Instituto Superior de Economia e Gestão

UNIVERSIDADE TÉCNICA DE LISBOA

Master's Degree in Accounting, Taxation and Corporate Finance

Master's Degree's Final Dissertation

"The State's Role on the Iberian Stock Markets – From Privatization to the State as an Investor"

Jury:

Prof. Doutor Eduardo Barbosa do Couto
Prof. Doutor Pedro Luís Pereira Verga Matos
Prof. ª Doutora Inês Maria Galvão Teles Ferreira da Fonseca Pinto

João Miguel Justino Cabeças – n. º 32672

16th December 2011

Table of Contents

Table Index

Acknowledgements

I would like to thank my parents and grandparents for all the care and support.

I would like also to thank Prof. Doutor Pedro Verga Matos for all his help in developing this dissertation.

Abstract (Portuguese)

As privatizações tendem a levar a um aumento da performance e eficiência das empresas bem como um melhoramento dos saldos orçamentais do estado, acompanhado de um aumento de concorrência (Carreira, Megginson e Netter, 2001). Desta forma, o objectivo do trabalho é estudar se as privatizações realizadas na última década, em Portugal e Espanha, foram realmente benéficas e se o processo de privatização se traduziu em melhorias para as empresas envolvidas. Este trabalho, suportado numa revisão de literatura de cerca de 60 artigos, contempla uma comparação dos períodos pré e pós privatização, bem como uma comparação entre os indicadores das empresas privatizadas e das ainda empresas de capitais públicos. Procura-se ainda analisar o papel da estrutura de capital e a sua influência nas melhorias trazidas pelas privatizações. O estudo replica os métodos utilizados Omran, M. (2004) and McGuinness, P. and Ferguson, M. (2005). Os resultados mostram que não existe uma melhoria significativa de performance após a privatização, nem uma interferência da estrutura de capital, mas apenas uma melhoria da eficiência operacional.

Palavras-Chave: Privatização, Empresas de Capitais Públicos, Portugal, Espanha

Abstract

The privatization of state owned enterprises (SOEs) tend lead to an increase in performance and efficiency, an improvement in the fiscal budget, followed by an increase in competition. (Carreira and Megginson and Netter, 2001). The goal of this study is to analyse if the Portuguese and Spanish privatization processes, in order to determine if the privatizations done in the last decade really led to improvements among the privatized firms. The study, backed by a literary review of circa 60 publish articles, provides a comparison between the pre and post privatization periods of the privatized companies, as well as a comparison between the same privatized firms and existing SOEs. Furthermore, it is investigated the influence the capital structure may have in such improvements. This study replicates the methods used by Omran, M. (2004) and McGuinness, P. and Ferguson, M. (2005). The results show that there is no evidence of significant improvements in performance or any capital structure influence, but rather an improvement in operational efficiency.

Key words: Privatization, State Owned Enterprises, Portugal, Spain

Introduction

The privatization of State Owned Enterprises (SOE), companies that are property of the state or in which the state is a shareholder, has been performed by several states throughout the world, and Europe was no exception. This study of the Portuguese and Spanish privatizations occurs due to their strong economic integration. By being open economies, the privatization is a means of promoting competitiveness, a way to attract investment, to increase the companies' performance, and to reduce the state´s presence in the economy (Megginson, 2010).

Primarily, privatizations lead to an increase in performance and efficiency, an improvement in the fiscal budget, followed by an increase in competition. (Carreira and Megginson and Netter, 2001). However, privatization by itself does not guarantee an improvement in performance, according to Omran, M. (2009), referring Zinnes, et al. (2001), but must be accompanied by an improvement in regulation and corporate governance (Bortolotti, D'souza, Fantinic, and Megginson, 2002).

The goal of this study is to investigate, within the 55 companies listed on the PSI 20 and IBEX 35, respectively the benchmark stock indexes of Portugal and Spain, if there is an improvement in performance within the companies, after privatization, and as well when compared to other existing SOEs. Additionally, it is investigated, for the same companies, if the capital structure influences the performance indicators.

The results show that there was no significant performance increase after privatization, when comparing the companies on their own nor when comparing with existing SOEs. Moreover, the capital structure does not influence the performance, specifically the biggest qualified position or the state presence as an investor.

The study is divided into four sections, the first being a literary review, the second presents in detail the sample and methodology employed, along with the hypotheses over which the study is developed. The third section presents an analysis of the results, and the fourth section provides concluding remarks.

1. Literature Review

The State Owned Enterprises (SOE) are defined by the OECD as "*business entities established by central and local governments, and whose supervisory officials are from the government, which* include wholly state-funded firms and (…) *'state-holding enterprises'* (..), *those firms whose majority shares belong to the government"*. (OECD, 2009, pp.5 and 6). The state can as well still be present as a minority shareholder. To simplify, hereonafter the term SOE refers to all companies in which the State is shareholder.

"*In several OECD countries, State-Owned Enterprises (SOE) still represent a substantial part of GDP, employment and market capitalisation. Moreover, State-Owned Enterprises are often prevalent in utilities and infrastructure industries, such as energy, transport and telecommunication, whose performance is of great importance to broad segments of the population and to other parts of the business sector*". (OECD, 2005, pp.9). The SOEs are the only companies able to operate under natural monopolies (Shapiro and Willig, 1990 and Megginson and Netter, 2001), because "*economies of scale provide a large cost advantage*" to have all the products or services "*provided by a single firm*". (Krugman and Wells (2005) pp. 337). In Spain alone, in 2003, there were 62 SOEs and another 38 which had the state as a minority shareholder, representing an asset value of $ 10 billion, expressed in purchasing power parity. (OECD, 2005).

