Delivery Forms and Value of Municipal Sport Services. Expenditure vs Cost

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Aim
Municipal expenditure in sport is a very relevant indicator of the budget effort in the provision of this service (Stastna, 2009). However, the characteristics of the different New Public Management (NPM) delivery forms (i.e. agentification and contracting out) hinder the estimation of the real dimension of the service. In particular, the contracting out delivery forms transfer the expenditure effort to a private company, which causes municipal spending to decrease and is not associated with a decrease in the number of services (Pérez-López, Prior, & Zafra-Gómez, 2015). Therefore, new indicators related with the overall cost of the service (including municipal and private companies’ expenditures) are necessary to analyze the real effect of the different NPM delivery forms on municipal sport services. The aim of this study was to analyze the influence of different delivery forms on the budget dimension of municipal sport services in Spain, evaluating the differences between expenditure per inhabitant and cost per inhabitant.

Theoretical Background
Public sport services play an especially important role in the municipalities. This area aims to provide access to physical activity to all inhabitants and to improve physical activity levels (Liu, Taylor, & Shibli, 2009). To do so, they control sport facilities and sports services. In addition, they promote local sport associations (Burillo, Barajas, Gallardo, & García-Tascón, 2011). Furthermore, as a public service that is directly provided to citizens, and due to the fact that most of the services provided by public sport facilities are directly comparable to those of the private sector, a greater performance control is required (García-Unanue, Felipe, Gómez-González, del Corral, & Gallardo, 2016).

The new legislation of the Spanish local administration includes actions to help with this control. One of them is the new compulsory indicator that has been published by municipal administrations since 2014, named effective cost. This indicator includes the direct sport expenditure of the municipal administration, a part of the distribution of the municipality’s general expenditure and the turnover of the public services managed by private companies.

Methods
All municipalities above 20,000 inhabitants took part in this study. The data of expenditures per inhabitant (only the sport expenditure of the municipal administration) and the cost per inhabitant (the value of effective cost indicator per inhabitant) have been obtained from the Spanish Ministry of Public Administrations website, focusing on the year 2015. Several missing values were found after a review of the dataset. Therefore, out of 395 municipalities, only 282 were included.

The main independent variable was the management delivery form. To do so, the municipalities were divided into three options through a dummy variable: 1 for direct centralized management, 2 for agentification and 3 for contracting out. Other environment
variables were included as control: total population (transformed to logarithm), rent per capita, taxes per capita, municipal budget solvency and total surface of public sport facilities. Two linear regression models were estimated, one for expenditures per inhabitant and another one for cost per inhabitant. Because of the existence of heteroscedasticity, robust standard errors were used. The analysis was performed with STATA 14.0 and the level of significance was set in p<0.05.

**Results and Discussion**

The estimations show a $R^2$ of 0.19 in expenditures per inhabitant model and 0.15 for cost per inhabitant model. The mean expenditure per inhabitant of the sample was 35.58 €, while the mean cost per inhabitant was 41.76 €. As expected, the delivery form directly influenced the expenditures per inhabitant. The municipalities with agentification expended 8.60 € more per inhabitant than municipalities with direct management ($p<0.001$) and the municipalities with contracting out expended 7.34 € less per inhabitant ($p<0.001$). However, the delivery forms did not present any significant value in the model of cost per inhabitant ($p>0.05$). These results help to support previous studies that do not find clear improvements with the decentralization and contracting out (Pérez-López et al., 2015). Furthermore, the results of this study show a bias in the expenditures per inhabitant as a performance indicator. The remaining variables followed the same pattern in both models. The sport facilities surface was not significant ($p>0.05$). The total population and the municipal solvency presented significant values with negative sign ($p<0.05$). Finally, the rent and taxes per inhabitant presented significant values with positive sign ($p<0.05$).

**Conclusions**

This research shows an empirical evidence of the relationship between the NPM delivery forms and the overall cost of municipal sport services. These findings imply that the delivery forms do not affect the total budget of the service. Future researches must go in-depth on the influence of delivery forms in other indicators such as participation index and perceived quality.

**References**


