



Delft University of Technology

Workshop 7 report

Market initiative: Regulatory design, implementation and performance

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DOI

[10.1016/j.retrec.2016.10.010](https://doi.org/10.1016/j.retrec.2016.10.010)

Publication date

2016

Document Version

Accepted author manuscript

Published in

Research in Transportation Economics

Citation (APA)

Preston, J., & van de Velde, D. (2016). Workshop 7 report: Market initiative: Regulatory design, implementation and performance. *Research in Transportation Economics*, 59, 343-348.
<https://doi.org/10.1016/j.retrec.2016.10.010>

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Workshop 7. Market initiative: regulatory design, implementation and performance

Report and Conclusions

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Keywords: Market initiative, competition, incentives.

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ABSTRACT

This workshop reviewed recent good and bad practice with respect to market initiatives in public transport, with consideration of express coach, rail, local bus and unconventional modes. The options for market-led initiatives and the associated regulatory requirements were re-assessed with a new model posited, inspired by the ski-lift industry. It is recommended that more pro-active development (by operators, authorities and third parties) of new measures is required, particularly to permit service coordination and fare, ticketing and information integration.

1. Aims of the workshop

This Workshop focuses on a theme that dates back as a Workshop to Thredbo 11 in Delft (Van de Velde and Beck, 2010) and that was developed further in Thredbo 12 (Van de Velde and Preston, 2013) and Thredbo 13 (Van de Velde and Augustin, 2014), but arguably as a topic dates back to at least Thredbo 5 in Leeds and the concept of light touch regulation (Carr, 1997). As in these previous conferences, this workshop discusses the current functioning and regulatory options for public transport regimes where autonomous market initiative¹ plays a role. This could be the main institutional feature of public transport organisation (deregulated regime) but discussion could also include hybrid regimes where market-initiative constitutes a marginal or additional feature to a market organised by contracting/tendering.

The workshop started by examining recent case studies provided by the workshop participants and discussed whether these could be considered good or bad practices in both

¹ The main characteristics of market initiative regimes are that entrepreneurs in these markets are expected to decide autonomously about entry into the market and service supply in the market. Decisions are made on a commercial basis and are as a matter of principle not subjected to a prior ordering by a transport authority (see Van de Velde, 1999 for a further discussion of these concepts).

market initiatives and hybrid regimes. On that basis, the workshop first considered whether new ideal-typical regimes had emerged, compared to the main options for market-initiated regimes outlined by Van de Velde and Beck (2010) during the Thredbo 11 workshop. The workshop then moved to discussing the regulatory requirements for alternative regimes to function. This included the need for coordination between services and the extent to which the regimes considered delivered this. The discussion also covered the scope for industry concentration encountered in the various regimes along with the observed impact on competition both in the market and for the market.

Given the above, the outline of this workshop report is as follows. In section 2, we review some case studies, looking for examples of good and bad practice. In section 3, we go on to summarise the workshop discussion, covering the main setups for market-initiative regimes and discussing associated regulatory requirements. We finish by drawing some conclusions (section 4) and making some recommendations for future conferences (section 5).

2. Review of evidence and discussion of good and bad practices

The evidence base drew on the presentation of 12 papers (listed in the references) and the discussion drew on around 20 participants (see acknowledgement) from 12 countries². These presentations focused on three conventional modes. Firstly, there were presentations on express coaches where there had been some de facto coach deregulation in Brazil, at least in terms of fares (de Aragão), some very real deregulation in Germany (Knorr) and deregulation about to start in France literally as the workshop convened (Guihery). Between 2012 and 2014, the coach market in Germany grew rapidly from around 2 million to almost 20 million passengers per year. Similar growth is anticipated in France. In Germany, this period of growth has been accompanied with rapid concentration, with one firm currently controlling around three-quarters of the market³. The response from the incumbent rail operator (DB) has been muted until 2015, although that might change in the next phase of competition.