The privatization of a SOE is *"transforming a pure SOE into a private firm"* expecting *"to improve firm performance"* since*, "a pure SOE is not usually profit-oriented"*. (Jiang, Yue and Zhao, 2009, pp. 2322). "*The privatization process is the sale of public assets, namely of the SOEs to private agents"* (Megginson and Netter, 2001, pp. 2), as a means for raising funds to improve both the state's fiscal budget and the performance of the companies. (Shirley, 1999 and Boubakri, Cosset, and Guedhami, 2004). The privatization process contributes to the performance improvements, as well as to creating a free and competitive market. the privatization is a means, on the one hand of adding diversity, raising net results, encouraging investment in the market, and on the other hand, a way of increasing funds through share offerings. (Perotti and Oijen, 2001).

1.1 The Goal of Privatizations

A privatization of an SOE can be seen as a "*broader policy-package that included economic reforms, liberalization and structural adjustment"* (Doshi, 2000). The governments have been using privatizations as a measure of fiscal and budget expenses reduction and to satisfy specific requirements, like the public finance convergence criteria in the Maastricht Treaty requirements' implementation. (Salmon, 2001). This was one of the reasons supporting the

privatizations in Portugal and Spain, in the late 20th century, so that the two countries could gain access to the Economic and Monetary Union, and later adopt the Euro as their currency.

These privatization programmes are seen *"primarily to raise revenue, in order to improve the economic efficiency of former state-owned enterprises and to develop the national stock markets",* (Megginson, 2010, pp.10), which prove to be an important regulation tool. (Bortolotti, D'souza, Fantinic, and Megginson, 2002 and Jiang, Yue and Zhao, 2009). This reality is supported as the *"European governments have at least two-thirds of a trillion dollars worth of stakes in partially privatized that could be sold".* (Megginson, 2010), pp. 6, referring Ng and Bartsch, 2009). According to the OECD, the size of the SOEs in 2003 was 1,8 in a scale of 6 for Portugal and 2,6 out of 6 for Spain, and between the year 1990 and 2001 the privatization proceeds, in percentage of GDP, was already circa 26% for Portugal and circa 7.5% for Spain. (OECD, 2005). In the Spanish example, privatizations were undertaken to: *"(i) raise revenue for the state; (ii) promote economic efficiency; (iii) reduce government interference in the economy; (iv) promote wider share ownership; (v) provide the opportunity to introduce competition; (vi) subject SOEs to market discipline; and (vii) develop the national capital market".* (Megginson, 2010, pp. 5). However, privatizations are not an automatic method of improving performance. (Omran, M., 2009 referring Zinnes, et al., 2001). The "*Spanish SOEs improved their efficiency and increased their real sales, capital expenditures and employment after going public, but not their profitability"*. (Farinós, García and Ibáñez, 2007, pp. 368).

Moreover, these gains in efficiency tend to be guaranteed if the majority of the equity is sold and not just a partial privatization, because a continued government involvement after the privatizations leave a re-nationalization option available. (D'souza, Megginson, and Nash, 2007 referring Boycko et al., 1996).

1.2 Methods of Privatization

The privatizations normally involve public share offering and a subsequent listing on one of the indexes of the national stock exchanges. (Megginson, 2010, pp. 7). Hence, the same author identifies five general distinct ways of privatization. *"These are (1) the direct sale of a company to another, existing firm or group of investors; (2) share issue privatizations (SIPs), which are public offerings of common stock to private investors on national and international stock markets; (3) voucher privatizations, involving the distribution of exchangeable purchase rights to citizens for free (or at nominal cost). These vouchers are then convertible directly into SOE shares; (4) the granting by governments of concessions to private companies, giving these firms the sole right to operate existing assets, and (5) public-private partnerships using project finance techniques to build new public assets using private capital."* The option of performing widespread privatisations is taken in an attempt to make the companies more efficient, more

result oriented and to solve any existing government failure. This market view makes way for an improvement in operational procedures and for a development of a corporate governance conscience.

1.3 The Presence of Foreign Investors and Market Regulation

Privatizations may be seen as a move from the governments to retreat to a regulatory position, leaving the market functioning independently (Perotti, 1995 referred by Perotti and Oijen, 2001). This withdraw represents the ending of the centralized ownership model, present in the Portuguese and Spanish SOEs, that run according to "*a strong centralized ownership, (...) under the responsibility of one ministry of agency".* (OECD, 2005, pp. 49). The state's pull-out allows a decrease of the scope, i.e. the extent, of the public sector in the economy, which was in 2003, 3,8 in a scale of 7 for Portugal and 3,5 out of 7 in Spain. (OECD, 2005). There is a benefit in opening the market, as the presence of foreign investors is decisive to the post-privatization improvement. (Jones, Megginson, Nash and Netter, 1999, along with Bortolotti, Jong, Nicodano, and Schindele, 2007). This is seen by the significantly higher return on equity or revenue per employee when foreign investors are among the shareholders. (Cin, and Vodopivec, 1997 and Anderson, Makhija, and Spiro, 1997, referred by D'Souza, Megginson, and Nash, 2007). To ensure the confidence of foreign investors there must be a legal framework in place, which is decisive to guarantee stability and consistency of the stock markets, essential in promoting growth and to attract further foreign funds. (Boubakri and Hamza, 2007 referring Black, 2001 and Coffee, 1999 and Mizutani, 2010). Privatizations in developed countries benefit from the work of the regulatory agencies, which contribute to the protection of shareholders and investors, as well for a stable investment environment. (Boubakri and Hamza, 2007). This is corroborated by findings that say that a strong and active regulation increases competition and foreign investment within the market, are major factors for productivity increase. (Okten and Arin, 2006, stating Wallsten, 2001, and Kikeri and Nellis, 2004). Competition *"can greatly improve monitoring possibilities and hence increase incentives for production efficiency. Private firms are more efficient than SOEs in competitive environments. On the other hand, in non-competitive industries or in industries with natural monopoly elements, the performance of privatized firms is ambiguous, and results from empirical studies are inconclusive."* (Omran, M., 2004, pp. 1023). The increase in productivity and efficiency may also arise because the governing board is subject to the market conditions, the financial markets, and the close supervision of the shareholders, whose income and wealth depend on the performance of the companies. (Omran, M., 2004). Being present in the stock markets, and released from government control, the newly privitized companies may benefit from many new opportunities of investment and development of new projects. The increase in

