ABSTRACT

Title: Charging for the use of infrastructures on passenger transportation in Europe: a comparison between air and rail modes
Author: Gerard Crosa Romero
Tutor: Carles Casas Esplugas

The European transport infrastructure is very important for the economic growth, work mobility and the European Community competitiveness. Therefore, it is vital to provide the maximum efficiency in its supply and use. To achieve this goal it will depend on, among other things, the way of charging the costs to the costumers due to the use of the infrastructure. This is why the efficiency of each mode of transportation is so important.

During last decades, congestion of the most usage routes (the road and the air ones), in addition of the environmental impact because of transport usage growing, has caused the research of alternatives which provide a fairer modal sharing. Considering the competition policy among modes of transportation, railway suffered a deep transformation in Europe to try to give an enough boost to it. After the vertical disintegration of this mode, the Executive Order 2001/14/EC established that railway operators had to pay a tax to the infrastructure’s manager due to its use. Thus, it was trying to harmonize the costs that had to be paid by operators in each transport mode, improving the competitiveness among them.

For that reason, the aim of this thesis was to analyse the current tariff systems, both air and railway modes. After the carried analysis out, it has observed that the current railway tariffs schemes are very heterogeneous, because the amount of parameters used by the different administrators vary a lot among them when it comes to define these schemes (also, the amount of variables that take part in each of these parameters).

On the other hand, this study has shown that the present airport tariffs are more homogeneous than the railway ones. The reason is the fact that this sector always applies the same principles (services rendered by the air companies). Still, it is necessary to point out the existence of some weaknesses regarding its transparency when it comes to fix the tax values. This fact sometimes can distort the reality and to produce an abuse of the airports due to their dominant position, affecting the operational costs of some air companies.

Related to the efficiency of the infrastructure use, it has seen that the ones of the air companies are higher than the railway ones (the costs of the former are 2/3 of the latter ones). In addition, in two assessed routes (Madrid – Sevilla and Paris – Lyon) it has observed that the tools of two studied railway operators represented a 33% and a 41% of the fares, while the air operator that was assessed just meant 20% of the fares.

Finally, it is possible to conclude that, through the quantitative analysis carried out in this thesis, the railway mode, due to its higher percentage of the taxes (tolls) respect to the air one, when it comes to decrease the price of their fares through diminishing other operational expenses, its buffer is smaller than the air one. This fact allows us to see the importance of tolls as a tool when it comes to regulate the competitiveness among modes of transportation.