On the irrelevance of input prices from a regulatory point of view

Markos Tselekounis
Department of Informatics and Telecommunications,
University of Athens, Greece

Outline

- Introduction to access price regulation
- Make-or-buy decisions
- Make-or-buy decisions from a social perspective
- Implications and conclusions

The aim of access price regulation

A new entrant plans to enter a market
Two alternatives:

1. Duplicate the incumbent's infrastructure ?
2. Buy the incumbent's key network elements? At what price?

- A low access (input) price fosters service-based competition but does not provide incentives to new entrants to invest
- A high access price promotes investments (bypass?) but prevents new entrants from joining service-based competition

Describing the trade-off

- Trade-off between the short-run benefits from service-based competition and the long-run benefits from facilities-based competition
- Clearly described in Commission 2nd draft Recommendation on regulated access to Next Generation Access networks (July 2009)

service-based competition

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lower prices and higher quality

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higher social welfare

facilities-based competition

↓

innovation

↓

market growth

The efficient make-or-buy decision

Sappington (2005):

Cost comparison	Entrant's profits	Entrant's decision
$c_u^{\mathrm{I}} < c_u^{\mathrm{E}}$	$\Pi_B > \Pi_M$	BUY
$c_u^{\mathrm{E}} < c_u^{\mathrm{I}}$	$\Pi_{\mathrm{M}} > \Pi_{\mathrm{B}}$	MAKE
$c_u^{\mathrm{E}} = c_u^{\mathrm{I}}$	$\Pi_{\mathrm{M}} = \Pi_{\mathrm{B}}$	INDIFFERENT

i) Input (access) prices are irrelevant for the entrant's efficient make-or-buy decisions
ii) Investment incentives when the new entrant is the least-cost supplier of the upstream input

…from a social perspective

Cost comparison	Social Welfare	Society's preference
$c_u^{\mathrm{I}} < c_u^{\mathrm{E}}$	$W_B > W_M$	BUY
$c_u^{\mathrm{E}} < c_u^{\mathrm{I}}$	$W_{\mathrm{M}} > W_{\mathrm{B}}$	MAKE
$c_u^{\mathrm{E}} = c_u^{\mathrm{I}}$	$W_{\mathrm{M}} = W_{\mathrm{B}}$	INDIFFERENT

i) Input (access) prices are irrelevant for the maximization of social welfare

Combining the two results

Cost comparison	Entrant's profits	Social Welfare
$c_u^{\mathrm{I}} < c_u^{\mathrm{E}}$	$\Pi_B > \Pi_M$	$W_B > W_M$
$c_u^{\mathrm{E}} < c_u^{\mathrm{I}}$	$\Pi_{\mathrm{M}} > \Pi_{\mathrm{B}}$	$W_{\mathrm{M}} > W_{\mathrm{B}}$
$c_u^{\mathrm{E}} = c_u^{\mathrm{I}}$	$\Pi_{\mathrm{M}} = \Pi_{\mathrm{B}}$	$W_{\mathrm{M}} = W_{\mathrm{B}}$

PROPOSITION : *The efficient make-or-buy decision undertaken by the entrant is always socially optimal.*

Conclusions (1)

- Input prices affect neither the entrant's efficient make-or-buy decision nor the maximization of social welfare
- Hence, access price regulation seems to be an inefficient instrument of fulfilling the regulator's twofold goal
- However, when the new entrant is the least-cost supplier of the upstream input, both regulatory goals are fulfilled
- Therefore, when the new entrant is the least-cost supplier of the upstream input, the optimal regulatory policy is to leave the upstream market unregulated