efficiency makes privatized companies show a significant reduction in the debt levels and an increase in dividend payout. (Brada and Ma, 2007 refering Megginson et al., 1994). This fact develops further the capital markets and gives the confidence that private agents need to invest. (Frydman et al., 1999 referred by Okten and Arin 2006).

1.4 Agency Problems within the SOEs

The privatization process can be the solution for problems related to the agency theory, and information asymmetry. The privatizations *"can mitigate the agency problems that bog down state owned enterprises, such as goal ambiguity, weak monitoring of managers, and ineffective managerial incentives, but it does not solve government failures associated with regulation*". (Ramamurti, 1997, pp. 1175, using the work of Aharoni, 1982 and Wolf, 1988). It is the state's transition from an executive position to a regulation role, promoting a free market and competition. By deepening the ties between ownership and shareholders' control a shift to a market orientated perspective occurs, and increases the prospect of performance improvements and insures a consistent return on the shareholders' investment. (Okten, 2006). Other authors have corroborated it by determining that the SOEs privatization can complement market failures adjusting the policies to improve production and performance, and thus transforming a SOE into a private company with a strong market and profit oriented conduct. The *"modern history of public ownership"* (...) suggest *"that it leads to lower levels of efficiency in SOEs than would be possible under private ownership, and these inefficient state-owned enterprises, in turn, are seen as creating other problems such as pre-emption of government revenues through subsidies or recapitalization and efforts by SOEs to obtain special protection from private competitors".* (Brada and Ma, 2007, pp. 122).

Another point of view regarding the companies' ownership focuses on the dangers of mixed ownership between the government and private investors. (Oum, Adlerb, and Yu, 2006). There is a conflict between the government and the shareholders' interests and strategies, meaning that the former tries to ensure a maximization of wealfare to society while the latter works to maximize profit. (Bos, 1991, and Boardman and Vinning, 1989). "*On one hand, mixed ownership may facilitate the role of the government as a ''steward'' in private firms that are dominated by a strategic investor or where there is a lack of market discipline. On the other hand, mixed ownership arrangements may blend the worst qualities of government and private ownership*", allows for a rise in agency problems related to information asymmetry and to a deviation from a profit oriented strategy and increase in performance. (Oum, Adlerb, and Yu, 2006, pp. 110). It "*may take the form of an inefficient use of the free cash flow through wasteful but politically valuable acquisitions. Managers can deviate from decisions that are optimal for shareholders and politicians may deviate from the policies that are optimal for*

voters. Between the inability of shareholders to fully control managers and the inability of voters to fully control politicians". (Bel and Trillas, 2005, pp.43).

One option can be transferring ownership to an agent who is already inside the company. Although this transfer of control creates a more confident prospect of corporate improvement, due to the extensive knowledge of the firms operations, it has a disadvantage in terms of limiting the management restructuring options and in profitability increase. In comparison with an external purchaser, these limitations are practically nonexistent, allowing a deeper restructure after acquisition from the government. (Huang and Wang, 2010, referring Bebchuk, 1994).

The incentives given to the management team are an important tool to line up the shareholders' actions with the companies' interests, with a goal of achieving performance and efficiency improvements. The managers' base salary is normally determined by benchmark with other companies and the incentives take the form of bonuses based on the companies' performance indicators, namely the earnings before interest and tax (EBIT), net results, earnings per share (EPS) and the economic value added (EVA). In addition to this accounting figures linkage, there are other forms of variable income like stock options. These bonuses constitute the variable portion of the annual income and the sole part that is directly linked to the company's performance. (Kim and Nofsinger, 2007). This may be viewed, for the most part, as a trigger of corporate growth and prosperity. However, the "*tools that align incentives to performance are available to both private firms and SOEs. For instance, SOE managers could be motivated to improve firm performance through incentive compensation based on achievement of certain targets, with poor-performing managers being punished through demotion or dismissals".* (Lin and Su, 2009, referring Grossman and Hart, 1986 and Cragg and Dyck, 2003).

"Private investors often have strong incentives to monitor management, select CEOs based on their industry expertise and adopt incentive pay schemes to align the interests of executives and shareholders' value". (Huang and Wang, 2010, pp. 2).

This may be more evident in private companies where there is bigger management board stability, a long-term commitment, and bigger control by the shareholders. In the SOEs, the managers are normally appointed based on political trust. *"Several studies (e.g.,* Shleifer and Vishny, 1997 and Dyck, 2001*) assert that corporate governance can have an impact on the performance of privatized firms". "The gains in performance"* are *"higher when the government gives up control".* (Huang and Wang, 2010 referring Boycko et al., 1996). The conclusions indicate a better performance both in results and in the stock markets if the political risk is low. (Levine and Zervos, 1998, La Porta et al., 1989 referred by Perotti and Van Oijen, 2001).