Secondly, there were presentations on rail including a productivity study of European operators (Bougna), an assessment of the business structure of private railways in Japan (Song) and reviews of development in Sweden (Alexandersson, Andersson). Song demonstrated the inter-relationship between rail-related businesses and other businesses (e.g. leisure, property, retail) for Japanese train operating companies, which complicates regulation of these firms. Bougna found that competitive tendering had a greater effect on productive efficiency than other reforms (such as open access competition and vertical separation), with Andersson highlighting issues in Sweden with transition costs, transaction costs and misalignment costs. Alexandersson has noted that tendering of rail services in Sweden has reduced the need for operating subsidies and has reduced costs by over 10%. Open access competition has been permitted on rail routes in Sweden since 2011 and major

² Australia, Brazil, Cameroon, Chile, Finland, France, Germany, Japan, the Netherlands South Africa, Sweden and the United Kingdom.

³ Following the merger of MeinFernbus and Fixbus.

competition has emerged between SJ (18 trains a day) and MTR (8 trains a day) on the Stockholm – Gothenburg route.

Thirdly, there were presentations on local buses in Sweden (Wretstrand and Danielson) and Wales (Preston). In Sweden, contracting-out was moving away from pure cost-based models to patronage-based models – the so-called Verified Passenger Boarding (VPB) model. In Wales, the market has been deregulated since 1986, but devolution in 1999 has seen the Welsh Government attempt to exert some control through its subsidy policy, particularly so as to encourage community-based initiatives.

In addition, there were presentations on other, less conventional, public transport modes. Emerson studied ski lifts in the Dolomites (Italy) and compared the arrangements there with those for ski lifts in Austria, Australia and New Zealand. Mbara examined tuk-tuks in Johannesburg in South Africa, a form of paratransit that seemed to have found a niche as a feeder mode to informal mini-bus services.

3. Synthesis of workshop discussions

The workshop discussions were organised around two main themes. The first was that of the institutional setups encountered or envisaged in market-initiative regimes. The second was that of the regulatory requirements associated with the functioning of these regimes.

3.1. Options for market-initiated regimes

The discussion on the main options for market-initiative regimes was framed by the options outlined by Van de Velde and Beck (2010) and illustrated by the three first regimes included in Table 1.

Table 1: Notional regimes to introduce market-initiative in largely authority initiative regimes

Regime 1	Regime 2	Regime 3	Regime 4
• Several contracts in one area • Authority designs and tenders core-network (net-cost contract) • Market initiate for commercial services (based on some minimum criteria) • Inter-available fares and ticketing, lower fares by operators allowed • Authority sets fare rebates and compensates • Discussion clubs (PTAs, operators, passengers)	• Transport plan (only functional) by PTA • Commercial services as market initiative (under general rules: headway regulation + clever exceptions, and fare freedom) • Additional tendering (transport plan) • Fare freedom + authority sets fare rebates and compensates • Super incentives to reduce need for regulation • Maybe some exclusivity linked to headway regulation	• One contract for one area • Negotiating contract with incumbent + threat of competitive tendering if negotiations unsuccessful • Threat of commercial entry (market initiative) if incumbent is not affected negatively • National body to support PTAs in contracting • Performance based penalties and benchmarking • Partnership between PTA and operator	• Route licensing with exclusivity • Network integration through inter-available fares and ticketing • Authority as the Community Franchisor sets integrated fares • Ownership rights on routes to induce focus on long-term developments with related businesses

- Need for quick response to unfair behaviour

It should be noted that this framework initially looked at the prospects for introducing market initiatives into public transport markets that are predominantly shaped by authority initiatives. This is because authority initiatives are the predominant market form at least for local public transport in developed countries. However, this workshop is also interested in authority initiatives in predominantly market initiative regimes, such as local buses in Great Britain outside London and express coaches in Germany. Indeed the on-going liberalisation of long distance public transport markets in the European Union has given some impetus to regimes of this type.

There was particular interest from this and past workshops in the development of regime 2 but progress has been limited. New Zealand has shifted to contracting rather than this regime, whilst the Swedish pseudo-deregulation seems – so far – to have been something of a damp squib. In both New Zealand and Sweden there may be an issue with sequencing. In these public transport markets, authority initiatives and subsidised services pre-dominate, with commercial services effectively crowded out. There has also been little development in regime 1 (multiple contracts) or regime 3 (negotiated contracts with competitive entry threat), although the Competition and Markets Authority (2015) seems to be proposing something akin to regime 1 for rail franchising in Britain. Furthermore it seems to be suggesting another option akin to regime 4 as well, though without the same level of exclusivity.

