

Chapter 2

General Literature Overview

Although not the focus of this dissertation, some remarks on related key issues discussed in articles and studies on this subject are necessary to understand the results within the broader context of research on competition for public bus transport services. However, a complete literature review is beyond the scope of this dissertation.

Much research has been undertaken on regulatory and institutional frameworks and their effects on the public bus transport market. The first to discuss the market for cab services was Chadwick (1859), who analyzed regulated competition in the market for public taxi services as compared to unregulated competition, or a free market regime. Following the wave of liberalization in the late 1980s, articles began to appear in the 1990s which assessed the outcomes and the factors influencing competition in markets where competition had been introduced at a very early stage, i.e. Britain, New Zealand, and the Scandinavian countries. White and Tough (1995), for instance, compared the results of tendering gross-cost versus net-cost contracts in Britain outside London, and showed that net-cost contracts lead both to a significantly lower number of bidders and to higher prices. Alexandersson et al. (1998) showed initial effects of tendering in Sweden, including significant cost-reducing effects. One of their main findings was that the decline in demand in Sweden during those years was not a result of the introduction of tendering or of deregulation, but was probably related to the country's deep recession.

In recent years, a number of international studies have analyzed tendering models for (non-commercial) bus services. In a study of the Swedish competitive tendering market, Alexandersson and Pyddoke (2003) identified a long period of decreasing costs and a substantial change in operators' structures. Mathisen and Solvoll (2008) focused exclusively on how the introduction of competition affected the development of the market structure in Norway, and confirmed a substantial shift towards non-local companies.

A meta-analysis of international studies on competitive tendering by Hensher and Wallis (2005) showed a significant price reduction in the first tendering round, but also some price increases thereafter. Initial findings on the introduction of

tendering processes in the Netherlands as part of the market reforms of 2000 presented by Hermans and Stoelinga (2005), among other authors, confirm that cost efficiency has increased but that passenger figures for bus services have remained stable despite improvements in service levels and customer satisfaction. The factors influencing the London bus tendering model examined by Amaral et al. (2006) and Cantillon and Pesendorfer (2007) again confirmed that competitive tendering results in price decreases, but that some price discrimination and strategic pricing by bidders occurs, at least in the specific London environment of multi-unit auctions. Amaral et al. (2008) analyzed collusion under both the London bus tendering model and the French model. Their paper provides evidence that transparency, the discretionary power of public bodies, and the level of competition are the key success factors in preventing collusion and corruption. They also showed that the London model improved performance indicators more than the French model.

Sharaby and Shiftan (2008) analyzed the results of introducing tendering in Israel, which again confirms increasing quality levels and decreasing prices. A notable recent paper is Wolanski (2009), who compared the efficiency levels of direct awarding and competitive tendering and analyzed the drivers of efficiency in the Polish market. He confirmed that tendering public bus transport services results in considerable improvements in efficiency.

Several papers have analyzed free, unregulated (commercial) market regimes. Romilly (2001), for instance, investigated the subsidy levels of local bus services in Britain outside London. He showed that despite the significant decrease in passenger numbers and an increase in fare levels, the government was able to reduce subsidies. Overall, his econometric model for the period 1957–1997 predicted welfare gains of around £7.7 million per annum. In a study of the ownership structures in this free market environment, Roberts (2005) showed that larger business forms have emerged that possess the size and power needed to invest and expand business in order to meet government requirements, for example, by bringing new and more environmentally friendly vehicles to the streets. In a theoretical paper, Gómez-Lobo (2007) stressed that the usual forms of competition do not work in urban bus markets, and attempted to explain why cartels arise in these markets. They are not cartels in the classic sense, but may be viewed as coordinating associations to reach the optimal equilibrium from the operator's perspective, for example, by avoiding competing buses arriving simultaneously at the same stops and hence ensuring a monopoly price for the operators. Leopairojna and Hanoaka (2007) presented a market analysis of passenger van services in Bangkok, a service type that conventional bus operators view as competitors. They recommend regulation of this free market regime to ensure the safety and quality of the services due, for example, to high overload factors, but also find there is no necessity for regulation of market quotas or exclusivity.

In general most of the studies to date on free, unregulated markets have focused on Great Britain, New Zealand, and South American and Asian countries, while studies on regulated competition have focused mainly on continental Europe, London, and Australia.

General aspects of different market models have also been discussed in the extant literature. Van de Velde (1999) presented a general classification for market organization, and discussed the different forms of market versus authority initiative for public bus transport services in Europe. A more recent overview by Macário (2005) stressed the high correlation between regulatory evolution and institutional behavior on urban mobility markets. A Sri Lankan assessment of the development of the regulatory framework for public bus transport services within the past 100 years by Kumarage and Jayaratne (2008) identified several phases that tend to repeat in a circle, starting from unregulated competition, followed by a period of consolidation under regulated private monopolies, a period of nationalization under state monopoly and now (since 1979) a period under regulated mixed competition. Gwilliam (2007), who provided evidence for a regulatory cycle, confirmed their finding. For developed countries this cycle consists of a circular flow through private competitive supply, unregulated private monopoly, regulation of private monopoly, nationalization, and then back through further regulatory reform to some type of private competitive supply.

An overview showing the wide variety of market structures and modes of market entry developed in Europe since the first efforts at liberalization in the late 1980s appears in van de Velde (2005), who described the increasing involvement of the private sector both through deregulation and competitive tendering, and the decentralization of public responsibility for the sector, and observed a trend to increased use of authority initiative. He also showed that the former market initiative has not led to competing operators within the market in most of the countries studied. Updating these observations, van de Velde et al. (2008a) described the different European forms of market organization that have arisen with the right to “the creation of passenger transport services” granted under the new European regulation (EC) No 1370/2007, and analyzed different contractual settings which reconfirm the broad variety across Europe.

In the German literature, the distinction between commercial and non-commercial services has been analyzed by several German legal scholars (e.g., Werner 1998 and 2001). Furthermore, legal aspects of tendering (Werner et al. 2004 and Klinger 2006) and competition for commercial services (Landsberg 2003; Werner 2004; Nareike and Walter 2006 as well as Recker 2007) have been discussed in many papers. However, economic papers on the institutional framework of German public bus transport services and competition for this market are rare. A brief overview of main aspects was presented by van de Velde (2005). In recent years, Sterzenbach (2008) has looked at public funding, while Knieps (2004) as well as Beck and Wille (2011) examined the structure of the German “Verkehrsverbünde” (public transport associations). A basic overview of this kind of market organization is presented by Pucher and Kurth (1996).

Research on the economic effects of tendering includes Achenbach 2006; Augustin and Walter 2009; Beck and Wanner 2007; Beck and Wanner 2008; Berschin 2003, and von Berlepsch 2005. A few papers consider competition for commercial services (e.g., Beck 2007; Beck and Wille 2009, and Walter et al. 2009).

Nevertheless, to my best knowledge, there are no economic papers which analyze the effects of commercial and non-commercial services within one (regulated) market. Thus, this dissertation is the first comprehensive economic analysis of the German bus industry that considers the distinction between commercial and non-commercial services.

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