1.5 Pricing the Privatizations

To privatize a company the state must determine the price at which the company is sold. The governments may make a "*tender offer*", do a "*bookbuilding exercise"*[1], or "*set a fixed price*" (Megginson and Netter, 2001). There is evidence that the governments will under-price their offer (set a lower price than the real market value of the company) of the initial selling portion of an SOE company in an attempt to incentive investors, and to signal the market that will not try to delay future operations of the privatized company. (Jones, Megginson, Nash and Netter, 1999 referring Perotti, 1995). However, "*(i) if future policy uncertainty is low, market oriented governments will offer small portions of SOEs in initial partial sales with little or no under-pricing; (ii) when future policy uncertainty is high, market-oriented governments will under-price initial sales of large portions of SOEs; (iii) market-oriented governments that cannot commit will ration these under-priced shares to domestic investors and employees in 'fixed-price offers'; (iv) populist governments will resist under-pricing because they are impatient and prefer the proceeds; and (v) the level of under-pricing will increase with the income inequality in a country"*. (Jones, Megginson, Nash and Netter, 1999, pp. 224). On the same topic, "*a committed government is motivated to signal its identity because: (i) The sale of the SOE will yield higher proceeds if private investors believe the government is committed. (ii) The economic benefits of private ownership will begin immediately since managers perceive that committed governments will not expropriate the profits from their private efforts*". (Jones, Megginson, Nash and Netter, 1999, pp. 221, referring Biais and Perotti, 1997). Governments which adopt a 'populist' conduct are very strict about the price per share and often are not eager to negotiate the price of a share issue privatization or of an initial public offering, trying to raise the maximum revenue possible. (Megginson and Netter, 2001). Generally, the former SOE companies present in the main stock indexes reveal a higher under-pricing when selling the first tranche, than when selling the subsequent tranches. In contrast, a lower under-pricing (higher selling price) is set if the company is not sold through a public offering. This shows that if the company's first tranche is sold through a public offering, it will secure a larger discount and a smaller discount with the following tranches' sale, and this way maximizing its revenue. (Bel, 1998).

1.6 The Selling Method

[1] *"Bookbuilding involves the submitting of (legally) non-binding bids by a relatively exclusive group of institutional investors. The book manager, in consultation with the issuing company, uses this crude approximation of the market demand curve to establish the price at which the share offering is sold and exercises considerable discretion in the allocation of shares".* WHILHEM, William J., Jr. (2005). "Bookbuilding, Auctions, and the Future of the IPO Process". *Journal of Applied Corporate Finance, vol. 17:1*, pp.3.

After the price setting negotiations, the process of share allocation is crucial. The state can sell the shares in bulk or in tranches. If the second is the chosen method, the state must determine the quantity of shares it wants to sell at the initial offer and at the succeeding offers. It is suggested that the sale process should be divided in tranches to ensure an effective control transfer. (Megginson and Netter, 2001). The sale programs *"are initially gradual, even when retained stakes are explicitly targeted to be sold over a few years. Proceeds from privatization increase over time, suggesting gradual selling calibrated to build investors' confidence"*. (Perotti and Guney, 1993, referred by Perotti and Oijen, 2001, pp. 49). The Spanish and Portuguese governments have historically adopted the selling process through public offering made in tranches, over a number of years.

The privatization can be done while still allowing for a mixed ownership with the government and the introduction of corporate control restrictions (Megginson and Netter, 2001), such as golden shares. The golden share figure was present in several Portuguese and Spanish companies, in which the state still has a presence, benefiting from special powers as member of the board. This mechanism was created to protect these companies from foreign hostile takeover actions, guaranteeing national sovereignty, usually for companies in strategic sectors. By using instruments such as golden shares the government encourages market distortion, (Salmon, 2001), allowing for unilateral dismissal of management board decisons through veto power. (Omran, M., 2004 referring D'souza, Megginson, and Nash, 2001).

1.7 The Post-privatization Period

The existence of competitors and the regulatory framework is essential to ensure that the original objectives of the privatization are executed and achieved. One example is the reduction of monopolies, promoting profitability and efficiency through competition. (Ramamurti, 1997, D'Souza, Megginson, and Nash, 2005 according to Djankov and Murrell, 2002). This fact is corroborated as privatizations subject the companies to market competition, a crucial factor for success and post-privatization performance improvements. (Newbery and Pollitt, 1997, World Bank, 1995, and Vickers and Yarrow, 1991). The post-privatization phase is essential to determine the success of the privatization and to ensure the future profitability of the newly privatized company. (Davis, Ossowski, Richardson, and Barnet, 2000, referred by Birdsall and Nellis, 2003). An IMF review of *"18 privatizing countries reports substantial gross receipts from privatization, accounting for nearly 2% of annual GDP"*. (Comstock, Kish, and Vasconcellos, 2003) referring Megginson et al., 1994). They also find that by comparing pre and post-privatization scenarios, the latter leads to improvements in performance and efficiency, already discussed above, as well as an increase in stock prices in the medium run. However, if this contributes to job uncertainty, the process may be postponed to protect the