The discussion initially focussed on the case study of the ski lifts, not least because this seemed to suggest an additional regime 4 in Figure 1 that is associated with Individual Line Ownership (ILO). The key features of the industry organisation of the ski lifts in the Dolomites indicated a market initiative with exclusivity based on payment per passenger carried. There was integrated network level ticketing and pricing, which was by the authority organisation, or Community Franchisor in the case of Dolomiti SuperSki, although this role could in other contexts be played by an operators' association. . Ownership rights induce a focus on longer-term developments with related businesses (the skiing leisure industry) – which has some parallels with the set of incentives encountered in the private rail industry in Japan.

However, there were some concerns that the putative regime 4 could be a case of 'back to the future'. There were clear elements of pre-deregulation licensing, as existed for example in Great Britain between 1930 and 1986, and Route Associations, such as the Collectivos that dominate urban bus transport in parts of Latin America. Moreover, there may be irreversibility once property rights are assigned and there are also the dangers associated with grandfather rights, with monopolisation likely if there is no competition of any kind. In the case of ski lifts, there is some competition in terms of the technology offered (e.g. tow bar, chair lift, gondola, etc) and in the quality of service (e.g. heated seats). For urban and inter-urban public transport intermodal competition is important, not least because of the car, whilst there may also be alternative routing options through the network..

3.2. Regulatory Requirements

The discussion of regulatory requirements was framed around the pyramid of regulation put forward by Van de Velde and Preston (2013) and illustrated by Figure 1.

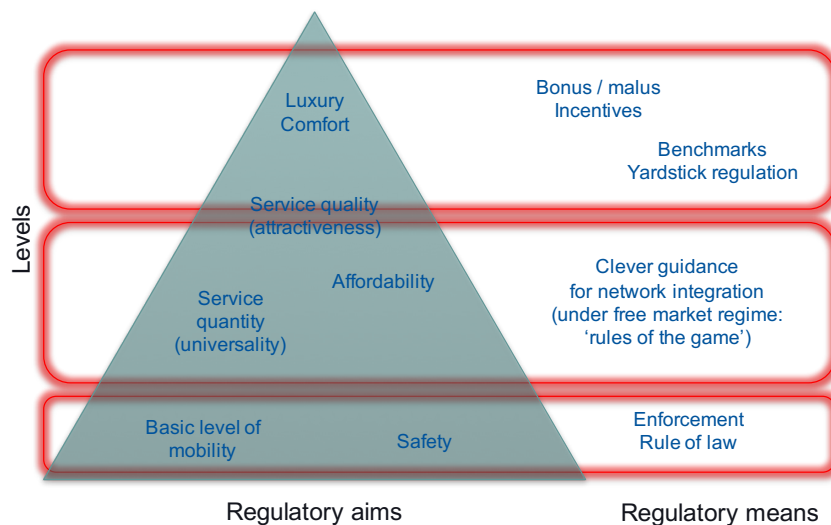


Figure 1: The Pyramid of Regulatory Requirement.

The view of this workshop was that there is a need to focus, both in terms of research and actual regulation, on the middle layer of the pyramid. In particular, there is a need to detect and disseminate examples of clever guidance and rules of the game. At the base of the pyramid, it was felt that the rules of law are generally well established with respect to safety regulation and competition policy, although safety enforcement was flagged as an issue in the cases presented at the workshop both in developing (Brazil) and developed (Japan) countries. Towards the apex of the pyramid, there has been substantial work on benchmarks and Key Performance Indicators (KPIs), not least at Thredbo conferences (for example, Veeneman and Smith, 2014) but mainly in the context of contract-based, tendered regimes. Further investigation at this level would be welcome for regimes based on market initiative.

The discussion of regulatory devices at the middle layer of the pyramid was based on the three options identified at Thredbo 13 in Oxford (Van de Velde and Augustin, 2014), with possibly a fourth type of measure added:

- Measures to guide desirable entry to provide strategic guidance through a Transport Plan, within which there would be a Public Transport Authority component that identifies gaps in the market and possible innovations.
- Measures to stimulate desirable entry, which might include access to (and compulsory usage of) ticketing and fare systems, information systems and stations. This might build on the essential facility doctrine that originates with US anti-trust (Farquharson, 2000; Tye, 1987). These measures might also include headway regulations to ensure even interval services (although enforcement can be an issue) and financial incentives, such as the compensation of fare rebates, to stimulate desirable entry and subsequent good behaviour.

