

IVECO

*Institutional Relations
and Transport Policies*

BESTUFS Workshop

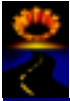
Genoa, 9 Nov 2001

Road pricing and marginal social cost

Marco Monticelli

IVECO

Institutional Relations and Transport Policies



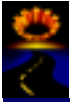
IVECO

*Institutional Relations
and Transport Policies*

A Recent ACEA Workshop



- 18/9/2001 in Brussels
- Participation: EC DG ENV, IRU, UNICE, ERF, CE Delft
- Rapporteur: Prof. Remy Prud'homme, Université de Paris XII
- If you are interested in getting this report, please send a message to monticelli@iveco.com



IVECO

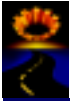
*Institutional Relations
and Transport Policies*

*“Abundan los sistemas increíbles, pero de arquitectura agradable o de tipo sensacional”**

Jorge Luis Borges

Ficciones (Tlon, etc. II)

** “Many are the systems which are unbelievable, but of a pleasant architecture or of a sensational type.”*



Different Types of Transport Policies

● **A - Objectives**

- economic efficiency
- environmental protection
- social imperatives

● **B - Targets**

- transport supply
- transport demand
- transport markets
- transport outcomes
- upstream global forces

● **C - Instruments (4 “Is”)**

- **I**nterdictions (f. e., traffic regulations, technical regulations, etc.)
- **I**ncentives (f. e., taxes, road pricing, subsidies)
- **I**nvestment (f. e., direct provision of services)
- **I**nformation (f. e., transport plans, info campaigns)

Complexity -> possible contradictions



Policy Objectives and Associated Pricing Policies

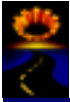
Policy Objective	Pricing Principle
Ensure neutrality between goods and self-financing	Average Cost Pricing
Minimise welfare losses associated with taxes	Ramsey-Boiteux Pricing
Promote income redistribution	Redistributive pricing, discriminatory pricing
Achieve specific aims	Specific Pricing
Facilitate efficient use of existing infrastructure	Marginal Cost Pricing

Source: Prud'homme, *Marginal Social Cost Pricing in Transport Policy*, 2001



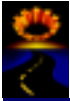
Infrastructure Charging

- New infrastructure charging scheme
- Charge infrastructure usage at marginal social cost (MSCP)
- Theoretically: elegant and perfect
- But raises 4 issues



MSCP for Infrastructure Use

- **It is just one of the pricing principles available**
- **Very difficult to implement:**
 - great variability over time and space \Rightarrow great variability of charges
 - no consensus on marginal costs
- **Ignores financing of investment:**
 - Under-investment “pays”
 - Why invest, then?
- **Includes possible regressive impacts:**
 - case of congestion



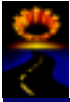
IVECO

*Institutional Relations
and Transport Policies*

Internalisation of External Costs and Road Pricing

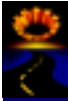
- Accidents
- Air Pollution
- CO₂

- Congestion \Rightarrow the main driver for urban road pricing



Congestion Pricing Possible Impacts

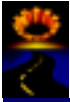
- Quantification of Congestion Costs
 - A significant case study \Rightarrow 0.15% of the Paris agglomeration GDP
- The Charidba of an ineffective single tax and the Scilla of an ununderstandable multiplicity of taxes
- Cost of technology
 - a case study \Rightarrow 0.07% of Paris GDP
- The system will mostly benefit the rich



Four major transport related issues

	Accidents	Congestion	Air Pollution	CO2
A serious problem?	Yes	Yes, though exaggerated	No longer	Yes
Scope?	National	Local	Local/Regional	Global
Affected People	Mostly road-users	Road-users	Not only road users	Everybody
An Externality?	No	No/Yes	Yes	Yes
Marginal cost known?	No	No	No	No
MSCP Feasible?	No	Difficult	No	Yes
MSCP Efficient?	No	Doubtful	No	Perhaps

Source: Prud'homme, *Marginal Social Cost Pricing in Transport Policy*, 2001



Conclusions

- Several pricing principles available
- MSCP is just one of them ...
- ... and not always the best one
- Furthermore it:
 - is very difficult to implement
 - with limited impacts in terms of cost/benefits
 - and possible regressive social impacts



A Final Question

- Urban road transport generates **negative** externalities linked to private transactions
- But it contributes to the welfare of urban citizens and to the good functioning of urban life
- Are these **positive** externalities (benefits) to be taken into account?