

1. Introduction

In most of continental Europe, local public transportation (LPT) is a regulated activity. A local authority (Region or smaller local body) regulates each network whereas a single multi-modal company provides the transit service. The services operated by more than one firm are an exception. Public transit systems generally face universal service obligation and the demand for this service is promoted through low user charges and considerable subsidies.

At present, the high operating costs of the local firms constitute a great challenge for political authorities, given the permanent deficit characterizing the sector. They have to ensure the economic-financial equilibrium of the utilities avoiding waste and inefficiencies.

In order to assess operating costs, a thorough investigation of the knowledge of the firms' technology is necessary. An empirical investigation of the sources of inefficiency in this industry is then useful to change the traditional state intervention and design new short and long run policies.

The aim of this paper is to provide fresh evidence about the features of technology and cost structure of public transit systems in Italy, useful to improve local policy. This is particularly relevant in the current evolution of the Italian regulatory framework. As in many other countries, it has undergone radical changes since the second half of 1990s. A structural reform started following the law 549/1995 and the *Decreti Legislativi* 422/1997 and 400/1999, turning the efforts towards a permanent economic recovery of the whole sector.

The empirical investigation is based on a sample of 45 Italian companies providing both urban and extra-urban transport service, observed during the period 1996-1998. The analysis is run through an econometric estimation of a translogarithmic variable cost function. This functional form allows us to verify the behavior of scale economies within the industry and to assess the effects on costs of factors considered relevant in explaining differences between operators.

The remainder of the paper is organized as follows. After a concise description of the Italian situation (Section 2), in Section 3 we briefly review the empirical literature on the LPT sector. Section 4 is devoted to the presentation of the functional form, the explanatory variables and the methodology used. Section 5 contains a description of the database, paying attention to the nature of each variable, while Section 6 comments on the results of the estimates. Conclusion and policy suggestions (Section 7) complete the work.