- Measures to restrict undesirable entry, such as the cream skimming tests applied in the bus industry in Japan or the not primarily abstractive tests used by the rail regulator in Great Britain. This might also include minimum standards for new vehicles (such as floor height, environmental emissions) and for driver training.
- Some 'new' basic requirements might be required (although these might be a sub-set of the second and third set of measures). This relates to management training for both operators and authorities so to be able to develop more effective (and trusting) partnerships.

Unfortunately, while a number of good practices or concepts of middle layer regulation were discussed at the Workshop, it was recognised that there was only a very limited number of good examples available or actually implemented⁴, and a lack of research and hence papers devoted to the topic.

Regulatory optima for different market configurations were discussed with respect to the bell-shaped curve posited at Thredbo 12 in Durban (Van de Velde and Preston, 2013) and illustrated by Figure 2. It should be stressed that this Figure is meant to be illustrative and the extent of the movements depicted and relationship with performance have, in most cases, still to be established.

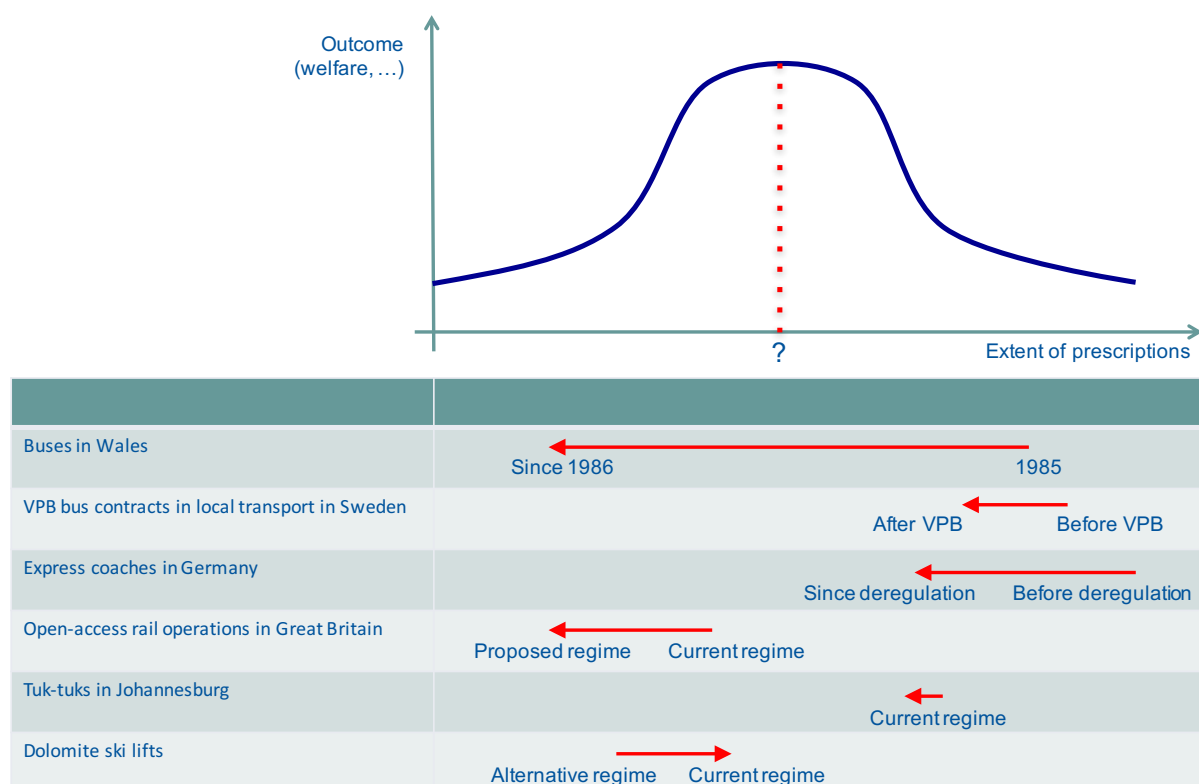


Figure 2: Evolutions in structure and possible relationship to performance

⁴ One example would have been the PTMA regulation developed in New Zealand, but that regime was never implemented in practice (Van de Velde and Wallis, 2013).

