The Spanish Privatisation Process: implications on the profitability and efficiency of divested firms*

Authors: Laura Cabeza García and Silvia Gómez Ansón

Address:

Laura Cabeza García
Department of Business Administration
University of Oviedo
Avda. del Cristo s/n, Oviedo 33071, Spain
Phone: 34- 985104971
Fax: 985103708
E-mail: lcabeza.uo@uniovi.es

Silvia Gómez Ansón
Department of Business Administration
University of Oviedo
Avda. del Cristo s/n, Oviedo 33071, Spain
Phone: 34- 985102825
Fax: 985103708
E-mail: sgomez@uniovi.es

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Abstract: This paper analyses the effect of the Spanish privatisation process on the performance of the firms privatised within the period 1985-2000. Using conventional pre- versus post-privatisation comparison, we find that profitability, operating efficiency and real sales increase significantly after privatisation. However, when we adjust these ratios to the firms' industry performance, we find no significant improvements on firm performance.

Besides, we analyse different factors that may have influenced the profitability and efficiency of privatised firms. The results suggest that competition may play an important role for the success of privatisation processes, profitability and efficiency gains seem to take place in competitive structures, not in utilities. The results also show some support for the positive influence of foreign investment and the use of public offerings as privatisation method on profitability.

Key words: privatisation, profitability, efficiency, leverage, employment

JEL: L33, L32, L51

1. Introduction

In the last decades the privatisation processes have been an important phenomena in the world. Since their beginning in 1979 in United Kingdom the privatisations have taken place in European countries, like France, Italy or Germany, and in developing countries of South America, Asia and Africa. Spain has not been an exception, 131 firms have been privatised since 1985 until 2003. Spain's process of economic restructuring has been founded upon liberalisation and deregulation in the financial sector and key product markets. Public sector restructuring and the privatisation of State-owned enterprises (SOEs) have been a major part of this reform. According to the OECD (2003), the privatisation program in Spain raised 38,401million US$ between 1990 and 2001, thereby ranking Spain fourth of the fifteen long-standing EU countries in terms of revenues from privatisations.

The economic theory of privatisation is a subset of the large literature on the economics of ownership and the role for government ownership (or regulation) of productive resources (Megginson and Netter, 2001). The motivations and objectives underlying privatisation processes include: financial, political and economic motivations. The financial motivations refer to the revenues obtained by the States as a consequence of the sale of the formerly State Owned Enterprises –SOEs- (Vickers y Yarrow, 1988) and to the benefits associated to the elimination of subsidies to SOEs. The revenues obtained through the privatisation processes have derived in reductions of the public deficit of the economies that initiated these processes. For Spain and other E.U countries, the revenues obtained from the privatisation processes during the 1990s helped meeting the Maastricht criteria of a fiscal deficit below 3 percent and public debt below 60 percent of the GDP. For Spain, according to Vergés (1998), up to 75 percent of the proceeds obtained through the privatisation of State-owned companies from 1992 onwards, particularly during the years 1996 and 1997, were devoted to this end.

Political arguments for privatising SOEs rely on weaknesses of state ownership, on the problems for governments in defining the goals of the firm and on the superior assignment of resources by the markets. Besides, privatisations may promote the entrance of foreign capital and of institutional investors and may help developing capital markets, promoting a "popular capitalism". Economic motivations for privatisation rely on the superior performance of private over state owned companies. These arguments for privatisation are supported by the results of different studies that suggest that private ownership leads to higher rates of productivity growth, to superior efficiency and firm performance (Cuervo and Maroto, 1983;

Ehrlich *et al*., 1994; Argimon *et al*., 1999; Ng and Seabright, 2001; Dewenter and Malatesta, 2001). Different authors also find an increase in performance of privatised firms (Megginson *et al*., 1994; Boubakri *et al*., 2001; Wei *et al*., 2003), although privatisation does not seem to lead to systematic improvements of allocative efficiency (Pestieau y Tulkens, 1993) or of productive efficiency (Vickers y Yarrow, 1988; Gonzalez-Páramo, 1995; Martín y Parker, 1997). The results of these papers suggest that the change of public to private ownership may not be the main determinant of the observed increase in the performance of privatised firms. Other factors, such as firms' management and the competitiveness of markets may influence firms' performance after privatisation. For instance, performance improvements could be due to greater exploitation of monopoly power, which has harmful effects on allocative efficiency, rather than productive efficiency.

Our papers aims to contribute to this literature by analysing the consequences, on the economic performance of firms, of one of the largest privatisation processes undertaken by a developed economy. The empirical evidence on the Spanish privatisation process is scarce and leads to non-conclusive conclusions about the possible improvements in performance of privatised firms (Sanchís, 1996; Melle, 1999; Villalonga, 2000). Besides, compared to previous analyses of the Spanish case, our study presents some differential characteristics. Firstly, we study not only the possible post-privatisation improvements in profitability and efficiency, but also in output, investment, leverage and employment. All variables are industry adjusted. Secondly, we try to explain the observed changes in firm performance, capital structure and employment using cross-sectional analyses that relate these measures to different factors that may influence privatisation processes: the method used for the privatisation –direct sale or public offering-, the ideology of the government that privatises the SOE –conservative or socialist-, whether the management team or a foreign investor invest in the privatised firm, the prior performance of the firms. Thirdly, the period of time considered in the study (1985-2000) encompasses approximately 50% of divested firms over the period considered, and 45% of the total assets of the firms. Besides, all types of privatisations are considered (direct sales and public offerings). Consequently, the study is based on a large sample of the firms privatised in Spain.

The results of the study does not support a post-privatisation improvement in firms' profitability and efficiency, once the industry effects are considered. Neither can we confirm an increase in investment, a decrease in leverage or employment after correcting for industry

effects. Moreover, the results do suggest that competition may play an important role for the success of privatisation. As suggested by Sheshinski and Lopez-Calva (1999) the profitability and efficiency gains take place in competitive structures, not in utilities. The results also show some support for the positive influence of foreign investment and the use of public offerings as privatisation method on firm performance.

The rest of the paper is organized as follows. Section 2 refers to the consequences of privatisation processes on firm performance. Section 3 describes different factors that may influence post-privatisation performance. Section 4 analyses the privatisation process in Spain and the empirical evidence. Section 5 describes the sample selection, methodology and the variables used in the study. The results are discussed in section 6 and section 7 presents the main conclusions of the paper.

2. Implications of privatisation on the financial and operating performance of divested firms.

Ownership structure influence corporate decisions. The economic theory of privatisation favours the advantages of private ownership of the means of production. The theoretical arguments point to the inefficiency of government ownership and on the problems of State Owned Enterprises when defining their goals. Actually, governments may have many other objectives for the SOEs other than profit or shareholder-wealth maximization (Megginson and Netter, 2001), for example they may pursue political goals that are inconsistent with efficiency and even with maximizing social welfare. Besides, even if the government pursues profit maximizing as the goal of SOEs, these public firms will tend to be more risk adverse and be less free to adopt decisions because managers will need to justify their strategic decisions to the employees or the State (Frydman *et al*., 2000). Moreover, agency problems may be more severe in public firms due to the double level of agency relations that they present (citizens-government and government-management), the impossibility of the citizens to sell the firms' shares, the political objectives of the government, or the firms' reliance on the government for funding and their unlikelihood to face bankruptcy. All these factors may derive in firm diversification and growth and to a reduction of the firms' profitability and efficiency.

Considering these characteristics of public firms, and given the discipline provided by the markets (capital market, corporate control market and product and service markets), the

change from public to private ownership in privatisation processes should derive in increases in profitability and efficiency (Yarrow, 1986; Boycko *et al*., 1993). The expected increase in operating performance of divested firms is supported by different empirical studies that report an increase in return on assets and return over sales for privatised firms (Megginson *et al*., 1994; Boubakri and Cosset, 1998; Boubakri *et al*., 2001; Sun y Tong, 2002)[i]. Thus, we propose as first testable hypothesis the following:

H1: Firms' operating profitability increases after privatisation

Market pressures and the reduction of subsidies by the State will drive privatised firms to employ their human, financial and technological resources more efficiently (Suneti *et al*., 1992; Boycko *et al*., 1993). This expected increase in the firm's efficiency is supported by the different empirical studies (De Alessi, 1980; Vining y Boardman, 1992; D´Souza y Megginson, 1999; Sun y Tong, 2003) and is one of the motives more frequently named by governments to justify privatisation processes. Consequently we state the following hypothesis:

H2: Firms' efficiency increases after privatisation

Firm's output may also increase following privatisation. Higher incentives, better financial opportunities and the increase in competence after privatisation could derive in an increase in output as reported by La Porta and Lopez de Silanes (1999) for Mexico, Boubakri and Cosset (1998) for privatisation processes in different developing countries, or Sun y Tong (2003) and Wei *et al*. (2003) for China. Nevertheless, privatisation may also lead to an output reduction as the government will not incentive managers (via subsidies) anymore to attain inefficient levels of output (Boycko *et al*., 1993). Following the first argument, we test the following hypothesis:

H3: Firms' output increases after privatisation

The empirical evidence regarding the possible influence of privatisation on firms' investment is not conclusive. While Megginson *et al*. (1994) and Boubakri and Cosset (1998) report a post-privatisation increase in investment, D´Souza and Megginson (1999) find no significant changes and for others (Parker, 1994), there is an increase in R&D expenses. Theoretically, the expectable increase in firm efficiency should drive firms to increase investment expenses as they would have access to capital markets funding. Moreover, different studies suggest that

privatisations may impulse entrepreneurship attitudes in divested firms (Zahra y Hansen, 2000). Thus, we hypothesize:

H4: Firms' investment expenses increase after privatisation

Privatisation may also influence firm leverage. Former SOEs will not be able anymore to use the State guarantee in debt contracts, to rely on the government for funding, and will have to face the risk of bankruptcy as supported by the studies of Megginson *et al.* (1994), or Boubakri and Cosset (1998). Consequently, post-privatisation a reduction in firms leverage should be expected:

H5: Firm leverage decreases after privatisation

Privatisation and liberalisation processes have important consequences on divested firms' human resources. SOEs usually are dominated by syndicates or respond to the interest of the State to protect economically and socially distressed regions or areas[ii]. Consequently, post-privatisation divested firms will tend to reduce their work force. Empirical studies analysing this issue are not conclusive and vary depending on the country of the study. For example, for the Chilean case Meller (1993) reports an increase in employment post-privatisation, and so do Boubakri and Cosset (1998) for a sample of firms belonging to developing countries, or Sun y Tong (2003) for China. On the contrary, the study of Sakita (1989) about the privatisation of the Japanese train company suggests a significant decrease in its work force after privatisation. Nevertheless, according to the theoretical arguments we have referred to we hypothesize:

H6: Firms' employment decreases after privatisation

3. The determinants of privatised firms' performance

Different factors may influence the post-privatisation profitability, efficiency, capital structure, investment and work force changes of divested firms. Among them, we may mention the economic and political environment, regulation and market competition and the firms' ownership and corporate governance structure.

The economic environment at the time of the privatisation and post-privatisation may influence significantly the success of the privatisation process. One of the factors that determine the economic environment is the existence of competence in the markets in which

the divested firms operate. In the lack of a competitive environment, firm efficiency will depend mostly on regulation and competitiveness, being the firm ownership structure not determinant (Vickers y Yarrow, 1988; Yarrow, 1986). Moreover, besides privatisation processes, other reforms such as price deregulation, market liberalisation and the incentives provided to managers may influence significantly on the efficiency of SOEs. Thus, we should expect that[iii]:

H7: Firms belonging to regulated industries will benefit less from privatisation

The ideology of the government in place when the firm is divested may also influence its post-privatisation performance. Neither, the objectives underlying the privatisation processes, nor the characteristics of privatised firms may coincide for socialist and conservative governments. Likewise, the consequences of the privatisation processes may differ depending on the commitment of the government that privatises the SOEs with the "idea" of privatisation, e.g. the commitment of the government is expected to be low if the main motivation underlying the privatisation is process is the State's needs of cash (D´Souza *et al*., 2000). For the Spanish case, the conservative government initiated an explicit Modernisation Program of the Public Sector after winning the general elections of 1996. Thus, we hypothesize:

H8: Firms that were privatised under the conservative government will benefit more from privatisation

Divested firms corporate governance and ownership structure, as well as the incentives given to their management team may also influence significantly on the firms' post-privatisation performance. As already said, the State may impose the firms other objectives different from maximizing their value, consequently, it should be expected, that the less ownership the State retains in privatised firms, the higher the expected benefits associated to privatisation (Boycko *et al*., 1996). This prediction is supported, for example, by the empirical evidence provided by Wei *et al*. (2003) for China. These authors document higher post-privatisation increases in profitability, efficiency and employment for privatised firms in which the State retains less than 50 percent of the capital[iv]. Consequently, we propose the following hypothesis:

H9: The less the State's ownership in privatised firms, the higher the benefits of privatisation

Since the method used to privatised the SOEs influences their post-privatisation ownership structure, it may also influence the benefits of privatisation. Public Offerings imply greater transparency of information, a "market" valuation of the firm and favour the development of capital markets and of a popular capitalism. Thus, we should expect higher benefits associated to privatisation for firms privatised through Public Offerings. Nevertheless, there exist also theoretical arguments that suggest higher benefits, increases in profitability and efficiency, for firms privatised through direct sales: given that firms privatised through Public Offerings are usually the larger firms and those presenting already, pre-privatisation, a higher performance, the "crown-jewels", the expected increases in profitability and efficiency of those firms would be reduced. According to the first argument, we test the following hypothesis:

> H10: Firms that are privatised through Public Offerings benefit more from privatisation

As we have already mentioned, the post-privatisation firm's ownership structure may influence significantly its performance. Accordingly, the empirical evidence suggest higher increases in performance for divested firms controlled by external investors (Frydman *et al*., 1999). Divested firms controlled by the managerial team or the State, may not have incentives to assume risk given their less wealth diversification. Besides, the theory of public election suggests that when the divested firm's control remains in the hand of the managerial team, given their proximity to politicians, to the government, changes in the firm's strategy, specially in that which relates to investment and employment, will be rare (Cuervo y Villalonga, 2000)[v]. Consequently we propose:

> H11: For privatised firms in which an external investor acquires a significant stake, the benefits of privatisation will be larger

Among the external investors, foreign investors presence should be considered in isolation, as their presence can influence significantly the firm's post-privatisation performance (Sader, 1993). Foreign investors may provide new know-how and technologies to the divested firms, help to improve the quality of their products and facilitate their access to the product and services markets and the financial market. This argument is supported by the results of the paper by Fayh *et al*. (2003) that reports a better and easier access to financial resources and markets of privatised firms that were acquired by foreign investors. Thus, we hypothesize:

> H12: Firms that count with a foreign investor as significant investor will benefit more from privatisation

The firm's prior performance may be highly correlated to the post-privatisation performance. On one hand, it could be argued that firms showing, pre-privatisation, higher performance would maintain that trend. On the other had, it could be also argued that the post-privatisation changes would be more significant and remarkable for firms showing lower pre-privatisation performance. Following this last argument, we test:

> H13: Firms showing lower pre-privatisation performance will benefit more from privatisation

4. Spanish privatisation process: Path and empirical evidence

1985 marked the beginning of the privatisation of State-owned enterprises in Spain, which followed on from an earlier process of full liberalisation of the financial markets, launched in the 1970s (Kaminsky *et al*., 2003). Spain started a gradual liberalisation of interest rates in 1974, which terminated in 1987. It relaxed its regulations on capital inflows in 1975 and by 1992 all capital controls had been lifted. The privatisation of State-owned enterprises started in the 1980s for three main reasons. Firstly, it was a response to the economic crisis of the late 1970s and early 1980s, when there were high level of inflation, interest rates and unemployment; secondly, there was an obvious need to adjust Spanish industry - with its unwieldy, unprofitable public sector - to the new economic environment being ushered in by Spain joining the European Community in 1986. Finally, it was a reaction to the opening-up of international markets. The process, which has been pushed along by Socialist and Conservative governments alike (between 1985-1996 and 1996-2003, respectively), has still not terminated. It has also been accompanied by an increase in competition in key product markets, particularly during the second half of the 1990s and in the wake of the liberalisation plan initiated in 2000. Liberalisation and deregulation have led to a fall in prices, which were actually below the euro-area average in most sectors for 2003 (IMF, 2004). The liberalisation processes within the petrochemical sector from 1992 onwards, the telecommunication sector, started in 1997, the transport sector – which began in the late 1990s - and the electricity and gas markets, launched in 1998 and culminating on 1 January 2003 figure amongst the most important achievements of liberalisation. Spanish governments have also been proactive in addressing cases of price-fixing and other non-competitive behaviour. Moreover, the enforcement of competition law has been favoured by the Spanish equivalent of the Monopolies Commission - *Tribunal de la Defensa de la Competencia* -, which was created in 1964 and acquired full autonomy in 1997 when Law 6/1997 was passed.

Between 1985, the starting point of the privatisation process, and 2003, 131 State-owned companies were privatised in Spain (116 between 1985 and 2000). These companies belonged mainly to the following industries: food, aluminium, energy, textiles, iron and steel, electronics, aerospace and wholesale and sea transport, airlines, telecommunications, chemical, paper, mining, engineering, shipping and ship building. Some of the privatised firms belonged to strategic industries, such as telecommunications, energy, transport and banking. The privatisation of SOEs took place in stages, through partial and total sales, direct sales and public offerings and under the socialist (PSOE) and conservative (PP) government. Under the Socialist government (1985-1996) the State retained (in the first tranche of privatisation) a mean of 36.84 percent of the firms that were partially privatised, compared with the figure of 49.47 percent under the conservative government (1996-2003). A considerable number of firms, particularly the largest ones, were privatised in stages. 48 percent were sold off in different phases during the Socialist period, 32 percent were first sold during the Socialist period and continued to be privatised under the Conservatives, and 20 percent were privatised in different phases between 1996 and 2003. Besides, more than half of the privatisation processes (60.23 percent) took place under the Socialist government's office between 1985 and 1996, especially during the early stage (1985-1992). The equivalent figure for the Conservative government is 39.77 percent, even though there was more privatisation activity per year. The methods of privatisation used were mainly direct sales and public offerings, although in some cases auctioning was used.

Empirical evidence as regards the Spanish privatisation process is scarce and inconclusive. Sanchís (1996) analysed a sample of 24 enterprises that were privatised between 1978 and 1990, concluding that not all privatisation processes spawned increases in efficiency. Whereas privatised firms' productivity does not seem to grow, the majority of the firms exhibited increases in efficiency when they were restructured. He concludes that changes in firms' organizational structure and management may be sufficient to turn around the performance of public enterprises. Privatisation may not be needed to achieve an increase in efficiency. Melle (1999) studies a sample of State-owned companies that were totally or partially sold by public offerings during the decade of the 1990s. Admittedly her sample of just ten firms is small, but her results do not point to any increase in firms' performance after privatisation. Privatised firms seem to improve their operational efficiency, but not their capital investment. Nor do the results of the study by Villalonga (2000), using a sample of 24 firms that were privatised between 1985 and 1993, support the enhanced efficiency of privatised firms. However, she

explains that organizational and political aspects, i.e. a firm's size, the type of buyer or the economic cycle, may help explain the relationship between privatisation and efficiency. Cabeza y Gómez (2003) with a sample of 52 firms that were privatised over the period 1985-2000 hints at an increase in economic efficiency of privatised firms; this positive relation between privatisation and performance is only confirmed for the firms privatised by direct sale.