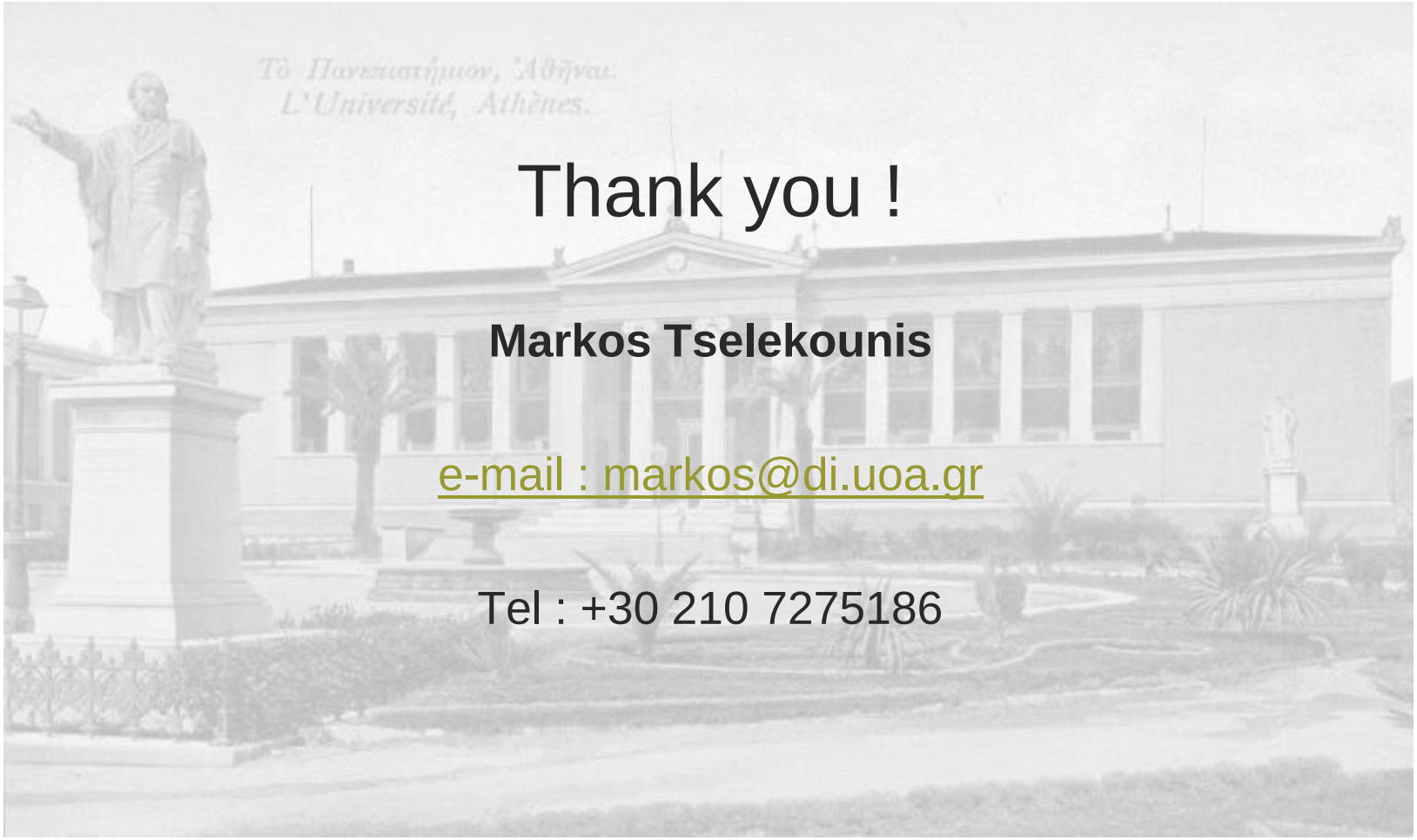
Conclusions (2)

- When the incumbent is the least-cost supplier of the upstream input, supplementary or alternative regulatory measures are needed. These measures should promote facilities-based competition without distorting the established competition.

- The above results are valid when the consumers incur either linear or quadratic disutility of transport (or transportation cost)

- *Future Research* : Is the efficient make-or-buy decisions socially optimal when the retail competition is described by other oligopoly models?

Q & A



Thank you !

Markos Tselekounis

e-mail : markos@di.uoa.gr

Tel : +30 210 7275186