Figure 2 illustrates a variety of outcomes. In Wales, deregulation was very briefly associated with welfare enhancements but these were dissipated as the industry concentrated and on the road competition ceased. This was followed by strong welfare losses, which have only been slightly reduced by increased governmental intervention, particularly through subsidy policies. In particular, since 2002, there has been a generous concessionary travel scheme, with concessions making up 40% of the total bus market. Given the ways operators reimbursed, this has led to an unintended consequence of rapid increases in adult fares. It seems that the Welsh bus market has a level of prescription that is below the optimal level.

In Sweden, it seems possible that the level of prescription is greater than the optimal level but the VBP regime does seem to have some modest increases in desired outcomes in terms of value for money, although detailed welfare calculations have not been made. In South Africa, the level of prescription is much less than that of Sweden and this is an example of how the scale and shape of the relationship in Figure 2 is notional. However, permitting tuk-tuks is an example of reducing prescriptions and the market surveys undertaken by Mbara indicates a high level of satisfaction, although again detailed welfare calculations have not been made. However, it should be noted that this is very much an example of niche entry and that if the number of legal tuk-tuks and/or illegal tuk-tuks increase then the position could change.

With respect to long distance public transport, i.e. the case of express coach, deregulation seems to have been largely beneficial within the coach market itself, although it could have knock-on impacts on inter-related rail markets. This could have parallels with the experience of coach regulation in Britain in the 1980s, where one of the benefits was the competitive pressure exerted on the rail sector (Douglas, 1987; Thompson and Whitfield, 1995). In rail, with its much higher element of fixed costs and greater capacity limits, the position could be different, with open access leading to too much service, provided at too high price and possibly with too low quality of service in terms of punctuality (Preston, 2008). Large-scale open access competition is currently characterising the passenger rail market in a number of European countries, such as Austria, the Czech Republic, Italy and Sweden, although in Germany such competition has receded (possibly in the wake of coach deregulation). However, it is known that in some of these cases the protagonists are losing money so head-on competition may not be feasible in the longer term.

As far as the Dolomite Ski-lifts are concerned, the case might be characterised as being a market initiative with relatively low levels of prescription (aside from standard safety and competition regulation) that has persisted in its original form and operations up to the present time with centralised fare setting and revenue pooling based on prescribed remuneration rates which seems to have had good outcomes, at least in terms of market growth, diversity and economic performance.

With respect to service coordination and headway regulation, the Oxford Statutory Quality Partnership (SQP) and its qualifying agreements and block exemptions were discussed. Examples of possible headway regulation were also highlighted in Valparaíso (Chile) and in

Estonia. The role of GPS in enforcement might mean headway regulation is more feasible than it once was, although public interest tests may be required to prevent cartelisation.

Bus stop allocation was seen as being problematic, with the Nottingham SQP providing some solutions, as might airport slot allocation procedures. Access to express coach stations was emerging as a problem in Germany and was likely to become a problem in France.

With respect to fares/ticketing regulation, legal powers to ensure participation in concessionary fares schemes may be desirable and could be extended to Travelcards and network Smart cards/contactless payment. With respect to the latter and based on experience in Great Britain outside London, the challenge may be to ensure that the network cards do not have an excessive price premium over operator specific cards.

In terms of competition, the rapid concentration that occurs following deregulation was noted but, at least for the express coach market, was not thought to be an area of concern. Economic, social and environmental externalities are less important in long distance public transport markets than in local markets and hence the case for regulation is less. In any event, the coach market may approximate to a contestable market, with potential competition having a similar disciplining effect as actual competition (Jaffer and Thompson, 1986). Even if the coach market is not contestable, intermodal competition will ensure efficiency. Some public transport markets exhibit high sunk costs (rail, ski lifts) and hence are unlikely to be contestable. For rail, this will be mitigated by intermodal competition, particularly in circumstances where coaches are deregulated. Overall, the workshop believed general pro-competition authorities could deal with concentration issues. However, in some cases, the speed of response of such bodies may be inappropriate and hence sector specific regulators are required.

