Special issue based on the 3rd Kuhmo-Nectar conference on transport and urban economics

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1. Editorial

The 2008 edition of the Kuhmo-Nectar Summer School and Conference on Transport and Urban Economics, which was held at the VU University in Amsterdam on July 3 and 4, 2008, was the third in a sequence that started in Finland in 2006, followed by a second edition in Urbino in 2007. As in the previous editions, the conference was tied to a summer school earlier in the same week. Various themes were identified for the summer school and conference. The latter eventually attracted nearly 60 papers, covering many aspects of transport economics, but with a clear focus on transport modelling, transport pricing, and capacity investments, often analyzed from the economic perspective. This special issue reflects the diversity of themes addressed at the conference, within the thematic boundaries implied by the orientation on transport and urban economics.

The special issue begins with a contribution from Andrew Koh and Simon Shepherd. This paper was elected for the Award for the Best Paper by a Young Scholar. It studies the modelling of pricing by competing profit-maximizing road operators in a network, and develops heuristic algorithms for finding the corresponding equilibria, considering both Nash equilibria and collusion. An intuitive result is that when the degree of collusion goes from ‘none’ to ‘full’, the solution goes from ‘Nash’ to ‘monopoly’. Still, the paper confirms that in some cases, notably when considering pricing of serial links, collusion may be preferable to Nash competition because the latter leads to a multiple application of revenue-maximizing mark-ups.

1 The conference organizers would like to thank DVS Centre for Transport and Navigation, Transumo, VU University, Tinbergen Institute, and Nectar for vital support.
2 The Conference attracted over 60 attendants while the Summer School attracted some 35 students and had 9 instructors: Ken Small, Richard Arnott, Andre de Palma, Nathalie Picard, Mogens Fosgerau, Alex Anas, Piet Rietveld, Jan Brueckner, and Erik Verhoef.
The second paper by Michiel Bliemer and Dirk van Amelsfort is also concerned with price incentives in road transport, but studies ‘positive’ incentives – user subsidies for avoiding peak travel, rather than a peak charge to discourage it. The research was carried out in the context of a Dutch project ‘Spitsmijden’ (‘Avoiding the Peak’) in which such incentives are actually tested in practice. This paper investigates the possible impacts of such a measure when evaluated from a full dynamic network perspective. The results show that the impacts of rewarding depend rather strongly on both the level of the reward and the number of participants. This provides an important insight for the design of future projects along these lines.

The next contribution is by Salvatore Amoroso, Marco Migliore, Mario Catalano, and Fabio Galatioto. They study urban transport policies for bus systems in small and medium towns. Specifically, they are interested in the design of bus networks, and propose a multi-actor objective function for evaluation that combines the interests of operators and travellers. Applying this objective in a model for the Sicilian city of Trapani, they develop an optimisation routine that succeeds in producing a more efficient bus network, characterized by higher frequencies, more origin-destination pairs served, and shorter travel times, at the expense of having more transfers by passengers between different lines.

Mark Koetse and Jan Rouwendal, in the fourth paper, focus on inter-urban freight transport. Specifically, they assess the welfare impacts of a Dutch dedicated freight railway connecting the harbour of Rotterdam and the German Ruhr Area, and do this in the context of the dynamic / strategic cost-benefit analysis tool, the Molino model (developed by A. de Palma and S. Proost). Although freight transport demand through The Netherlands will increase, and the new connection is predicted to carry substantial freight flows and to support the competitive position of Rotterdam, an overall welfare loss from the project results when costs of investments and operations are taken into account. This confirms the need to perform solid ex ante cost benefit analyses for large infrastructure projects.

The fifth and final paper, by Guillaume Pouyanne, addresses the interrelationships between mobility, urban form, and socio-demographic characteristics. The paper proposes an econometric method, the “typological regressions”, to deal with the mutual causalities and interdependencies. Applying the method for the city of Bordeaux, the author succeeds in corroborating some hypotheses on such interrelationships that were formulated in the earlier literature, for instance on the relation between urban density and transport demand.

As it addresses both road transport and public transport, both passenger and freight transport, and also the interactions between transport and land-use, we believe this special issue offers a fair representative sample of the main topics discussed during the Amsterdam meeting.

Since this meeting, another successful edition has already taken place in Copenhagen (2009), and another one is currently in preparation for Valencia (2010). We of course hope to publish some of the results of these meetings in future editions European Transport\Trasporti Europei.