Four case studies relating to the privatisation process in Spain are also worth mentioning. Arcas and Ruiz (1999) report a post-privatisation increase in the operating efficiency of Repsol, although they do not compare this company with its competitors. Similar results are shown by Hernández and López de Castro (2000) for Telefónica, Repsol, Endesa and Gas Natural. These authors also fail to compare the results of these privatised firms with those of their competitors. Bosch and Vergés (2002) analyse the privatisation of the iron and steel company Aceralia (now part of Arcelor), concluding that significant changes in the firm's profitability and efficiency occurred during its restructuring process, before privatisation. Finally, Arocena (2003) studied the economic efficiency of the electrical company Endesa after its privatisation, comparing it with its competitors. He reports an inferior performance of the privatised firm.

5. Sample section, methodology and variables used in the study

5.1. Sample selection

The initial database used for the analysis comprises the sample of companies privatised in Spain during the period 1985-2000, 116 firms. We got economical and financial information about the privatised firms for a period of up to eleven years encompassing five years before through five years after the last stage or block of privatisation.

To the initial database the following filters were applied:

a) Firms for which we were not able to obtain data for a period of up to seven years encompassing three years before through three years after the last stage of the privatisation process: firms for which there was a lack of accounting data, firms that began their activity in the two year prior to the privatisation and firms that closed their business around the privatisation.

b) Financial firms due of their particular characteristics.

c) Firms for which we were not able to obtain the mean industry ratio.

Once these filters were applied the final sample to comes to 57 (see Table 1).

[TABLE 1]

Table 2 shows the industry and annual distribution of the sample firms, as well as privatisation method employed. The firms belong mainly to the transport equipment industry (15.71% - SIC code 37), to the steel and iron industry (11.73% -SIC Code 33) and the water, electricity and gas industry (11.73% - SIC code 49) –Panel A, Table 2-. The privatisation process took place mainly in year 1997 (18.57%), in year 1999 (11.73%) and in year 1989 (10%) (Panel B, Table 2). As in the total database the direct sales is the main method of privatisation (74.29%). Under the socialist government (PSOE) the privatisation processes accounted to 42 (33 through direct sales and 9 through public offerings), whereas under the conservative government (PP) 28 firms were privatised (19 through direct sales and 9 through public offerings).

[TABLE 2]

The information about the Spanish privatised firms was obtained from different data sources: the State Corporation of Industrial Shares (Sociedad Estatal de Participaciones Industriales - SEPI), samples used by previous studies (Gamir, 1999; Vergés, 1999; Villalonga, 2000) and the reports of Consultative Privatisation Committee (Consejo Consultivo de Privatizaciones – CCP-). The accounting information was obtained: for the pre-privatisation years from the annual reports of the formerly SOEs storaged in the library of the SEPI and different ministries: Economy and Industry, for the post-privatisation years, from information provided by the Spanish Supervisory Agency (CNMV), by the Madrid Stock Exchange and the firms´ offerings prospectus, for listed companies, by the databases SABI (Sistema de Análisis de Balances Ibéricos) and Informasa, and by the financial reports of the Official Mercantile Registry and by the companies. This information has been completed with the information provided by the Dicodi and the Dun´s & Bradstreet directories. In addition, the aggregate data for the industries comes from the information provided by the Center of Balance of the Spanish Central Bank (e Central de Balances del Banco de España).

5.2. Methodology and variables

The first aim of our paper is to study whether the privatisation of SOEs led to an increase in firms' profitability, efficiency, output and investment of firms and to a decrease in firms'

employment and leverage. For that purpose, similarly to Megginson *et al.* (1994), Boubakri and Cosset (1998) and D'Souza and Megginson (1999), we use a matched pairs (pre vs post-privatisation) methodology. Empirical proxies for each variable and each company are computed both for a period of up to eleven years encompassing five years before through five years after the last stage or block of privatisation. Thus, for each company, we estimate its performance, investment, employment and leverage, from the five years of public ownership through the five years as a privatised entity. These measures are estimated raw for each firm and after adjusting for its industry. The mean and median of each variable for each firm over the pre- and post-privatisation windows (pre-privatisation: years -5 to -1 and years -3 to -1 and post-privatisation years: +1 to +5 and years +1 to +3) is then calculated. For all firms, the year of privatisation is named year 0. It includes both the public and private ownership phases of the enterprise and is therefore excluded from the calculations. Having computed pre- and post- privatisation mean and median values, we use the t de student test and the Wilcoxon signed- rank to test for significant changes in the variables.

Table 3 shows the variables used in the study and the predicted relationships. We measure profitability using three ratios: return on assets (ROA), return on equity (ROE) and return on sales (ROS). We test for changes in operating efficiency by analysing four ratios: normalized sales-to-employees (SALES/EMP), net profit-to-employees (NP/EMP), operating profit-to-employees (OP/EMP) and added value-to-employees (AV/EMP). Besides, we use real sales- in million euros- (sales deflated by the index of retail prices, SALES) as proxy for output[vi]. Investment is defined as the increase of the firm's fixed assets each year (INV). Finally, as proxies of the firms' capital structure we use the ratio of total leverage (LEV) and the ratio of long-term leverage (LLEV) as proxies of the firms capital structure and as proxies of the changes in employment the number of the firms' employees (EMP).

[TABLE 3]

Secondly, we run linear regressions in order to test how the political, regulatory and economic environment, the firms' prior performance and ownership and corporate governance related factors affect the performance and efficiency of privatised companies. When doing this we just consider the period encompassing three years before and after the privatisation. In these cross-sectional analyses, we use many of the variables constructed for the univariate analyses, but also define other variables: Dummy variables are defined for the type of government in place when the firm was privatised –whether it was a socialist or a conservative government- (TGOV) and the firms' regulatory environment –whether the firm belongs to a regulated

industry or not- (REGIND); a dummy variable that reflects the method used in the privatised process –direct sale or IPO- (METHOD); the firm's prior performance (PPER) measured as the firm's mean net profit over years -3 to -1 and the firm's performance at the time of privatisation (PER0). Besides, the firms' ownership structure after privatisation is measured through State ownership, defined as the size of the State's residual stake after privatisation (STATEOWN) and as a dummy variable that takes value 1 if the State does not hold any stake in the privatised firm and zero otherwise (STATED) and through the variable MANOWN that denotes whether the firms' managers hold any stake in the firms after privatisation and INVFOR that denotes whether a foreign investor invests in the privatised firm. Besides, the following control variables are included in the analyses: firm's size defined both as the firm's total assets or sales (SIZEASSETS or SIZESALES) and the country's economic situation the year the firm was privatised (CYCLE)[vii].

The regression models we run are as follows:

$$VPERFORMANCE = a_0 + a_1\ REGIND + a_2\ TGOV + a_3\ \ STATEOWN^{viii} + a_4\ \ METHOD + a_5\ MANOWN\ + a_6\ INVFOR + a_7\ PPER^{ix} + a_8\ LSIZEASSETS^{x} + a_9\ CYCLE + \sum_{it}$$

Table 4 presents the summary statistics (median, maximum, minimum and standard deviation) of the variables included in the study[xi]. All variables representing the firms performance and efficiency, the level of investment, leverage and employment, but for the variable sales per employee (SALES/EMP), present median negative values. Regarding the explanatory variables, the State's stake in privatised firms ranks between zero and 70 percent, with a mean value of 12.6 percent (median value of zero). The variable representing the firm's prior performance (PPER) presents a mean positive value 24.01 millions of euros. However, the median value is negative, -0.496 millions of euros, so the majority of the firms have negative results before the privatisation and the mean and median value of the firms' performance at privatisation year are positive (182.652 and 2.664 millions of euros, respectively). A 37 percent of the firms were privatised by the conservative government (PP, 1996-2000) and the main method used in the privatisation process has been the direct sale (82.15 percent). Besides, regarding the firms' ownership, in 37 per cent of the firms a foreign investor bought a stake, only for 5 percent of the firms the managers invested in the firms' capital and 50 per cent were fully privatised, holding the State no stake after privatisation. 25 per cent of the privatised firms belong to a regulated industry and the variable CYCLE shows that firms were mainly privatised during growth periods (84 per cent). Regarding firms' size, the firm's mean size in terms of total assets amounts to 1.193 millions of euros.

[TABLE 4]

The variables bivariate correlations are presented in Table 5. Variable SIZEASSETS is significantly and positively correlated with the bulk of the variables included in the study: the method of privatisation (METHOD) –large firms are mainly privatised through public offerings-, the industries' regulation (REGIND) –large firms belong to regulated industries- and the firms' prior performance (PPER). On the contrary, firm's size is negatively correlated to some of the ownership variables: (STATEOWN) and MANOWN. Both the State and the management team seem to retain a lower stake in large privatised firms. Besides, according to Table 5 the method of privatisation (METHOD) is positively correlated with the State stake in privatised firms (STATEOWN) -in firms that were privatised through public offerings the State retained a large stake- and variable METHOD is also positively correlated to variable REGIND and PPER -firms privatised through public offering belong mainly to regulated industries and present better prior performance-. The type of government (TGOV) is also positively correlated with variable CYCLE, the privatisations of the conservative government mainly took place in economic growth periods.