employees, acknowledging the labour unions which typically are against any privatization. (Asiedu and Folmer, 2007). In the same line of work, a study of the productivity of the 500 non-U.S. industrial firms for the year of 1983 found that there was a significant connection between private companies and growth. The results suggest that private ownership leads to higher rates of productivity growth and declining costs in the long run, regardless of the competitive and regulatory environments. (Boardman and Vining, 1989, referred by Brada and Ma, 2007). In a study of the OECD member counties, and another of the develop countries the results show that there were improvements in performance and efficiency. (D'Souza, Megginson, and Nash, 2005, and Boubakri et al., 2005). They found that, apart from the ownership influence, the stock market development and its trading volume are also important factors in improving performance and efficiency. The more sophisticated the markets, the more likely efficiency and performance are improved. Academic research *"has documented that the intensity of the capital market pressure depends upon the size and sophistication of the nation's financial system"*. (D'Souza, Megginson, and Nash, 2005, pp. 750). The same authors present several empirical studies which identified that the company's performance after the privatization differs considerably, depending on the degree of market competiveness and regulation. In fact, "*institutional development is key to successful economic transition and development*". (D'Souza, Megginson, and Nash, 2005, pp. 761). Associated to this development of the financial markets the companies' leverage levels drop significantly. (Megginson, and Nash, 2005 signaling the work of Megginson et al., 1994).

In spite of several studies indicating that privatizations ultimately lead to an increase in efficiency and performance, there are a growing number of authors who say that privatization by itself does not mean an automatic improvement. (Omran, M., 2009). Hence, the results are contradictory and not very conclusive. *"Under competitive market conditions, government ownership is not inherently less efficient than private ownership, and that competition is the key to efficiency rather than ownership per se".* (Vickers and Yarrow, 1991 referred by Oum, Adlerb, and Yu, 2006, pp. 110.

1.8 Corporate Governance after Privatization

One major factor that typically changes with privatization is the corporate governance of the newly privatized companies. Corporate Governance is a set of *"laws, institutions, practices, and regulations that determine how limited-liability companies will be run and in whose interest"*. (Megginson and Netter, 2001, pp. 43). Among other definitions, corporate governance can be viewed as well, as the way to encourage the managerial board to act in a way to maximize the shareholder's return, and the goal of eliminating the agency costs that

naturally occur between the shareholders and the management board. (Omran, M., 2009 and Boubakri, Cosseta, and Guedhami, 2004).

The privatization process is an opportunity to change the company's corporate governance policy. As the OECD suggests, "*improvements in the governance in state owned enterprises are expected to promote growth through better performance and increased productivity. If fully implemented, they should lead to a more transparent allocation of resources and a more effective supervision and management of enterprises".* (OECD, 2005). The governance changes are important to guarantee a higher post-privatization success. (Kočenda and Hanousek, working paper October/2010). The shareholders' prosperity depends on the performance of the company. This fact makes the shareholders more dedicated to control and monitor the management, especially foreign shareholders, and to make sure the plans are executed efficiently (Okten, 2006 referring Shleifer and Vishny, 1997 and Boubakri et al., 2005 and Frydman et al., 1999 and Villalonga, 2000). If the ownership is very disperse, a steady corporate ownership is difficult to achieve, increasing the assymetric information between shareholders and managers. (Boubakri, Cosseta, and Guedhami, 2004). This dispersal pattern is in part result of shareholders who do not wish to retain a stake in the company, re-selling the stock right after (Megginson and Netter, 2001). Frequently, these dispersal transactions are also promoted by the state itself to atract small shareholders to encourage market investment. It must be pointed out that "*since the long-run returns to investors in SIPs*[2] *are generally positive, the first experience of these new retail investors in stock market trading is a positive one".* (Boubakri, Cosseta, and Guedhami, 2004, pp. 46). In addition, governments manage to encourage many of the original investors to come back for subsequent share offerings. The presence of long-lasting investors or those whose intention is merely financial depends also on the level of legal protection for their investment. Hence, a legal system that *"protects investors is presumably a determinant of the success of privatization in improving firm performance"* (Megginson and Netter, 2001, pp. 44). The changes in corporate governance may occur beforehand, and the government may want to reorganize certain characteristics of the company such as *"restabilising relationships with strategic foreign investors or implementing employee share ownership plans, and/or through restructurings such as acquisitions, divestitures, or re-capitalizations"*. (D'souza, Megginson, and Nash, 2007, pp. 158).

Under government control, the management board is often appointed for political reasons. The objectives are *"vaguely defined, and tend to change as the political situation and relative strengths of different interest groups".* (Oum, Adlerb, and Yu, 2006). Under private ownership, the management is replaced with others more professional and competent, leading to

[2] Share issue privatization.

immediate performance expansion. (Megginson et al., 1994). "*Corporate governance changes (brought on by different upper management) will positively impact the degree of post-privatization performance improvement"*. (D'Souza, Megginson, and Nash, 2007, pp. 160). The privatization process provides an opportunity to introduce new incentives and control mechanisms that motivate the managers to thrive and lead the companies to improvements. (Boubakri, Cosset, and Guedhami, 2004). The objectives pursued are different depending on the type of company. An SOE will typically follow the orientation of the government in office, which may trail conflicting agendas and setting multiple and sometimes conflicting goals. "*The government's goals can be inconsistent with efficiency, inconsistent with maximizing social welfare, or even malevolent*". (Megginson and Netter, 2001 referring Laffont and Tirole, 1993 and Shleifer, 1998).

2. Data and Methodology

It appears to be consensual that with privatization comes as an improvement in performance, allowing for an alignment with a market orientation view. Although privatization on its own does not guarantee improvements, this new view introduced by private investors leads to improvements in corporate governance and regulation, both internal and external, dealing as well with potential agency problems that may occur. Hence, the capital structure can influence the performance of privatized firms.

