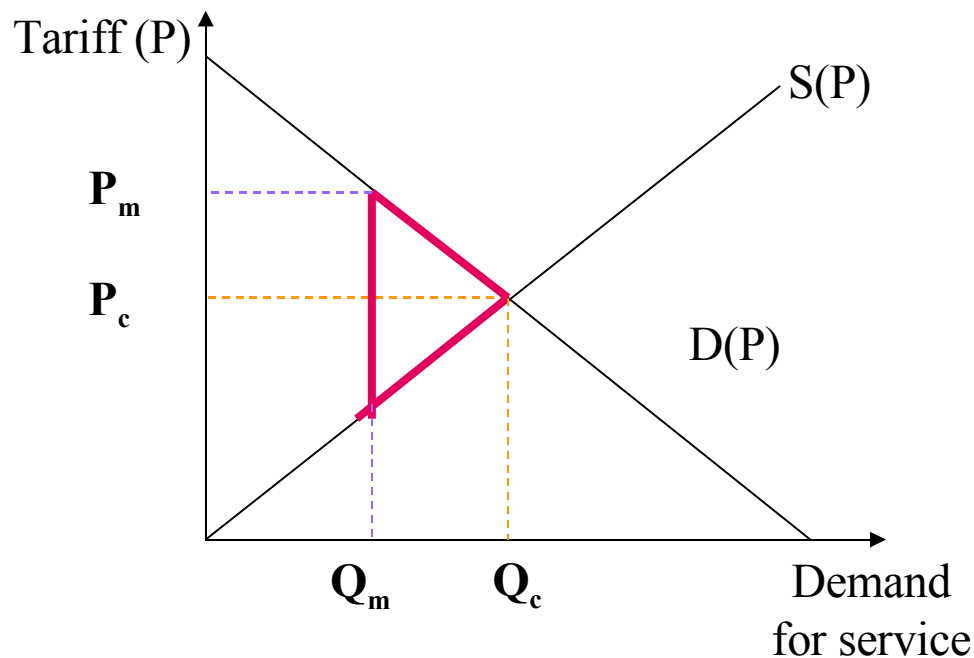
Incentive Regulation in Telecommunications



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Point of Departure: Opening up the ICT Markets

The objectives of regulatory reforms: enhanced social welfare from „natural monopolies” to regulated competition





Anti-trust and Industry Regulation

Why regulate?

What to regulate?

Tariffs

Interconnection

Universal service

How to regulate?

Time horizon in private and in public decisions

Incomplete information

The force of law and the regulatory power



The Telecom Act of the US in 1996

The EC Directives of 1998

Rate of return regulation

A hidden incentive to over-invest

The Price Cap rule

Incentive to under-invest and reduce quality

Cost-based pricing

Regulation and Information

Cost-based pricing: what are its weaknesses?

Requires full information

Huge transaction-coordination costs

Moral hazard

Adverse selection



Why is „second best” sometimes the first best? (1)

The Principal-Agent model

The government's objectives: maximize total net benefit

$$\max_{q,w} \Pi(q, w) = V(q) - w(q)$$

The firms' objectives: maximize gains from business:

$$\max_{w,q} U(w, q) = u(q) - c(q)$$



Why is „second best” sometimes the first best? (2)

Conflicting interests

The principal wants maximum effort for minimum pay from the agent

The agent’s willingness to participate

The agent’s willingness to act according to his capabilities

First best optimum: marginal benefit of the principal = marginal cost of the agent

Not feasible



Information rent

The efficient agent needs extra compensation for revealing her true type

The principal will lose on the inefficient firm but she will gain on the efficient firm: second best optimum

The social loss is at minimum = the inefficient firm will provide less service than optimal



Conclusions 1

Economic contracting is constrained by asymmetric information

Cost-based pricing and regulation misses the target

Incentive regulation: takes into account the lack of sufficient and relevant information



Conclusions 2

Incentive regulation does not require more state – it requires a different state

Incentive regulation in the EU

A fine balance between national regulatory agencies and the EU administration

Member countries can contribute for the EU doesn't know much about the subject either