[TABLE 5]

6. Results

6.1. Privatisation and firm performance

Table 6 shows the differences in means and medians in the performance of firms after their privatisation. Both pre - and post - privatisation positive medians values[xii] over the period (-3+3) are observed for all measures of firm performance, efficiency, investment, leverage and employment, but not for the ratio sales-to-employees. However, we just observe a statistically significant increase for the measure of firm profitability ROS (return on sales) and, when considering the last stage, for the level of employment. These results contrast to the ones reported in Table 7 and 8 for the proxies of profitability and efficiency over the windows (-3+3) and (-5+5) when the industry effect is not taken into account. In this case, we find significant differences in the mean and median values for the proxies of efficiency, the level of output, and long-term leverage. These results seem to suggest that there is an improvement in the firms' raw performance after privatisation, but that these improvement is similar to the one experienced by their industry peers.

[TABLE 6]

[TABLE 7]

[TABLE 8]

Looking for an explanation for this behaviour we divide the sample in two different sub-samples: the one composed of the firms that were privatised during economic growth periods and the one formed by firms that were privatised during recession periods. For that purpose a period with economic growth is defined as one during which the country's GDP is larger than the GDP the year before. The results show significant statistically improvements in the firms' raw profitability and efficiency only for firms that were privatised during growth years. Thus, the observed improvements seem to be a consequence of the country's economic situation rather than of the firms' performance.

Summing up, these results seem to contradict hypotheses 1 to 6 that predicted an improvement of privatised firms' performance. To this end, these results contradict the results reported by Lopez de Silanes (1999) for Mexico or Boubakri y Cosset (1998) for a sample of developing countries because it is found an adjusted industry improvement. These results tend to confirm the conclusions reported by prior studies about the Spanish privatisation process, although it is worth noting that those studies did not adjust the measures of profitability and efficiency for industry effects. For example, Sanchís (1996) report that not all the privatisation processes led to an improvement in the productivity, Melle (1999) only finds an increase of the ratio sales-to-employee, and Villalonga (2000) points to the necessity of considering other factors like firm's size or the type of the buyer when studying the Spanish privatisations.

6.2. Determinants of performance changes

We next analyse whether different factors may have influenced the profitability, efficiency, investment, output, capital structure and employment of privatised firms. To this end, we relate the post-privatisation variation of these measures to the set of variables proxies of the economic, political and regulatory environment of the firms that were privatised, their prior performance and their ownership structure after privatisation. The results, considering just the first stage of the privatisation processes, are reported in Tables 9 and 10 [xiii]. It had been filtered the extreme values in the dependent and explanatory and control variables.

Regarding the firms' profitability, for all ratios, but sales per employee, the variable REGIND seems to influence significantly the firms' profitability. Firms belonging to regulated

industries, utilities, tend to experience lower increases in profitability after privatisation. Utilities also seem to experience lower increases in the efficiency measures, net profits per employee. Thus firms operating in competitive sectors present larger increases in profitability and efficiency after privatisation. A possible explanation for this behaviour could be that firms belonging to regulated sectors, usually monopolistic or oligopolistic industries, would not have enough incentives to improve their innovation and performance, as, in these industries, the risk of loosing market share is minimum. On the contrary, firms operating in competitive industries would have more incentives to improve their performance as, after the change of ownership, they would not be able to receive the political and financial support of the State and would have to compete with their industry's peers.

The results of Table 9 also suggest that other factors may influence the firm profitability and performance. Variable METHOD presents in Reg. 1 to Reg. 4 a positive coefficient, although this coefficient only turns out to be significant, and only at a 10% level, for the measure of profitability operating profit to sales. Firms privatised through public offerings would present higher operating profits to sales. They would just continue the higher performance shown before the privatisation process. The results of Reg. 4 also suggest that ratio sales to employment increases more when a foreign buyer acquires a stake in the privatised firm. Foreign investors would provide their knowledge and experience to the privatised firm enhancing that way the firm's efficiency. This result supports the one reported by Villalonga (2000) who points the type of buyer, national or foreign, as an important factor for explaining the consequences of the privatisation process in Spain. Likewise, D´Souza *et al*. (2001) and Boubakri *et al*. (2001) also report a higher improvement in performance when a foreign investor holds a stake of the privatised firm. Regarding the participation of the State in the firms, the proxies of this factor only present a significant coefficient for the measure of efficiency net profit to employment.

For the proxy of the firms' leverage, long-term leverage just two variables turn out to be significant: the method of privatisation and the acquisition of the firm by a foreign investor. Firms privatised through public offerings would decrease their leverage. These firms were mostly the largest SOEs and were already profitable before the privatisation (they were the crown jewels), thus, for them it would also be easier, due to their performance and presence in the stock market, to finance their new investment through equity offerings. Besides, most of these Public Offerings took place during bull markets taking privatised firms advantage of the

market situation when financing their investments. Besides, the acquisition of the firm by a foreign investor also seems to reduce the use of debt. The presence of foreign investors as owners would facilitate the participation of privatised firms in new products and financial markets and the access to new sources of finance would reduce the firm capital cost (Henry, 2000; Stulz, 2000). Moreover, the presence of foreign investor would monitor managerial opportunistic behaviour impeding leveraged diversification and acquisition adventures. Finally, regarding the level of employment, once again we find that the adscription of a firm to a regulated industry, utilities, influences significantly the increase post-privatisation of the level of employment. A possible explanation for this result could be the liberalisation processes that have accompanied the privatisation of utilities. Privatised firms trying to respond to the liberalisation processes would create new firms and would try to respond to a new demand for new products and services and would need more employees.

Summing up, the results show that factors like the type regulation of the industry, the method of privatisation or the ownership held, post-privatisation, by a foreign investor can help explain the changes in the performance of the privatised firms. However, we do not find any evidence of the existence of a significant influence of the ideology of the government or the participation of the management team in the firm's capital on their profitability and efficiency.

[TABLE 9]

[TABLE 10]

7. Conclusions

Privatisation processes constitute an important phenomenon in many countries, particularly during the last two decades. They are seen as a mean to modernize a country's economy, reduce political and government interference in economic activity. Besides, in a significant part of these countries, e.g. Spain and other E.U. countries, privatisation processes have contributed significantly to the reduce of the countries' public deficit.

The empirical evidence supports the superior performance of private firms, and some studies suggest an improvement, post-privatisation, of performance. For Spain, the studies of Cuervo, 1989; Azofra *et al.*, 1991; Argimon *et al*., 1999 support the superior performance of private

firms, but the empirical evidence regarding the possible post-privatisation improvements in performance is not conclusive (Melle, 1999; Villalonga, 2000).

In this paper we have analysed for a broad database whether the privatisation process in Spain has led to improvements in firm profitability, efficiency, higher investment rates and a decrease in leverage. We do not find evidence of a significant post-privatisation improvement in firms' profitability and efficiency, once the industry effects are considered. Neither can we confirm an increase in investment, a decrease in leverage or employment after correcting for industry effects. The results do suggest that competition and the presence of a foreign investor that holds a significant stake in the divested firm may play an important role for the success of privatisation.

Table 1: Sample

Privatisation year [1]	Privatised firm	Activity	Method of privatisation
1986	Amper	Electronics	PO
1986	Entursa	Tourism	Direct Sales
1986	Frigsa	Food	Direct Sales
1986	Gesa	Energy	PO
1986	Remetal [2]	Aluminium	Direct Sales
1986/90	Seat	Car industry	Direct Sales
1987	Acesa	Highways	PO
1987	Alumalsa	Aluminium	Direct Sales
1987	Gas Madrid	Energy	PO
1987	Litofan	Aluminium	Direct Sales
1987	Purolator	Car industry	Direct Sales
1988/95	Ence	Paper	PO
1988/98	Endesa	Energy	PO
1989	Astican	Shipbuilding	Direct Sales
1989/92	Ateinsa	Capital goods	Direct Sales
1989	Enfersa [3]	Fertilizers	Direct Sales
1989/92	MTM	Capital goods	Direct Sales
1989	Oesa	Food	Direct Sales
1989	Pesa	Electronics	Direct Sales
1989/97	Repsol	Energy	PO
1990	Hytasa	Textiles	Direct Sales
1990	Salinas de Torrelavieja	Salt	Direct Sales
1991/92	Geasa	Porcelain	Direct Sales
1991	Jobac [4]	Wholesale	Direct Sales
1992	Campsa	Petrochemical	Direct Sales
1992	Icuatro	Health	Direct Sales
1993	FSC	Capital goods	Direct Sales
1993/94	Palco	Aluminium	Direct Sales
1994	Artespaña	Craftsmanship	Direct Sales
1994	CTE	Shipping	Direct Sales
1994/97	Enagas	Gas	Direct Sales
1995	Lesa	Food	Direct Sales
1995	Refinalsa	Aluminium	Direct Sales
1995	Sidenor	Iron and steel	Direct Sales
1995/99	Telefonica	Telecommunications	PO
1995/99	Indra	High technology	Direct Sales / PO
1996	Gas Natural	Gas	PO
1996	Sefanitro	Fertilizers	Direct Sales
1997 (SEP/OCT)	Aldeasa	Wholesale	Direct Sales / PO
1997	Almagrera	Mining	Direct Sales
1997 (JUL/DIC)	CSI-Aceralia	Iron and steel	Direct Sales / PO
1997	Elcano	Sea transport	Direct Sales
1997	Ferroperfil	Aluminium	Direct Sales
1997	H.J. Barreras	Shipbuilding	Direct Sales
1997	Iongraf	Aluminium	Direct Sales
1997	Retevision [5]	Telecommunications	Direct Sales
1997	Surgiclinic Plus	Pharmaceuticals	Direct Sales
1998	Inespal	Aluminium	Direct Sales
1998	Inima	Environment	Direct Sales
1998	Productos tubulares	Iron and steel	Direct Sales
1998	Tabacalera	Food (tobacco)	PO
1999	Astander	Shipbuilding	Direct Sales
1999	Aya	Aerospace	Direct Sales
1999	Enatcar	Road transport	Direct Sales
1999	Icsa	Aerospace	Direct Sales
1999	LM Composites	Capital goods	Direct Sales
1999	REE	Energy	PO