The aim of the study is to search for an improvement within privatized firms' performance, and to compare it to the performance of other existing SOEs. At the same time, it is also attempted to determine if the capital structure after privatization, the privatization process itself, and the presence of the state as a shareholder, influence the performance indicators.

2.1 Data

The companies analysed are those listed on the Portuguese and Spanish benchmark stock indexes PSI 20 and IBEX 35, respectively. The data used is obtained from the Amadeus and Bankscope Systems, annual reports and stock market information. The data used is from the years of 2003 and 2006 when comparing the pre and post privatization periods. When analysing the capital structure, the data retrieved is from the years of 2005, 2007 and 2009. The total number of companies present in the sample is 55. The sample contains 33 privately owned companies, 7 in which the state is present and 15 privatized companies. The sample is very diverse as it encompasses a variety of companies from different industries, including the

financial institutions. During the last decade only 4 companies were privatized in the same years. 2 companies were privatized in 2003 and other 2 in 2006.

2.2 Methodology

Using the information collected on each of the 55 companies present in the sample, two distinct methodologies are used in trying to asses if the privatization leads to improvements in performance and to see if the same performance is influenced by capital structure. These methodologies are based on the works of Omran, M. (2004) and McGuinness, P. and Ferguson, M (2005), respectively.

In accordance to the literature review, the privatization of an SOE is undertaken with the expectation of an improvement in performance and efficiency. "*Privatization that allows the sale of voting shares - possibly giving control to outside investors - is most conducive to efficiency improvements"*. (Omran, M., 2006, pp. 1025). In addition, it was found that "*private firms are significantly more profitable and efficient than SOEs and mixed-ownership enterprise*". (Boardman and Vining, 1989, and Vining and Boardman, 1992, referred by Omran, M., 2004, pp. 1024) Therefore, this study examines if the privatization of an SOE improves performance.

- Hypothesis 1: The privatization of an SOE improves its performance.

The analysis employs the methodology originally introduced by Megginson et al. (1994), and subsequently applied by Omran, M. (2004) to the Egyptian economy, beginning with the comparison between the means of pre and post-privatization periods, within the companies, followed by a comparison with SOEs of the same industry or size, in terms of total assets. This comparison between companies is made using two distinct approaches: Absolute Performance Differential (APC) and Relative Performance Differential (RPC). The absolute differential approach requires the absolute accounting figures, while the relative approach requires the indicators' relative growth rate for the period. The intention is to investigate if the means of newly privatized firms differ from the state owned enterprises. This analysis was originally developed for the period between 1994 and 1998, with a sample of 55 newly privatized Egyptian companies and another 54 state owned enterprises that constituted the control group used for comparison. (Omran, M., 2004).

The variables included in the study were the profitability variables EBIT (Earnings Before Interest and Tax), ROS (Return on Sales), ROA (Return on Assets) and ROE (Return on Equity). The latter three are calculated by dividing the EBIT by sales, total assets and equity,

respectively. (Omran, M., 2004). Furthermore, there were operational variables included which represented sales efficiency (SALEFF: sales per employee) and income efficiency (INEFF: EBIT per employee). In addition, the analysis includes also the labour force represented by the number of employees (EMPL) and the Leverage (TDTA) computed as the total debt over total assets. (Omran, M., 2004). The means of each variable were calculated for the two year period prior to the privatization and after the privatization, excluding the privatization year. (Omran, M., 2004).

This same methodology is now applied to the Portuguese and Spanish companies with the same variables. Among the 55 Portuguese and Spanish companies present in the sample referred earlier, only five were privatized in the last decade. From those five only four were considered because the privatizations occurred in the same year (2003 and 2006). This is done to achieve a sample size bigger than one. Hence, the sample was divided in two groups: two companies which were privatized in 2003 (EBRO Foods PLC and Portucel SGPS) and two which were privatized in 2006 (GALP Energia SGPS and ZON Multimédia SGPS). The control group is composed by SOEs with similar size, i.e. total assets (Enagas S.A. and Red Electrica S.A for 2003 and Bolsas y Mercados Españoles S.A. and INAPA SGPS for 2006), since there weren't any SOEs of the same industry listed in either indexes. The means used to apply the methodology were calculated for the three years prior (-3) and after (+3) the privatization years of 2003 and 2006. The methodology of privatized/SOE company comparison is as follows:

- Absolute Performance Differential Approach:, $APC = P_{i,t} - P_{i,t-1}$
- Relative Performance Differential Approach: $RPC = (P_{i,t} - P_{i,t-1})/P_{i,t-1}$

The APC is the absolute performance change, RPC is the relative performance change, $P_{i,t}$ is the mean performance of each variable in the post-privatization period, and $P_{i,t-1}$ the mean performance change of each variable in the pre-privatization period. (Omran, M., 2004).

The variables present in the methodology are the same used by Omran, M. (2004) and are as follows:

Profitability Variables

- EBIT: It is the *Earnings Before Interest and Tax* of each company.
- ROS: The *Return on Sales* is calculated as the EBIT over the Sales for each year.
- ROA: The *Return on Assets* is calculated as the EBIT over Total Assets for each year.
- ROE: The *Return on Equity* is calculated as the EBIT over Total Equity for each year.

Operational Variables

- SALEFF: This variable represents the Sales *per* Employee. It is calculated as the Total Sales over Total number of Employees.

- INEFF: This variable presents the EBIT *per* Employee. It is calculated as EBIT over the Total Number of Employees.
- EMPL: EMPL represents the number of employees of each company.

Financial Variables

- TDTA: This variable is the leverage ratio. It is calculated as Total Debt over Total Assets.

