

Empirical Applications in Transport Economics

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General outline of the course:

The objective of this course is to provide a general overview of several empirical issues that are relevant in the transportation industry:

- Regulation, deregulation and efficiency: When an industry is regulated, a central issue is to propose appropriate incentives to the transport operator to be productive efficient and provide a significant effort to reduce its costs. Under deregulation, these incentives are decentralized through market forces and competition. This first part proposes to examine these questions through various examples.

- Alliances, mergers, and collusion: Increasing competition in many transportation industries forces transport operators to combine their productive resources. This can be done through a merger. If mergers are forbidden, several operators may ally and offer new services without having to expand their network. Or firms may just collude in order to reduce competition and gain higher profits. We will shed light on the effects of these forms of cooperation on competition and the organization of a transport industry.

- Market power and entry: A specific market structure and the way competitive forces act on the decisions (pricing, capacity, entry, or exit) of transport operators should be carefully accounted for in the empirical model that is made amenable to the data. We will examine here different applications, and shed light on how the structure of the model is related to the economic environment.

- Corporate governance: The performance of a firm (cost incentives, pricing, or profit maximization for instance) may be closely linked to the performance of the chief Executive Officer (CEO) itself, and the way he/she is remunerated. Several types of mechanisms are used in practice by a board of managers to provide the CEO with the right incentives to be productive. Very recently, empirical evidence has been provided on these aspects. We will review some of them.

Transport economics entails various transportation modes. We will consider most of them, namely the airline industry, public transit and urban transportation, railroads, private vehicles and highways, and the shipping industry.

Special emphasis will be given in this course to the construction of the empirical model that will be tested with the data.

References

I. Regulation, deregulation, and efficiency

Gagnepain, P. and M. Ivaldi. "Incentive Regulatory Policies: The Case of Public Transit Systems in France". *Rand Journal of Economics*, vol. 33 (2002a), pp. 605-629.

Marin, P.L. "Productivity Differences in the Airline Industry: Partial Deregulation versus Short Run Protection". *International Journal of Industrial Organization*, vol. 16 (1998), pp. 395-414.

Ng C.K. and P. Seabright. "Competition, Privatization, and Productive efficiency: Evidence from the Airline Industry". *The Economic Journal*, vol. 111 (2001), pp. 591-619.

II. *Alliances, mergers, and collusion*

Brueckner J.K., and W.T. Whalen. "The Price Effects of International Airline Alliances". *The Journal of Law and Economics*, vol. 43 (2000), pp. 557-576.

Clougherty, J.A. "U.S. domestic Airline Mergers: The Neglected International determinants", *International Journal of Industrial Organization*, vol. 20 (2002), pp. 391-414

Ellison, G. "Theories of Cartel Stability and the Joint Executive Committee". *Rand Journal of Economics*, 25 (1994), 37-57.

Gagnepain, P. and P. Marin. "Alliances in the Air: Some Worldwide Evidence". 2005.

Kim, E.H., and V. Singal. "Mergers and Market Power: Evidence from the Airline Industry". *American Economic Review*, 83 (1993), pp 549-569.

III. *Market power and entry*

Berry, S.T. "Estimation of a Model of Entry in the airline Industry", *Econometrica*, vol. 60 (1992), 889-917.

Borenstein, S. "Hubs and High Fares: Dominance and Market Power in the U.S. Airline Industry", *Rand Journal of Economics*, vol. 20 (1989), pp. 344-365.

Busse, M. "Firms Financial Condition and Airline Price Wars". *Rand Journal of Economics*, 33 (2002), 298-318.

Gagnepain, P., and P. Marin. "Regulation and Incentives in European Aviation", *Journal of Law and Economics*, 49 (2006), 229-248.

Ivaldi, M., and G.J. McCullough. "Density and Integration Effects on Class I U.S. Freight Railroads", *Journal of Regulatory Economics*, 19:2 (2001), pp. 161-182.

Marin, P.L. "Competition in European Aviation: Pricing Policy and Market Structure". *The Journal of Industrial Economics*, vol. 43 (1995), pp. 141-159.

Marín, P.L. and R. Sicotte. "Exclusive Contracts and Market Power: Evidence from Ocean Shipping", 2003, *Journal of Industrial Economics*, 51 (3), pp. 193-213.

Mazzeo, M. J. "Product Choice and Oligopoly market Structure". *Rand Journal of Economics*, 33 (2002), 221-242.

IV. *Corporate governance*

Kole, S. and K.M. Lehn. "Deregulation and the Adaptation of Governance Structure: The Case of the U.S. Airline Industry", *Journal of financial Economics*, 52 (1999), 79-117.

Palia, D. "The Impact of Regulation on CEO Labor Markets". *Rand Journal of Economics*, 31 (2000), 165-179.