The workshop discussed why the evidence base might be so limited. It was speculated that this might be due to uneven power relations between operators and authorities (both national and local). For example, in the deregulated bus market of Wales, it seems likely that the operators have the greatest power, limiting what the Welsh Government can achieve and inhibiting, for example, plans for a Traws Cymru nationwide bus network. In the largely, regulated bus markets of Sweden, the local authorities have greater power than both the operators and central government, with the latter being the main sponsor of deregulation. In Oxford, good practice might have emerged because the authority and operators are relatively evenly balanced with a record of working together that dates back to the mid-1970s. Furthermore, the two main bus operators in Oxford are of broadly equal size and status.

The lack of good practice in terms of regulating deregulated markets might be exacerbated by poor knowledge of the benefits of practices such as timetable and fare coordination and of service stability (including route numbering, liveries etc.) Although there are now guidance manuals on appropriate fare, journey time and other elasticities to apply in the bus and rail industry (Preston, 2015), there is less evidence on the impacts of even interval timetables, good connections and stable services.

4. Conclusions

This workshop drew the following conclusions on the basis of the cases presented, the additional evidence and the further workshop discussions.

Firstly, it was evident that there were interdependencies between market and authority regimes. In Sweden, there were suggestions that tendered services were crowding out commercial services. This could be a form of path dependency in that tendered services have been specified first, leaving few gaps for commercial services. An alternative sequencing could be for commercial services to be specified first, with tendering services filling the gaps and being required to not inhibit competition (as in Great Britain outside London) which might lead to different results (but might not – and in New Zealand's case seems to have led ultimately to the prevalence of negotiated contracts). Commercial networks could include user-side subsidies, for example in the form of concessionary fare subsidies. However, such fare subsidies can have unintended consequences, as the rise in adult bus fares in Wales illustrates.

Secondly, with respect to competition, it is difficult to detect (and prevent) wasteful competition as it is happening, although in retrospect it may be easier to identify. Some of the on-track competition in the European rail market could be wasteful, but this will not be evident until the losses to operators are revealed and this can be compared to increases in consumer surplus and other net benefits. The approach taken to this issue will depend on the political economy viewpoint taken. Neoliberals will see this as part of the process of creative destruction that ensures productive and dynamic efficiency, interventionists will focus more on the allocative inefficiencies it creates.

Thirdly, with respect to regulation, the workshop demonstrated that it was difficult to implement middle level regulations and incentives (such as clever guidance and 'rules of the game') to stimulate further market initiative.

Fourthly, the workshop believed that this was only likely to get more complicated with the growth of shared mobility services and initiatives such as Yourbus (buses in Germany), blablacar (shared cars) and uber (taxis) – not least because many of these services are exploiting a variant of Goodhart's Law – when given the opportunity, economic activity will shift from more to less regulated sectors (Goodhart, 1981).

Finally, this points to the fact that implementation problems also relate to unequal power balances and knowledge skills between the regulators and the regulated and the lack of clear reporting guidelines (e.g. on route costs) for evaluation.

5. Recommendations

In terms of future policy, the workshop believed land passenger transport should continue to implement light touch regulation in market initiative regimes and continue incorporating market initiatives in authority initiative regimes. However, what is also needed is more pro-

active development (by operators, authorities and third parties) of new measures, particularly to permit service coordination and fare, ticketing and information integration.

Future research should monitor and evaluate such schemes (and competing conventional regimes) and disseminate the results. Some of this dissemination should be via future Thredbo conferences and via the conference's website (<http://www.thredbo-conference-series.org>).

Acknowledgement

Workshop participants included: Pekka Aalto, Gunnar Alexandersson, Matts Andersson, Nicolás Badiola, Javier Boncompte, David Bray, Hans Danielson, Joaquim de Aragão, Peter Dwyer, David Emerson, Emmanuel Bougna, Laurent Guihery, Vicente Huerta, Andreas Knorr, Tatenda Mbara, Carlos Melo, John Preston, Yeon-Jung Song, Didier van de Velde, Anders Wretstrand and Théo Yeche.

Workshop Papers

Alexandersson, G. Development of Swedish railway organisation and policy – status report from on-going Government Committee review.