(1) First and the last year of the privatisation process (privatisation in stages or blocks).
(2) Although in 1990 0.5% of the firm was privatised, due to lack of information, we just consider the first stage of the privatisation process.
(3) Although in 1991 20% of the firm was privatised, due to lack of information, we just consider the first stage of the privatisation process.
(4) Although in 1995 30% of the firm was privatised, due to lack of information, we just consider the first stage of the privatisation process.
(5) Although in 1999 30% of the firm was privatised, due to lack of information, we just consider the first stage of the privatisation process.
(6) The industry classification corresponds to the one denoted by the SEPI reports (not SIC codes).

Table 2: Sample industry and annual distribution, classification according to privatisation method

The sample consists of 57 companies privatised in Spain during the period 1985-2000. The number of privatisation processes amounts to 70.

Panel A: Sample industry classification

Industry (SIC Codes)	*Number of observations*	*Percentage of observations*
10	1	1.43%
14	1	1.43%
20	3	4.28%
21	1	1.43%
22	1	1.43%
26	3	4.28%
28	3	4.28%
29	3	4.28%
30	1	1.43%
32	2	2.86%
33	8	11.73%
34	4	5.71%
35	2	2.86%
36	2	2.86%
37	11	15.71%
41	1	1.43%
44	2	2.86%
47	1	1.43%
48	3	4.28%
49	8	11.73%
50	2	2.86%
54	1	1.43%
55	2	2.86%
70	1	1.43%
73	3	4.28%
Total	70	100%

Panel B: Sample annual distribution

Year	*Number of observations*	*Percentage of observations*
1986	6	8.57%
1987	5	7.14%
1988	2	2.86%
1989	7	10%
1990	3	4.28%
1991	2	2.86%
1992	5	8.33%
1993	2	2.86%
1994	4	5.71%
1995	6	8.57%
1996	2	2.86%
1997	13	18.57%
1998	5	7.14%
1999	8	11.73
Total	70	100%

Panel C: Classification by the method of privatisation

Number of public offerings	18	25.71%
Number of direct sales	52	74.29%
Privatisation processes	70	100%

Table 3: Variables of the study

Panel A: Dependent variables		
Variables	**Description**	**Predicted relationship**
Profitability		
Return on assets (ROA)	Operating profits divided by total assets	$ROA_A > ROA_B$
Return on equity (ROE)	Net profit divided by total equity	$ROE_A > ROE_B$
Return on sales (ROS)	Operating profits divided by sales	$ROS_A > ROS_B$
Operating efficiency		
SALES/EMP	Sales divided by the number of employees	$SALES/EMP_A > SALES/EMP_B$
NP/EMP	Net profit divided by the number of employees	$NP/EMP_A > NP/EMP_B$
OP/EMP	Operating profits divided by the number of employees	$OP/EMP_A > OP/EMP_B$
AV/EMP	Added value divided by the number of employees	$AV/EMP_A > AV/EMP_B$
Output		
Real sales (SALES)	Nominal sales/ index of retail prices	$SALES_A > SALES_B$
Investment		
In fixed assets (INV)	Increase of fixed assets	$INV_A > INV_B$
Leverage		
Total leverage (LEV)	Liabilities / assets	$LEV_A < LEV_B$
Leverage LR (LLEV)	Liabilities LR / assets	$LLEV_A < LLEV_B$
Employment (EMP)	Number of employees	$EMP_A < EMP_B$
Panel B: Explanatory and control variables		
Explanatory variables		
REGIND	Dummy variable that takes value 1 if company belongs to utilities sector	-
TGOV	Dummy variable that takes value 1 if privatisation took place under the conservative government and 0 in other case	+
STATEOWN	Percentage that State hold in firm capital after privatisation	-
STATED	Dummy variable that takes value 1 if it is a full privatisation and 0 in other case	-
METHOD	Dummy variable that takes value 1 if privatisation took place by Public Offering and 0 in other case	+
MANAOWN	Dummy variable that takes value 1 if an internal investor (managers) hold participation in firm capital and 0 in other case	-
INVFOR	Dummy variable that takes value 1 if there is a foreign buyer and 0 in other case	+
PPER	Mean of net profit in the three years before privatisation	-
PER 0	Performance in the moment of privatisation	-
Control variables		
SIZEASSETS or SIZESALES	Logarithm of the firm total assets or total sales	
CYCLE	Dummy variable that takes value 1 if there is an increase of gross domestic product in the moment of privatisation	

Table 4: Summary Statistics

The sample consists of 57 privatised firms in Spain during the period of 1985-2000. VROA denotes the variation in ROA. VROE denotes the variation in ROE. VROS denotes the variation of operating profit-to-sales. VSALES/EMP denotes the variation of sales-to-employees. VNP/EMP denotes the variation of net profit-to-employees. VOP/EMP denotes the variation of operating profit-to-employees. VAV/EMP denotes the variation of the added vale-to-employees. VSALES denotes the variation of real sales. VINV denotes the variation of investment. VLEV denotes the variation of total leverage. VLLEV denotes the variation of the leverage (long-run). VEMP denotes the variation of the employment. STATEOWN is the percentage that State hold in firm capital after privatisation. PPER is the mean of net profits before privatisation. PER 0 denotes the performance in the moment of the privatisation. LSIZEASSETS is the logarithm of firm total assets in the moment of privatisation. LSIZESALES is the logarithm of total sales in the moment of privatisation. REGIND denotes if it is a utilities sector or not. TGOV is the type of government in the moment of firm privatisation. STATED denotes if there is a partial o full privatisation. METHOD is the method of privatisation. MANOWN denotes the participation of the management in the firm capital after the privatisation. INVFOR denotes if there is a foreign buyer. CYCLE denotes if there is an increase in the gross domestic product in the moment of privatisation.

Variables	**Mean**	**Median**	**Maximum**	**Minimum**	**Stand. Dev.**
Dependent variables					
VROA n: 43	0,.142	-0.263	28.275	-30.379	6.883
VROE n: 45	-1.587	-0.975	29.952	-79.955	13.018
VROS n: 42	0.995	-0.216	27.867	-12.080	6.232
VSALES/EMP n: 48	3.528	0.570	69.982	-10.248	12.249
VNP/EMP n: 41	-2.494	-0.226	21.491	-94.323	15.953
VOP/EMP n: 39	-14.011	-0.126	18.661	-584.061	93.814
VAV/EMP n: 23	-0.149	-0.198	3.577	-4.049	1.372
VSALES n: 56	-1.94	-0.045	6.416	-96.942	13.101
VINV n: 33	19.952	-1.167	1068.491	-254.161	193.657
VLEV n: 42	2.226	-0.623	93.356	-20.852	17.102
VLLEV n: 42	0.764	-0.529	41.779	-9.368	7.611
VEMP n: 51	1.265	-0.051	69.763	-9.274	9.936
Explanatory variables					
STATEOWN	12.607	0	70	0	21.98
PPER	24.010	-0.496	653.564	-217.438	108.653
PER 0	182.652	2.664	3139.179	-204.976	540.785
Control variables					
ASSESTS	1193.033	71.599	28958.313	1.432	4178.181
SALES	654.964	44.556	10460.958	0.439	1779.056
Other explanatory and control variables		*Percentage/(number) or observations*			
REGIND		25% (14)			
TGOV		37.5% (21)			
STATED		66.35 (36)			
METHOD		17.85% (10)			
MANOWN		5.45 % (3)			
INVFOR		37.03% (20)			
CYCLE		84% (46)			

Table 5: Correlation matrix for the dependent and explanatory variables

The sample consists of 57 privatised firms in Spain in the period 1985-2000. The number of privatisation processes amounts to 70. VROA denotes the variation in ROA. VROE denotes the variation in ROE. VROS denotes the variation of operating profit-to-sales. VSALES/EMP denotes the variation of sales-to-employees. VNP/EMP denotes the variation of net profit-to-employees. VOP/EMP denotes the variation of operating profit-to-employees. VAV/EMP denotes the variation of the added vale-to-employees. VSALES denotes the variation of real sales. VINV denotes the variation of investment. VLLEV denotes the variation of the long-run leverage. VEMP denotes the variation of the employment. LSIZEASSETS is the logarithm of firm total assets in the moment of privatisation. LSIZESALES is the logarithm of total sales in the moment of privatisation. TGOV is the type of government in the moment of firm privatisation. METHOD is the method of privatisation. MANOWN denotes the participation of the management in the firm capital after the privatisation. INVFOR denotes if there is a foreign buyer. STATEOWN is the percentage that State hold in firm capital after privatisation. STATED denotes if there is a partial o full privatisation. REGIND denotes if it is a utilities sector or not. CYCLE denotes if there is an increase in the gross domestic product in the moment of privatisation. PPER is the mean of net profits before privatisation. PER 0 denotes the performance in the moment of the privatisation.