Another point raised in the literature review was the influence of the capital structure on the company's performance. Although, "*companies with private-sector stakeholders enjoy benefits in terms of increased return on equity and a lower cost of capital*", a "*mixed ownership arrangements may blend the worst qualities of government and private ownership*", not assuring an elimination of political interference. (McGuinness, P. and Ferguson, M, 2005; Oum, Adlerb, and Yu, 2006, pp. 110 and Omran, M., 2009, respectivelly). A company released from government control, may benefit from many new opportunities of investment. (Brada and Ma, 2007). As a result, this study investigates the influence of the capital structure on the performance.

- Hypothesis 2: The performance is influenced by capital structure.

This hypothesis attempts to provide evidence about the relation between the capital structure, shareholder concentration and performance. This is relevant after the privatization process because in several companies the State remains as a minority shareholder, which may still influence the performance of the company.

To analyse this hypothesis an OLS regression model is used in order to determine if the capital structure, notably with a presence of the State as shareholder, contributes to higher earnings per share, compared to the entirely private companies. To study this possible influence, the model first used by McGuinness, P. and Ferguson, M. (2005) on the Chinese market is employed. The original model was employed to explain the relationship between ownership structure and profitability, when foreign investors began acquiring equity of several Chinese SOEs. The study was conducted for the year of 2003. The sample was originally formed by 66 Chinese, listed both in the stock exchanges of the Chinese mainland and Hong Kong S.A.R. (Special Administrated Region of the People's Republic of China). These companies remained, at the time, with a state presence in their capital structures. The study was able to determine that when the majority shareholder increases its dominance, corporate performance tends to decrease, and that there are indications of a positive association between corporate performance and private investment. (McGuinness and Ferguson, 2005).

To apply this methodology to the Portuguese and Spanish markets, it is required some variable modifications to ensure adequate adherence to the available data. It is added the variable SHARECON which represents the percentage of equity by the biggest capital qualified position. Three independent moments in time are analysed. The study is undertaken for the years of 2005, 2007 and 2009. In this methodology, the number of companies varies according to those referred earlier. For 2005 some of the companies were not listed in the indexes and therefore reducing the sample to 46. For the years 2007 and 2009 the sample is comprised of the 55 and 53 companies, respectively.

The OLS model is as follows:

$$EPS = \beta_0 + \beta_1 SHARECON + \beta_2 STATE + \beta_3 PRIV + \beta_4 SIZE + \beta_5 VOL + \beta_6 IND + \beta_7 NYSE + u$$

The explanatory variables used represent the factors that may influence the performance variable earnings per share. The variables SHARECON, STATE and PRIV provide the evidence of the relationship between capital structure, privatization and performance. The variables VOL, SIZE, FIN, and NYSE serve a control purpose.

The variables are as follows:

- EPS: Represents the earnings *per* share for the year.
- STATE: Dummy variable being 1 if the company has the State as a shareholder, and 0 if it is privately owned.
- PRIV: Dummy variable being 1 if the company was privatized, and 0 if it was not.
- SHARECON: Represents the concentration of shareholders stated as percentage of the equity of the biggest capital qualified position.
- VOL: Represents the total share trading volume of each company on the PSI20 and IBEX35, in billions of shares, for the year.
- SIZE: Represents the net revenue of the previous year, stated in millions of Euros.
- IND: Dummy variable being 1 if the company is in the Industrial, Construction and Energy sectors.
- NYSE: Dummy variable being 1 if the company is listed on the NYSE.

3. Empirical Results

In this section the empirical results of both hypothesis 1 and hypothesis 2 are stated, analysing the performance improvements after privatization and the influence of the capital structure on performance.

For hypothesis 1, the analysis begins by presenting the expected variable signs for the means paired samples comparison t-test, followed by the explanation of the test results carried out for the years of 2003 and 2006. The comparison is made for the three-year period prior and after the privatization of the privatized companies EBRO Foods S.A. and Portucel SGPS for 2003 and GALP Energía SGPS and ZON Multimédia SGPS for 2006 (table 1). The sample is comprised of only 2 companies for each year because these were the only companies privatized in the same years during the last decade.

Subsequently, a comparison is made between the same privatized companies and other existing SOEs that have the same size in terms of total assets (tables 2, 3, 4 and 5). The same test is repeated using a larger sample of SOEs. For the year 2003, 4 SOEs were used and for 2006, 5 were used. These were the SOEs listed on the PSI 20 and IBEX 35 for which there was available data. In spite of the slightly larger number of companies, the sample size is a weak spot in this study.

For hypothesis 2, an OLS regression used to study the influence of the capital structure on the performance of a company. The analysis begins with the signs expectation for each one of the variable coefficients, followed by the interpretation of the actual results of the regression. There are three distinct regressions, one for 2005, another for 2007 and another for 2009 using the companies listed on both the PSI 20 and the IBEX 33.

3.1 Hypothesis 1

The first hypothesis in this study tests the performance improvement after the privatization of an SOE.

3.1.1 The Expected Sign

The privatization process, which reduces the presence of the state on the equity of the SOEs, is expected to bring broad improvements to the company. In terms of profitability it is likely that there will be an improvement of the EBIT. With this progress it is expected to improve the ROS, ROA, and ROE, as they are computed using the EBIT.

These improvements also spread out to operational indicators and therefore it is also expected that the sales efficiency (SALEFF) and the income efficiency (INEFF) indicators increase after the privatization, due to a better resource usage in a more competitive environment. Within

the operational indicators, the one with a less probable behaviour is the number of employees (EMPL). Normally, privatization "*increase incentives for production efficiency".* (Omran, M., 2004, pp. 1023). The financial variable present in this methodology is the level of total debt in terms of total assets (TDTA). The SOEs have access to more favourable borrowing conditions granted by the State, which lead to a steady debt build up. Once the privatization is complete, borrowing costs will be the same as the private companies, leading to a decrease in debt levels, and therefore a reduction in the debts levels after privatization is expected. (Omran, M., 2004).