Bougna Tchofo, E. and Crozet, Y. Towards a liberalised European rail transport: Analysis and modelling the impact of competition on productive efficiency.

Emerson, D, Mulley, C. and Bliemer, M. A Case Study of an Individual Route Ownership business regime for public transport service delivery.

Emerson, D, Mulley, C. and Bliemer, M. A theoretical analysis of business models for urban public transport systems, with comparative reference to the case of the Individual Line Ownership regime.

Guihery, L. New development of intercity bus market in France: is it the comeback of the Road?

Hulten, S, Alexandersson, G. and Andersson, M. Transaction and transition costs during the regulation of the Swedish railway market.

Knorr, A. and Lueg-Arndt, A. Intercity Bus Deregulation in Germany – Intramodal and Intermodal Effects after Two Years.

Mbara, T. Tuk-tuk, 'a new kid on the block' in Johannesburg: Impacts and performance.

Preston, J. Big Buses in a Small Country: The Prospects for Bus Services in Wales.

Song, Y.-J. and Shoji, K. Effects of Diversification Strategies in the Investment of Railway Business: The Case of Private Railway Companies in Japan.

Wretstrand, A. and Danielson, H. From production to service: novel ways of contracting public transport services in Sweden.

Yamashita, Y., Aragao, J. Orrico, R. and Almeida, C. Deregulation in the Brazilian Interstate Coach Transport: A new perspective?

References

Carr, J.D., 1997. Light Touch Regulation for the Privatised Bus Industry, In: Preston, J. (Ed.), Proceedings of the 5th International Conference on Competition and Ownership in Land Passenger Transport, Leeds (UK).

Competition & Markets Authority, 2015. Competition in passenger rail services in Great Britain - A discussion document for consultation, Competition & Markets Authority, London.

Douglas, N.J., 1987. A welfare assessment of transport deregulation : the case of the express coach market in 1980. Gower, Aldershot.

Farquharson, M., 2000. Essential Facilities and Transport Infrastructure, In: Preston, J., Lawton Smith, H., Starkie, D.N.M. (Eds.), Integrated Transport Policy: implications for regulation and competition. Ashgate, Aldershot.

Goodhart, C., 1981. Problems of Monetary Management: The UK Experience, In: Courakis, A.S. (Ed.), Inflation, Depression, and Economic Policy in the West. Rowman & Littlefield, Lanham, Maryland.

Jaffer, S., Thompson, D., 1986. Deregulating Express Coaches: A Re-assessment. Fiscal Studies 7(4), 45-68.

Preston, J., 2008. Competition in transit markets. Research in Transportation Economics 23(1), 75-84.

Preston, J., 2015. Public transport Demand, In: Nash, C. (Ed.), Handbook of Research Methods and Applications in Transport Economics and Policy. Edward Elgar, Cheltenham.

Thompson, D., Whitfield, A., 1995. Express Coaching: Privatization, Incumbent Advantage, and the Competitive Process, In: Bishop, M., Kay, J., Mayer, C.-P.e. (Eds.), The regulatory challenge. Oxford University Press, Oxford and New York, pp. 18-42.

Tye, W.B., 1987. Competitive Access: A Comparative Industry Approach to the Essential Facility Doctrine. Energy law Journal 8(2), 337-379.

Van de Velde, D., Augustin, K., 2014. Workshop 4 Report: Governance, ownership and competition in deregulated public transport markets. Research in Transportation Economics 48, 237-244.

Van de Velde, D., Preston, J., 2013. Workshop 3B: Governance, ownership and competition issues in deregulated (free market) public transport: Lessons that can be learnt from developed and developing economies. Research in Transportation Economics 39(1), 202-207.

Van de Velde, D., Wallis, I., 2013. 'Regulated deregulation' of local bus services—An appraisal of international developments. Research in Transportation Economics 39, 21-33.

Van de Velde, D.M., 1999. Organisational forms and entrepreneurship in public transport (Part 1: classifying organisational forms). *Transport Policy* 6, 147-157.

Van de Velde, D.M., Beck, A., 2010. Workshop report - Beyond competitive tendering. *Research in Transportation Economics* 29, 145-151.

Veeneman, W., Smith, A., 2014. Workshop 1 Report: Developing an effective performance regime. *Research in Transportation Economics* 48, 62-66.