Variables	VROA	VROE	VROS	VSALES/EMP	VNP/EMP	VOP/EMP	VAV/EMP	VSALES	VINV	VLLEV	VEMP	LSIZEASSETS	LSIZESALES	TGOV	METHOD	MANAOWN	INVFOR	STATEOWN	STATED	REGIND	CYCLE	PPER
VROE	-0.417 *																					
	(0.06)																					
VROS	0.096	0.164																				
	(0.680)	(0.478)																				
VSALES/EMP	-0.161	0.508 **	0.154																			
	(0.486)	(0.19)	(0.506)																			
VNP/EMP	0.052	0.167	0.027	0.128																		
	(0.824)	(0.470)	(0.907)	(0.581)																		
VOP/EMP	-0.359	0.035	-0.173	-0.356	0.033																	
	(0.110)	(0.879)	(0.453)	(0.113)	(0.887)																	
VAV/EMP	-0.108	-0.327	0.458 **	-0.029	-0.149	0.011																
	(0.642)	(0.148)	(0.038)	(0.899)	(0.520)	(0.963)																
VSALES	-0.308	0.157	0.180	-0.285	-0.228	-0.018	0.044															
	(0.175)	(0.496)	(0.436)	(0.211)	(0.321)	(0.939)	(0.848)															
VINV	0.063	0.163	0.024	0.048	0.947***	0.008	-0.216	-0.030														
	(0.785)	(0.479)	(0.918)	(0.836)	(0.00)	(0.972)	(0.346)	(0.896)														
VLLEV	-0.063	-0.038	-0.025	-0.241	0.070	0.81	-0.014	0.088	0.113													
	(0.788)	(0.869)	(0.915)	(0.292)	(0.764)	(0.728)	(0.951)	(0.704)	(0.625)													
VEMP	-0.179	0.178	0.037	-0.202	-0.081	0.137	-0.184	0.533 **	-0.062	0.076												
	(0.438)	(0.441)	(0.872)	(0.379)	(0.726)	(0.552)	(0.424)	(0.013)	(0.790)	(0.743)												
LSIZEASSETS	0.175	0.077	0.259	0.219	-0.170	-0.282*	-0.211	0.047	0.001	-0.205	0.164											
	(0.293)	(0.644)	(0.117)	(0.187)	(0.306)	(0.086)	(0.33)	(0.810)	(0.995)	(0.285)	(0.396)											
LSIZESALES	0.246	0.006	0.273*	0,147	-0,131	-0,205	-0.349	.,055	0.035	-0.097	0.170	0.961***										
	(0.136)	(0.974	(0.097)	(0.378)	(0.434	(0.218)	(0.12)	(0.708)	(0.856)	(0.216)	(0.377)	(0.00)										
TGOV	-0.211	-0.190	0.068	0.075	-0.164	-0.116	-0.241	0.070	-0.250	-0.288	0.157	-0.115	-0.048									
	(0.204)	(0.254)	(0.684)	(0.625)	(0.326)	(0.489)	(0.268)	(0.606)	(0.190)	(0.130)	(0.416)	(0.493)	(0.732)									
METHOD	-0.168	0.223	0.013	0.362	0.104	-0.153	-0.242	0.107	0.254	-0.245	0.261	0.533***	0.126	-0.208								
	(0.313)	(0.178)	(0.936)	(0.026)	(0.560)	(0.360)	(0.265)	(0.433)	(0.183)	(0.200)	(0.172)	(0.00)	(0.364)	(0.210)								
MANOWN	-0.021	-0.027	-0.0 28	-0.069	-0.345**	-0.060	0.510	0.038	-0.034	-0.074	-0.084	-0.400***	-0.033	0.246	-0.145							
	(0.902)	(0.875)	(0.870)	(0.686)	(0.034)	(0.724)	(0.025)	(0.783)	(0.866)	(0.708)	(0.672)	(0.014)	(0.813)	(0.143)	(0.390)							
INVFOR	0.137	0.045	0.218	0.281*	-0.040	-0.012	0.251	-0.170	-0.199	-0.277	0.121	0.403**	-0.055	-0.173	0.234	-0.182						
	(0.425)	(0,. 94)	(0.202)	(0.096)	(0.812)	(0.943)	(0.260)	(0.219)	(0.311)	(0.154)	(0.540)	(0.015)	(0.700)	(0.312)	(0.170)	(0.287)						
STATEOWN	-0.197	0.150	0.224	0273	-0.193	-0.038	0.062	0.100	0.117	-0.309	0.157	0.498***	0.118	-0.224	0.670***	-0.244	0.550***					
	(0.235)	(0.369)	(0.176)	(0.097)	(0.259)	(0.822)	(0.777)	(0.469)	(0.545)	(0.103)	(0.417)	(0.00)	(0.318)	(0.127)	(0.00)	(0.146)	(0.00)					
STATED	0.191	-0.214	-0.179	-0.195	-0.252	-0.91	-0.222	-0.113	-0.125	0.336	-0.096	-0.378**	-0.159	-0.040	-0.456***	0.325***	-0.565***	-0.759***				
	(0.251)	(0.197)	(0.284)	(0.240)	(0.127	(0.587)	(0.309)	(0.402)	(0.517)	(0.075)	(0.620)	(0.019)	(0.237)	(0.799)	(0.00)	(0.00)	(0.00)	(0.00)				
REGIND	0.136	0.159	-0.140	0.368	-0.332**	-0.294*	0.372 *	-0.097	-0.177	-0.222	0.335+	0.523***	-0.059	-0.135	0.494***	-0.155	0.050	0.292*	-0.049			
	(0.416)	(0.340)*	(0.401)	(0.023)	(0.045)	(0.074)	(0.080)	(0.475)	(0.358)	(0.248)	(0.075)	(0.00)	(0.670)	(0.426)	(0.00)	(0.358)	(0.771)	(0.075)	(0.768)			
CYCLE	-0.376 **	-0.040	-0.010	0.104	-0.175	-0.041	0.218	0.056	0.046	-0.191	0.187	0.157	0.027	0.411***	0.259	0.094	0.135	0.277*	-0.118	-0.172		
	(0.02)	(0.811)	(0.910)	(0.534)	(0.293)	(0.809)	(0.319)	(0.681)	(0.813)	(0.321)	(0.331)	(0.345)	(0.846)	(0.01)	(0.117)	(0.578)	(0.433)	(0.093)	(0.480)	(0.303)		
PPER	0.056	0.021	0.123	0.140	0.094	-0.330*	-0.183	0.059	-0.040	-0.110	0.053	0.527***	0.062	-0.109	0.539***	0.132	0.220	0.456***	-0.145	0.484**	0.070	
	(0.740)	(0.902)	(0.463)	(0.402)	(0.598)	(0.043)	(0.44)	(0.670)	(0.838)	(0.570)	(0.786)	(0.00)	(0.663)	(0.513)	(0.00)	(0.443)	(0.158)	(0.00)	(0.385)	(0.00)	(0.678)	
PER 0	-0.088	-0.11	-0.406**	-0.087	0.024	0.085	-0.074	0.164	0.119	-0.129	-0.67	0.131	0.103	-0.026	0.476***	-0.081	0.363***	0.180	-0.359***	0.279**	0.076	0.800***
	(0.599)	(0.508)	(0.011)	(0.602)	(0.888)	(0.612)	(0.739)	(0.236)	(0.537)	(0.506)	(0.728)	(0.432)	(0.458)	(0.853)	(0.00)	(0.582)	(0.008)	(0.186)	(0.00)	(0.041)	(0.584)	(0.00)

p-values are reported in parenthesis below
* Statistically significant at a 10%
** Statistically significant at a 5%
*** Statistically significant at a 5%

Table 6: Industry adjusted mean and median differences (-3+3)

	Pre- privatisation		Post- privatisation		Difference		Z	
Variable	*Mean*	*Median*	*Mean*	*Median*	*Mean*	*Median*	*t-student*	*Wilcoxon*
PROFITABILITY								
ROA -3+3 (1T) N=43	-3.688	-2.438	-1.489	-0.376	2.199	2.062	-1.280	-1,352
ROA -3+3 (2T) N=43	-3.688	-2.438	-2.256	-0.376	1.432	0.694	-0.629	-0.845
ROE -3+3 (1T) N=45	-90.236	0.277	-1.120	4.845	89.116	4.568	-0.439	-0.818
ROE -3+3 (2T) N=45	-90.236	0.277	-0.634	4.845	89.602	4.568	-1.633	-0.694
ROS -3+3 (1T) N=42	-12.963	-4.828	-6.443	-2.067	6.52	2.761	-1.187	-1.919 *
ROS -3+3 (2T) N=42	-12.963	-4.828	-9.147	-2.067	3.816	2.761	0.975	-1.069
EFFICIENCY								
SALES/EMP -3+3 (1T) N=48	5.16-02	-2.88-03	7.32-02	-2.73-02	2.16-02	-2.44-02	-0.103	-1.190
SALES/EMP -3+3 (2T) N=48	5.16-02	-2.88-03	4.23-02	-4.07-02	-9.3-02	-3.78-02	0.211	-1.590
NP/EMP -3+3 (1T) N=41	-2.13-02	-6.30-03	-1.66-02	-1.27-03	4.7-03	5.03-03	-0.306	-0.279
NP/EMP -3+3 (2T) N=41	-2.13-02	-6.30-02	-2.65-02	-6.48-03	-5.2-03	5.56-02	0.275	-0.952
OP/EMP -3+3 (1T) N=39	6.20-03	-8.96-04	1.11-02	4.28-03	4.9-03	5.17-03	-1.002	-1.256
OP/EMP -3+3 (2T) N=39	6.20-03	-8.96-04	5.47-03	1.04-04	-7.3-04	0.001	0.098	-0.335
AV/EMP -3+3 (1T) N=23	0.105	1.497-02	0.116	2.068-02	0.011	5.71-03	-0.441	-0.335
AV/EMP -3+3 (2T) N=23	0.105	1.497-02	0.112	2.068-02	0.007	5.71-03	-0.277	-0.578
OUTPUT								
SALES -3+3 (1T) N=56	140.358	1.884	231.569	3.155	91.211	1.271	-1.651	-1.485
SALES -3+3 (2T) N=56	144.358	1.884	441.306	3.155	296.948	1.271	-1.860*	-1.436
INVESTMENT								
INV -3+3 (1T) N=33	15.938	-0.461	2.591	7.188	-13.347	7.649	0.958	-0.616
INV -3+3 (2T) N=33	15.938	-0.461	20.170	9.450	4.232	9.911	-0.244	-0.688
LEVERAGE								
LLEV -3+3 (1T) N=42	-1.883	-5.640	-0.693	-4.196	1.19	1.444	0.630	-0.634
LLEV -3+3 (2T) N=42	-1.355	-5.640	0.366	-3.783	1.721	1.857	-0.540	-0.243
EMPLOYMENT								
EMP -3+3 (1T) N=51	2946.738	39.855	3605.222	243.916	658.262	204.061	-1.844 *	-1.500
EMP -3+3 (2T) N= 51	2946.738	39.855	4721.647	69.298	1774.909	29.443	-1.717 *	-1.884 *

