

## Expanded abstract

# Financial performance compared between public and private companies in Spain during a period of economic expansion (2014-2019)

### Objectives

The privatization of public enterprises –a cornerstone of the neoliberal paradigm– has been based on the argument of the greater efficiency and profitability of private enterprise, and which is grounded primarily in three theories: property rights theory, agency theory, and public choice theory.

However, after the Great Recession, a “new” theory of public enterprises has begun to emerge, built on two fundamental pillars: the fact that public enterprises fulfil a “public mission”, and public service motivation, as opposed to profit maximization.

From this “new theory” of public enterprises, it follows that the criteria of productive efficiency (cost minimization) and profitability (profit maximization) prove inadequate for measuring the economic performance of public enterprises or for comparing them to that of private companies. Such is the main limitation of the extensive comparative empirical literature on the economic performance of public and private enterprises; namely, that most of it focuses on efficiency and profitability. Another limitation of the empirical literature is the near absence of studies focusing on financial ratios other than profitability. While some studies compare debt and liquidity, none compare other ratios such as solvency or financial autonomy.

Under the hypothesis that the nature of ownership per se (private vs. public) affects financial performance, the central objective of this study is to compare the performance of public and private enterprises based on the following financial indicators: profitability, solvency, liquidity, financial autonomy, and indebtedness. This comparative analysis is conducted for Spain from both the perspective of the economy as a whole and from a sectoral perspective, during a recent period of economic expansion following the Great Recession (2014-2019).

The specific objectives are first to comparatively evaluate how these indicators have evolved over the study period, and second to review the empirical literature comparing the two types of enterprises as well as contrast our results with those of the existing literature.

### Methodology

The empirical analysis involves comparing the mean of the different ratios between the two types of enterprises, provided that the Mann-Whitney test for independent samples shows that the distributions are statistically different.

In the first instance, the mean value of each ratio was calculated for the whole period in each enterprise in the sample, using the available values of the variables for each enterprise. Furthermore, due to the high dispersion of the collected data and the presence of errors, outliers were identified and eliminated for each variable. Outliers (O) are defined as those that meet the following condition:  $Q1 - 3*IR > 0 > Q3 + 3*IR$ , where Q1 and Q3 represent the first and third quartiles, respectively, of the distribution of each ratio analysed, and IR corresponds to the interquartile range, calculated as  $IR = Q3 - Q1$ .

The SABI (Sistema de Análisis de Balances Ibéricos) and INVENTE (Inventario de entes del sector público) databases were used as data sources. First, public enterprises were selected from the INVENTE database, specifically 109 state-owned enterprises and 304 companies from regional (autonomous community) governments. Private enterprises were subsequently selected from the SABI database, from which information on financial variables and ratios was also obtained for both private and public enterprises.

A total of 10,397 enterprises were finally selected, with 9,999 (96.2%) being private enterprises and 398 (3.8%) being public enterprises. Private enterprises were selected as a random sample of 9,999 enterprises from a total population of 222,789, representing a sample percentage of 4.48%.

The sample taken corresponds to a period of economic expansion (2014 to 2019), excluding subsequent years in order to avoid the effects of an abnormal economic situation –namely the one triggered by the economic crisis stemming from the Covid-19 pandemic.

In addition to the overall comparison of the Spanish economy as a whole, an analysis by production sector was also conducted. For this purpose, the 2009 National Classification of Economic Activities was used, and 12 sectors were selected covering the whole of the Spanish economy.

## Results

At the level of the economy as a whole, the results are very clear; public enterprises are more solvent, have greater financial autonomy, greater liquidity, and less debt. Public enterprises outperform private companies in these financial indicators. However, they also clearly register much lower profitability –both economic and financial– than private enterprises. Analysis at the sectoral level presents the same results.

What accounts for the lower profitability of public enterprises? As explained above, public companies basically pursue a “public mission” and motivation in terms of their managers’ behaviour, a “motivation for public service” that goes far beyond efficiency and profitability. Moreover, the greater solvency (and financial autonomy) of public enterprises could be related to their lower exposure to private debt or their access to guaranteed public financing.

These results paint a comparative picture between public and private enterprises which differs greatly from that to come out of the conclusions of the extensive comparative empirical research. The fundamental reason is that, as shown, the comparative empirical research has focused primarily on indicators of efficiency and profitability, whereas we introduce other indicators, such as solvency, financial autonomy, liquidity, and indebtedness.

## Conclusions

Both the theoretical approach and the extensive comparative empirical literature seem to conclude that private enterprises tend to outperform public enterprises in terms of financial performance. However, this conclusion must be questioned for two basic reasons. First, they have one fundamental limitation; studies compare enterprises that do not pursue the same objectives. Second, compilations of empirical studies are very likely to exhibit biases in sample selection: the observation period, reference to industrialized or developing countries, the degree of market competition, the existence or absence of regulation to correct market failures and, finally, the economic performance indicator used (Mühlenkamp, 2015).

Regarding this last point, we have found a lack of comparative studies based on financial ratios other than profitability. Added to this is the absence of a financial comparison of the two types of enterprise in Spain. This study attempts to address this gap, with the results obtained presenting a very different picture from that of the empirical literature analysed; superior performance of public enterprises vis-à-vis private ones in financial indicators other than profitability.

Nevertheless, this study does have limitations that warrant further research. First, it focuses solely on financial indicators. Second, it does not present any explanatory theories (since none exist) for the superior performance of public enterprises in financial indicators other than profitability. Third, the effect of enterprise size on the financial indicators analysed merits examination. Finally, the robustness of the results during periods of economic recession should be demonstrated.

## Original value

This work attempts to provide a modest contribution to the most recent literature on public enterprises. It helps recognise the value of public enterprises by demonstrating superior results compared to private enterprises. However, these results must be theoretically grounded and confirmed in different macroeconomic contexts, which should be the subject of future research.