



TEAM "FINANCE"

Project status (as of December 08)

Members:

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Description:

Over the last few decades strong growth rates and increasing competition within the air transportation sector have led to a rising need for efficiency and cost reduction. A large number of airports became privatized, but there are great variations between the European countries. The airports' financial performance appears to depend on these different ownership structures, but also the price regulation system, the airlines' behaviour, the degree of outsourcing etc. as well. Traffic and demand structures, which are often highly depending on regional conditions, are important influencing factors. Especially German airports seem to be outperformed by others. Due to these differences financial indicators must be chosen carefully in order to get reasonable results when comparing various airports.

Targets:

- Preparation of the airports' revenues and expenditures as a basis for financial comparisons.
- Trying to understand the main revenue sources of the airports (Concession vs. Non-aviation).
- Examination of interconnections between the airports' operating techniques, methods, activities etc. and their financial performance in order to identify best practices. In this respect results from the other sub-projects within GAP are used.
- Determining the effects of outsourcing and capacity expansion on financial variables.

Methodology:

Comparisons are drawn by calculating financial ratios. Furthermore, nonparametric methods such as Data Envelopment Analysis (DEA) are applied in order to estimate correlations between the various inputs and outputs and to make statements about the airports' productive efficiency.

Data:

Basis of the financial analysis is a large database of many German and European airports reaching from 1990 until 2007 which has been compiled over the last few years. These data consist of the balance sheets and the income statements.





Research papers:

Sagol, Coskun : "Financial Performance of Selected Major European Airports", Master Thesis

Demir, Cemil; Michalski, Sascha; Scholz, Stefanie Marie : **"How Major Investment Decisions Affect the Financial Performance of German Airports"**, GAP working paper

First Results of Research:

The thesis by Coskun Sagol used financial ratio analysis (FRA) to assess the financial performance of the selected major European airports for the years between 2002 and 2005. Both, the globalization and deregulation trends in airline industry and privatization attempts in the airport sector force airport companies to act more like profit-oriented businesses and to look more closely at costs and revenues. On the one hand airport companies seek to increase their aeronautical revenues but on the other hand airlines try to reduce their airport costs. If we remember the airport value tree, an airport company can increase its profits by generating higher revenue or having lower operating costs. The airport company can increase its revenue through higher airport charges, attracting more international traffic or developing nonaeronautical activities. The different regulatory approaches result different level of airport charges that affect the profitability of airport companies. Furthermore, in the increasingly deregulated and liberalized aviation environment in some developed countries and other regions induced many airports to re-examine their traditional relationships with airlines. The airlines are aware that the survival and future of the airports heavily depend on a single carrier hinges on lower charges. Thus, airports should develop non-aeronautical activities at their facilities as far as possible and should obtain revenue from concessions, rentals and free zones. An airport's financial performance depends not only on its ability to generate revenues, but also on its ability to minimize costs. The airport company should also minimize costs to get higher profits.

Financial ratio analysis is a good starting point and a useful part of an investigation process. In order to take full advantage of these calculations they have to be assessed and interpreted with due consideration of background information on the company, industry trends, the state of the airport industry sector on a global scale, technological changes that are anticipated or in process and general economic conditions and trade cycles as the most important parameter of traffic development, etc. Ratios then, are extremely useful tools.

Further Research and Targets:

- 1- The structure of the data is checked and corrected Berlin
- 2- The errors are identified and corrected Berlin
- 3- 2006/2007 data are entered in the dataset Bremen
- 4- Improving the master thesis of Coskun Sagol
- 5- Using the Vogel Data, which include 1990-1998, in order to make better analyses