* Statistically significant at a 10%
** Statistically significant at a 5%
*** Statistically significant at a 1%
1T denotes first stage
2T denotes the last stage

Table 7: Raw mean and median differences (-3+3)

	Pre- privatisation		Post- privatisation		Difference		Z	
Variable	*Mean*	*Median*	*Mean*	*Median*	*Mean*	*Median*	*t-student*	*Wilcoxon*
PROFITABILITY								
ROA -3+3 (1T) N=43	0.592	2.019	3.516	5.220	2.924	3.201	-1.588	-1.823 *
ROA -3+3 (2T) N=43	0.592	2.019	3.304	5.220	2.712	3.201	-1.442	-1.497
ROE -3+3 (1T) N=45	-19.145	7.466	-6.185	9.853	12.96	2.387	-0.439	-0.818
ROE -3+3 (2T) N=45	-19.145	7.466	-5.390	9.779	13.755	2.313	-0.472	-0.581
ROS -3+3 (1T) N=42	-3.211	2.312	1.805	4.991	5.016	2.679	-0.894	-1.419
ROS -3+3 (2T) N=42	-3.211	2.312	-1.086	4.991	2.125	2.679	-0.368	-0.857
EFFICIENCY								
SALES/EMP -3+3 (1T) N=48	0.197	9.726-02	0.272	0.138	0.075	0.040	-3.067**	-4.523 ***
SALES/EMP -3+3 (2T) N=48	0.197	9.726-02	0.305	0.138	0.108	0.040	-2.790 ***	-4.339 ***
NP/EMP -3+3 (1T) N=41	-0.203-04	-2.76-03	1.364-02	5.050-03	0.014	7.81-03	-2.105 **	-2.870 ***
NP/EMP-3+3 (2T) N=41	-8.203-04	-2.76-03	1.275-02	5.050-03	0.013	7.81-03	-2.629 **	-3.331 ***
OP/EMP -3+3 (1T) N=39	1.396-02	2.442-03	2.746-02	9.148-03	0.0135	6.706-03	-2.485 **	-3.112 ***
OP/EMP -3+3 (2T) N=39	1.396-02	2.442-03	2.922-02	9.148-03	0.015	6.706-03	-2.655 **	-3.126 ***
AV/EMP -3+3 (1T) N=23	0.164	7.004-02	0.190	9.443-02	0.026	0.024	-1.050	-2.129**
AV/EMP -3+3 (2T) N=23	1.498-02	6.368-03	0.189	9.443-02	0.174	0.088	-2.060 *	-4.197***
OUTPUT								
SALES -3+3 (1T) N=56	204.403	15.082	288.862	20.416	84.459	5.334	-1.899 *	-1.966 **
SALES -3+3 (2T) N=56	204.403	15.082	496. 415	20.416	292.012	5.334	-1.927 *	-1.811 *
INVESTMENT								
INV -3+3 (1T) N=33	23.763	7.619	7.033	4.417	-1.673	-3.202	1.251	-0.170
INV -3+3 (2T) N=33	23.763	7.619	21.596	4.417	-1.807	-3.202	0.127	-0.331
LEVERAGE								
LLEV -3+3 (1T) N=42	19.196	14.637	18.117	12.682	-1.079	-1.955	0.396	-0.382
LLEV -3+3 (2T) N=42	19.196	14.637	18.083	13.128	-1.113	-1.509	0.444	-0.564
EMPLOYMENT								
EMP -3+3 (1T) N=51	386.93	576	4403.228	379.666	540.298	-196.34	-1.625	-0.570
EMP -3+3 (2T) N= 51	3862.93	576	5103.374	378	1240.444	-198	-0.660	-0.251

* Statistically significant at a 10%
** Statistically significant at a 5%
*** Statistically significant at a 1%
1T denotes first stage
2T denotes the last stage

Table 8: Raw mean and median differences (-5+5)

	Pre- privatisation		Post- privatisation		Difference		Z	
Variable	*Mean*	*Median*	*Mean*	*Median*	*Mean*	*Median*	*t-student*	*Wilcoxon*
PROFITABILITY								
ROA -5+5 (1T) N=18	1.001	1.736	4.911	5.433	3.91	3.697	-1.486	-2.243 **
ROA -5+5 (2T) N=18	1.001	1.736	4.561	5.377	3.56	3.641	-1.353	-2.243 **
ROE -5+5 (1T) N=23	-45.893	3.155	-15.203	8.684	30.69	5.529	-0.771	-0.852
ROE -5+5 (2T) N=23	-45.893	3.155	-7.876	12.589	38.017	9.434	-0.941	-1.065
ROS -5+5 (1T) N=17	24.570	7.377	12.029	9.968	-12.541	2.591	0.691	-1.065
ROS -5+5 (2T) N=17	24.570	7.377	5.476	9.011	-19.094	1.634	1.077	-0.118
EFFICIENCY								
SALES/EMP -5+5 (1T) N=27	0.182	0.097	0.318	0.150	0.136	0.053	-3.390 ***	-4.036 ***
SALES/EMP -5+5 (2T) N=27	0.182	0.097	0.359	0.166	0.177	0.069	-2.798 ***	-4.084 ***
NP/EMP -5+5 (1T) N=21	-0.001	-0.004	0.020	0.007	0.021	0.011	-3.003 ***	-3.319 ***
NP/EMP-5+5 (2T) N=21	-0.001	-0.004	0.021	0.011	0.022	0.015	-3.115 ***	-3.632 ***
OP/EMP -5+5 (1T) N=16	0.016	0.012	0.048	0.018	0.032	0.006	-2.427 **	-2.689 ***
OP/EMP -5+5 (2T) N=16	0.016	0.012	0.049	0.018	0.033	0.006	-2338 **	-2.585 ***
OUTPUT								
SALES -5+5 (1T) N=30	232.535	28.256	413. 861	31.862	181.326	3.606	-1.710 *	-1.404
SALES -5+5 (2T) N=30	232.535	28.256	522. 871	31.862	290.336	3.606	-1.852 *	-1.717 *
INVESTMENT (1)								
INV -4+4 (1T) N=22	11.830	9.637	11.132	9.757	-0.698	0.12	0.158	-0.179
INV -4+4 (2T) N=22	11.830	9.637	22.284	10.268	10.454	0.631	-0.732	-0.450
LEVERAGE								
LLEV -5+5 (1T) N=20	26.568	28.355	18.357	14.340	-8.211	-14.015	2.008 *	-2.016 **
LLEV -5+5 (2T) N=20	26.568	28.355	20.228	14.545	-6.34	-13.81	1.630	-1.717 *
EMPLOYMENT								
EMP -5+5 (1T) N=30	5069.787	704.200	6257.473	509	1187.686	-195.200	-1.120	-0.093
EMP -5+5 (2T) N= 30	5069.787	704.200	6054.248	460.223	984.461	-243.977	-0.915	-0.854

(1) The maximum horizon that we can consider for the investment measure is nine years encompassing four years before and four years after the year of privatisation.

* Statistically significant at a 10%

** Statistically significant at a 5%

*** Statistically significant at a 1%

1T denotes first stage

2T denotes the last stage

Table 9: Determinants of profitability and efficiency changes

The sample consists of 57 privatised firms in Spain during the period of 1985-2000. VROA denotes the variation in ROA. VROE denotes the variation in ROE. VROS denotes the variation of operating profit-to-sales. VSALES/EMP denotes the variation of sales-to-employees. VNP/EMP denotes the variation of net profit-to-employees. VOP/EMP denotes the variation of operating profit-to-employees. VAV/EMP denotes the variation of the added vale-to-employees. TGOV is the type of government in the moment of firm privatisation. METHOD is the method of privatisation. MANOWN denotes the participation of the management in the firm capital after the privatisation. INVFOR denotes if there is a foreign buyer. STATEOWN is the percentage that State hold in firm capital after privatisation. REGIND denotes if the firms is an utility. PPER is the mean of net profits before privatisation. The regressions are estimated for first stage privatisation processes.

