

IMPRINT-EUROPE

Summary of Key Conclusions and Recommendations

Draft for discussion

Chris Nash and Bryan Matthews

1. Aims of the Imprint thematic network

- To facilitate the exchange of experience and transfer of knowledge among scientists and practitioners in the field of pricing;
- To draw together the results of previous and ongoing research in the field of pricing and to make them accessible to policy-makers, practitioners, industry and other professionals in a series of seminars and deliverables designed to assist them in developing and responding to pricing policy reform;
- To identify, through critical comparative work, the prerequisites for the development of an integrated approach to implementing the European Commission's proposed pricing reforms.

2. Background

- The CAPRI concerted action achieved consensus on the range of relevant objectives and information important for transport pricing decisions; this emphasised the need for knowledge of marginal social cost and of total cost, for greater differentiation of prices in accordance with variation in cost (accepting that deviations from pure marginal social cost pricing would be necessary) and for efficiency, equity and budgetary objectives to be taken into account.
- The UNITE project provides up-to-date evidence on methodology and quantitative results for the measurement of marginal social cost, showing that - whilst uncertainties and disagreements remain - there was consensus on the broad direction of change necessary
- The first Imprint seminar contained a review of alternative pricing philosophies, showing that a considerable divergence of views existed between European countries; in part this may reflect different existing circumstances and objectives, for instance between congested core members and peripheral regions, environmentally sensitive areas and others. Even definitions of terms such as maintenance or variable cost differed between member states.
- The UNITE results and Imprint papers showed a wide variety of existing situations in terms of pricing levels and structures, so a single phased movement towards more efficient pricing across all member states was unlikely to be feasible. Implementation paths need to be flexible to adapt to these varying conditions.

3. Measurement of marginal social cost

- infrastructure cost is best measured by an allocation process informed by econometric studies – there is a good degree of consensus as to what are the key variables determining costs, though disagreement remains as to the precise nature of the relationships so an element of judgement is involved;
- there is an established approach to measuring congestion costs; the problem here is their wide variability, and a lack of studies on modes other than road
- the extent to which pricing reform can contribute to the efficient allocation of scarce capacity in rail and air remains uncertain
- identifying the external component of accident cost remains uncertain because of the limited amount of evidence on risk elasticities; in the meantime it is reasonable to regard this as relatively low
- great progress has been made on measurement and valuation of environmental cost; although uncertainties and disagreements remain, particularly regarding the treatment of global warming
- Most countries have some information suitable for setting more efficient charges, though the disagreements and uncertainties identified above serve as a barrier to estimation of charges according to a common basis, consistent with promoting equal terms of competition;
- a likely way forward is to seek consensus on a lower limit of costs that should be reflected in price, and to raise this as evidence becomes stronger and more accepted

4. Learning from experience and from research

- behavioural responses – where charges are sufficient to illicit any response at all, initial responses tend to involve re-organisation of travel whilst continuing to use the same mode as prior to the pricing reform (e.g., changing time of travel or route, consolidating journeys etc, rather than switching mode), though longer term responses will involve some transfer between modes and changes in land-use;
- distributional impacts will obviously vary both with the design of schemes and the use of revenues, and these need to be determined with distributional considerations in mind
- land-use impacts also vary with the detailed design of schemes; with appropriate design and use of revenue the limited evidence is that these can be positive
- broader economic impacts are also uncertain; there is some evidence that they might be negative but small
- acceptability tends to be higher where problems are particularly acute and demonstrable, where revenue use is transparent and/or earmarked and where there is an identified package of complementary measures, whilst there is evidence to show that acceptability is higher where initial price changes are simple and modest and that acceptability for more sophisticated charging may grow over time;
- Investment; it is important to make the link between pricing and investment, in terms of both ensuring that future investment decisions take account of the

impacts of more efficient prices and ensuring that future prices reflect changes in capacity;

- phasing; as well as there being arguments in favour of making simple and modest reforms first and then progressing towards more sophisticated charging systems, there are arguments in favour of ensuring that each new phase of reform moves prices in the right direction, even if short term considerations might dictate otherwise

5. Key Issues for Newly Associated States

- Link with financing: financing needs are more acute, and other sources of finance more limited, so pricing is seen very much as a way of financing investment
- Congestion not nearly so much of a problem so more difficult to demonstrate problem worth addressing via pricing
- Issues concern transit traffic and peripherality
- Significant data problems so need for generalisable approaches important
- Need to translate lessons from the existing 15 member states, but do they always set a good example?
- note that all the above issues are also relevant to at least some existing member states

6. Ten steps to implementation

Both research and experience suggest the following 10 steps

1. Demonstrate problem to be addressed;
2. Demonstrate pricing as a potential solution;
3. Design something simple, as part of an integrated package of measures;
4. State clearly how any revenues will be used - Revenue use is key to both the efficiency and acceptability of transport pricing reforms (transparent and acceptable arrangements for revenue use but which do not constrain the use of revenue in an inefficient way are needed);
5. Demonstrate likely outcomes – there is a wealth of research using models to predict the outcomes of pricing reform in different situations, though there is scepticism regarding the validity of some models and the applicability to particular situations;
6. Secure political support - it is necessary to find a champion, and that means exploiting windows of opportunity (messages from London, Rome, Norway, Stockholm(?), Switzerland and Germany);
7. Consult and promote widely - clear simple information and explanation is needed (Positive messages from London, Switzerland and the US but mixed messages from Edinburgh and UK rail, Rome, Netherlands);
8. Monitor to demonstrate impacts - Monitoring is important as part of a phased reform, as well as to enable others to learn from experience;
9. Review acceptability and effectiveness openly after a pre-specified period – where reforms have been successfully implemented they have generally been subject to review or withdrawal after a specified period (e.g., the Norwegian toll rings and London congestion charge);
10. Refine towards more sophisticated system over time.

7. Priorities for action

A start has been made in some sectors: for instance the Rail Directive contained a sensible pragmatic approach to marginal social cost based pricing, and the proposed revised Eurovignette Directive was a step in the right direction, although still containing many constraints which would prevent fair and efficient pricing of road freight vehicles.

In the light of seminar discussions a number of priorities for action emerged:

- To improve pricing systems in the light of their major current defects, without seeking to make them 'perfect';
- Reform in congested urban areas – to reduce congestion, environmental degradation and generate finance;
- Reform on trans-European road and rail corridors – to harmonise terms of competition, reduce congestion, environmental degradation and accidents and generate finance;
- Reform in aviation – to harmonise terms of competition, to reduce environmental degradation and congestion, and to tackle the allocation of scarce slots ;
- Reform in ports – to harmonise terms of competition and to address environmental degradation.

8. . Priorities for future research

- Particular areas of cost measurement – scarcity in rail and air, accident risk elasticities, environmental costs for air and water;
- Generalisation – how to estimate costs for particular circumstances from available evidence (especially a problem for congestion and local environmental impacts)
- further evidence is needed on particular types of impacts – land-use, regional economic, distributional – although the evidence that exists is that these do not pose serious drawbacks to suggested pricing reforms, and can be mitigated by other elements of the package
- Complexity and simplicity – to what extent should we seek ultimately to portray the full complexity of variations in marginal social costs in prices?
- Processes and institutions; what bodies should set or regulate prices and be responsible for allocating the revenue? How do prices feed through to and impact upon end-users? Institutional issues are particularly complex in the aviation and maritime sectors.