

Project Outline: Optimal Pricing of Airport Infrastructure And Benchmarking of Aeronautical Charges

- (1) **Responsible:** Jürgen Müller, Hans-Martin Niemeier, Sylvana Thiele, Pauline Wentzel, Plamena Ivanova
- (2) **Objective:** Our main purpose is to examine the structure and levels of airport charges. Furthermore, to provide an overview about current methodologies for benchmarking airport charges in the light of optimal pricing theories for airport infrastructure. The end target is to analyse how a pricing scheme increase economic welfare and what is the potential for welfare improvements.
- (3) **Background:** The 3 percent, which is said to represent the share of airport charges in the total costs of airlines is a totally misleading world average figure which hides the major cost impact of airport charges on many airlines. (Doganis, 1992). The deregulation of the European airline market resulted in lower barriers to entry and led to a stronger competition. As a result, airlines are constantly looking for ways of minimising costs, most of all minimising costs that are not under direct control such as airport charges. On the other hand, airport charges represent an important revenue source to airport operators.
- (4) **Design/Methodology/Approach:** Our research is split in two parts. The first part concentrates on providing an overview on the theory of optimal pricing for airports. The second one presents some studies which attempted to benchmark aeronautical charges and their results.
- (5) **Findings:** Based on the theory of optimal pricing of airports, we have showed how first best marginal cost pricing has to be adapted to accommodate the specific problems of airports. The backbone of this theory is that under very restrictive assumptions a set of prices equalling marginal costs would lead markets to clear and would allocate scarce resources pareto-efficiently so that consumer and producer surplus are maximized. In the same time we have shown that the complications associated with rising marginal cost and congestion requires significant modifications to the optimal pricing policy. Keeping these theoretical aspects in mind, we highlighted that, benchmarking of airport charges makes only sense if in addition to levels, the structure of charges is also included, to reflect sound economic principles of pricing and resource allocation. In other words, the pricing scheme should maximize social welfare based on covering the costs of airports. We suggest that benchmarking exercises should rely on the concept of optimal prices for airport infrastructure. Such pricing policies increase economic welfare. However as the airport industry is not a competitive industry for a variety of factors, like decreasing costs, sunk costs, lumpiness of investments, etc. research has focused on second best solutions, instead of the first best marginal cost pricing. Even though all the reviewed studies aim at understanding the major factors that influence the weight and composition of airport charges, the results they obtained cannot be generalized easily

Contact persons:

Jürgen Müller
jmueller@fhw-berlin.de

Hans-Martin Niemeier
hm.niemeier@t-online.de

WWW.GAP-PROJEKT.DE