Panel A: Normal regression

Variable	Reg. 1 (VROA)	Reg. 2 (VROE)	Reg.3 (VROS)	Reg. 4 (VSALES/EMP)	Reg.5 (VNP/EMP)	Reg.6 (VOP/EMP)	Reg. 7 (VAV/EMP)
Constant	1.291	-1.198***	-0.185	-3.371	4.290 **	3.833 **	-0.769
	(0.691)	(-4.855)	(-0.197)	(-1.219)	(2.148)	(2.109)	(-0.959)
TGOV	-2.029	0.194	-0.269	5.007	-2.123	-2.720	0.921
	(-1.150)	(0.789)	(-0.285)	(1.526)	(-0.997)	(-1.503)	(1.147)
METHOD	2.522	0.363	1.687	7.930	-3.106	-1.742	-1.028
	(0.840)	(0.669)	(1.056)	(1.449)	(-0.854)	(-0.569)	(-0.694)
MANOWN	0.643	0.713	0.281	0.899	-2.045	-1.091	-0.396
	(0.166)	(1.747)	(0.140)	(0.139)	(-0.443)	(-0.284)	(-0.346)
INVFOR	1.400	-0.460	-0.759	8.102 *	2.943	-1.884	0.126
	(0.633)	(-1.360)	(-0.654)	(2.015)	(1.225)	(-1.760)	(0.096)
STATEOWN	-3.47-02	1.059-02*	1.205-02	-4.69-02	-8.72-02*	2.833-02	1.191-02
	(-0.836)	(1.721)	(0.540)	(-0.628)	(-1.871)	(0.611)	(0.557)
REGIND	-4.151**	-0.676**	-2.449 **	7.815	-6.529 **	-2.208	0.335
	(-2.180)	(-2.058)	(-2.052)	(1.620)	(-2.279)	(-0.945)	(0.415)
PPER	8.423-03	7.572-04	-2.17-03	-3.07-02	3.761-02 **	5.432-03	-3.40-03
	(0.448)	(0.300)	(-0.221)	(-0.843)	(2.194)	(0.350)	(-0.370)
F	1.035	1.983 *	0.836	1.642	1.935	0.564	0.669
R^2	0.198	0.331	0.179	0.281	0.318	0.128	0.281
N	38	36	36	43	37	35	20

Panel B: Step-wise regression

Variable	Reg. 1 (VROA)	Reg. 2 (VROE)	Reg. 3 (VROS)	Reg. 4 (VSALES/EMP)	Reg.5 (VNP/EMP)
Constant	1.161	-1.084 ***	-0.291	-3.359	4.058 **
	(0.879)	(-6.074)	(0.561)	(-1.361)	(2.097)
TGOV	-1.733			4.897	-2.118
	(-1.067)			(1.536)	(-1.140)
METHOD	2.068	0.479	1.932*	4.793	
	(0.973)	(1.078)	(1.780)	(1.029)	
MANAOWN		0.792			
		(1.550)			
INVFOR		-0.419		6.350 *	3.341
		(-1.296)		(1.860)	(1.436)
STATEOWN		9.534-03			-0.104 **
		(1.611)			(-2.135)
REGIND	-4.697 **	-0.677 **	-2.444 **	5.363	-6.862 **
	(-2.413)	(-2.168)	(-2.328)	(1.286)	(-2.495)
PPER					3.232-02 *
					(2.033)
F	2.985 **	2.723 **	2.961 *	2.644 **	2.607 **
R^2	0.169	0.312	0.159	0.218	0.296
N	38	36	36	42	37

* Statistically significant at a 10%
** Statistically significant at a 5%
*** Statistically significant at a 1%

Table 10: Determinants of post-privatisation changes in firms' output, investment, leverage and employment.

The sample consists of 57 privatised firms in Spain during the period of 1985-2000. VSALES denotes the variation of real sales. VINV denotes the variation of investment. VLLEV denotes the variation of the long-run leverage. VEMP denotes the variation of the employment. TGOV is the type of government in the moment of firm privatisation. METHOD is the method of privatisation. MANOWN denotes the participation of the management in the firm capital after the privatisation. INVFOR denotes if there is a foreign buyer. STATEOWN is the percentage that State hold in firm capital after privatisation. REGIND denotes if it is a utilities sector or not. PPER is the mean of net profits before privatisation. The regressions are estimated for first stage privatisation processes.

Panel A: Normal regression

Variable	Reg. 1 (VSALES)	Reg. 2 (VINV)	Reg.3 (VLLEV)	Reg. 4 (VEMP)
Constant	0.157	-7.044	3.600 *	-0.785 *
	(0.414)	(-1.084)	(0.506)	(-1.698)
TGOV	0.005	-3.352	-2.425	0.447
	(0.011)	(-0.522)	(-1.641)	(0.825)
METHOD	1.661 **	1.598-02	-3.574	-0.591
	(2.263)	(0.002)	(-1.441)	(-0.585)
MANOWN	-0.045	9.802	-2.552	0.127
	(0.960)	(0.772)	(-0.832)	(0.118)
INVFOR	-0.171	2.877	-2.626	-0.714
	(0.773)	(0.371)	(-1.485)	(-1.129)
STATEOWN	-0.002	4.808-02	-1.03-02	1.267-02
	(0.870)	(0.355)	(-0.307)	(1.111)
REGIND	-0.165	4.178	-1.915	2.434***
	(0.788)	(0.464)	(-1.121)	(2.991)
PPER	-0.002	-1.65-02	1.098-02	-6.19-03
	(0.102)	(-0.234)	(0.940)	(-1.128)
F	0.751	0.062	0.260	0.284
R^2	0.144	0.260	0.374	0.44
N	43	30	38	39

Panel B: Step-wise regression

Variable	Reg.1 (VLLEV)	Reg. 2 (VEMP)
Constant	2.467 *	-0.774 *
	(2.000)	(-1.759)
TGOV	-2.091	0.484
	(-1.569)	(0.925)
METHOD	-3.501**	
	(-2.286)	
INVFOR	-2.531*	-0.701
	(-1.831)	(-1.151)
STATEOWN		9.943-03
		(0.974)
REGIND	-0.806	2.320 ***
	(-0.393)	(3.013)
PPER	1.109-02	-6.93-03
	(0.928)	(-1.336)
F	2.962 **	2.770 **
R^2	0.217	0.267
N	38	44

* Statistically significant at a 10%
** Statistically significant at a 5%
*** Statistically significant at a 1%

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[i] Nevertheless, it is not possible to assure that privatisation is the only cause of the observed increase in performance (Bishop y Kay, 1992; Green y Volggelsang, 1994). Changes in the competence and in the structural environment of the firm may also influence post-privatisation firm performance (Newbery, 1997). The performance improvement may have taken place before privatisation (Dewenter y Malatesta, 2001).

[ii] Another cause of the high work force rates of public firms may be the opportunistic behaviour of the management team, that would benefit from "building empires" (Jensen, 1986).

[iii] We also considered the possible influence of the liberalisation of the privatised firm's industry by defining three alternative variables that measured, the industry's liberalisation at the year of privatisation, before and after the privatisation. Due to the high correlation between these variables and the variable representing whether the firm belonged to a regulated or non-regulated industry, we decided not to include these variables in the cross-sectional analyses. It is worth noting that most of the liberalisation processes took place after privatisation.

[iv] In Spain, for a significant part of the firms that were privatised through public offerings, the State retained a golden share. Governments to retain control over the firms' strategies and operations may use those golden shares. We considered the possible influence of the issuance of golden shares on privatised firm performance, by defining a dummy variable that took value one when a golden share was issued and zero otherwise. Nevertheless, we decided not to include this variable in the regressions as, for first stages privatisation, there was just one case of a firm that issued a golden share at the time of privatisation.

[v] Regarding the possible influence of employees ownership on firm performance, the empirical evidence is not conclusive. Some studies show a negative relationship between employees ownership and efficiency (Barberis *et al*., 1996; Boycko *et al*., 1996), while for other this relationship turns out to be positive (Smith *et al.*, 1997). In order to consider this factor, we defined a dummy variable that took value one if the employees owned part of the companies' shares after divestment and zero otherwise. This variables turned out to be highly correlated with a significant part of the explanatory variables and, finally, we decided, due to multicollinearity reasons, not to include it in the analyses.

[vi] Sales have been deflated to year 1980.

[vii] Variable CYCLE has not been included in the regression models due to multicollinearity problems, results were similar when it was included. Besides, variables LSIZEASSETS was also not included in the regression models due to multicollinearity problem. Although the results did not vary significantly when including this variable. It showed a positive and significant coefficient for the ratio net profit-to-employment, and negative and also significant coefficient for the long-run leverage.

[viii] STATED is used as an alternative variable.

[ix] PER 0 is used as an alternative variable.

[x] LSIZESALES is used as an alternative variable.

[xi] It is considered the first stage of privatisation. For the explanatory and control variables the statistics have been calculated using SALES as dependent variable because in this case we have the most large number of observations.

[xii] We consider median values because we rejected the normality hypothesis though Kolmogorv - Smirnov test.

[xiii] The regressions were estimated using step-wise regression models in order to avoid multicollinearity problems. Nevertheless, we show both results, firstly considering all the independent variables and secondly when running step-wise regressions, the model that turns out to be significantly. No models turn out to be significant for variables operating profit to employment, added value to employment, output and investment. Although the results are reported only for the first stage of the privatization processes, the results are very similar and lead to the same conclusions when considering the last stage of the privatization processes.