These behaviours are corroborated by other studies, which state that post-privatization scenarios lead to improvements in performance as well as in efficiency. (Comstock, Kish, and Vasconcellos, 2003 and Omran, M., 2006).

3.1.2 Result Analysis

The results of the pre and post-privatization comparison (table 1) for 2003 show a slight increase in almost every indicator, in terms of absolute figures. The only indicators that do not increase after privatization are return on sales (ROS) and the EBIT per employee (INEFF). The EBIT, the ROS decreases, the ROA increases, and the ROE increases and are not statistically significant at a 5% level. The difference of SALEFF is one of the few statistically significant at 5% level, with a t-statistic of 55,743 and a p-value of 0.006. The EMPL difference is not statistically significant. The EBIT per employee difference (INEFF) registers stagnation and subsequently is not statistically significant. The financial indicator total debt over total assets (TDTA) increases slightly after privatization, as the other indicators do and it is not statistically significant at a 5% level. These results are in line with what was expected, except for the ROS and TDTA variables that were supposed to increase and decrease, respectively, after the privatization, as more favourable borrowing conditions become unavailable.

The results for the 2006 privatized companies are similar to those of 2003. As in the previous period, there is an increase in the work force (EMPL) and in the debt as percentage of the assets (TDTA). Most of the profitability variables increased, in absolute figures. The EBIT, ROA and ROE increased after privatization, but neither variable are statistically significant at 5% level. All these three variable differences show the expected behaviour expressed earlier. The operational variables followed the same path, except for INEFF which decreased slightly. The sales per employee (SALEFF) increased after privatization. However, these differences are not statistically significant. These behaviours correspond to what was expected, except for the ROS and INEFF variable, which should increase after privatization. The last variable, total debt over total assets (TDTA) showed an increase but its difference is not statistically significant at the

5% level. This fact is not expected, as privatization makes the public borrowing instruments unavailable.

From these results it can be seen that for these companies that have been listed in the stock market indexes for some time, the difference in the profitability indicators is not statistically significant and only the operational variables appear to benefit from the privatization process.

Table 1 – Test of significant changes in performance of privatized firms*

2003	Number of Companies	Mean After Privatization	Mean Before Privatization	T-statistic	p-value
EBIT	2	189459.333	153883.333	0.524	0.346
ROS	2	0.118	0.142	-0.491	0.355
ROA	2	0.074	0.071	0.117	0.463
ROE	2	0.103	0.074	0.631	0.321
Sales per Employee (SALEFF)	2	415.105	324.739	55.743	0.006
EBIT per Employee (INEFF)	2	51.586	51.583	0.000	0.500
Employees (EMPL)	2	4617.833	4417.833	0.734	0.298
Total Debt over Total Assets (TDTA)	2	0.334	0.212	7.544	0.042

2006	Number of Companies	Mean After Privatization	Mean Before Privatization	T-statistic	p-value
EBIT	2	316564.667	267490.167	0.791	0.287
ROS	2	0.082	0.102	-1.204	0.221
ROA	2	0.101	0.086	0.358	0.391
ROE	2	0.126	0.086	0.603	0.327
Sales per Employee (SALEFF)	2	1207.517	1027.590	1.947	0.151
EBIT per Employee (INEFF)	2	73.907	74.106	-0.021	0.493
Employees (EMPL)	2	4264.333	3712.500	0.677	0.311
Total Debt over Total Assets (TDTA)	2	0.301	0.258	0.900	0.267

*Table1 shows the results of the test that tries to determine if there are differences between the means of the three years prior and after the privatization process of the companies EBRO Foods and Portucel SGPS, for the year of 2003, and for GALP Energia SGPS and ZON Multimédia, for the year of 2006. It is used a dependent t-test for paired samples in order to compare the means of each sample. It is shown the number of companies studied for each year, the mean of each indicator for the three years prior to privatization, the mean for the three years after the privatization, the t-statistic and the p-values. The null hypothesis is that the means of the post-privatization companies are equal to the means of pre privatization period. The alternative hypothesis is that the means are different (H_0: $\mu_1 = \mu_2$; H_1: $\mu_1 \neq \mu_2$). The results were reported using Microsoft Excel software.

After the comparison of the pre and post-privatization periods, a comparison between privatized and SOE companies was made to see if there are significant differences in the performance (table 2). To achieve this goal the comparisons are based on two approaches, the Absolute Performance Differential Approach (APC) and the Relative Performance Differential Approach (RPC). The results are stated in table 2. Both were applied to the two companies privatized in 2003 and the two privatized in 2006. The SOEs chosen are those with a similar value of total assets.

Table 2 – Absolute Performance Differential Approach (performance comparison between privatized companies and SOEs of similar size) *

2003	Number of Companies	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	35576.000	170060.167	-1.672	0.172
ROS	2	-0.048	0.168	-11.824	0.027
ROA	2	0.003	0.015	-1.714	0.168
ROE	2	0.029	0.063	-0.952	0.258
Sales per Employee (SALEFF)	2	90.366	-541.704	1.030	0.245
EBIT per Employee (INEFF)	2	0.003	126.553	-6.872	0.046
Employees (EMPL)	2	200.000	204.667	-0.011	0.496
Total Debt over Total Assets (TDTA)	2	0.122	0.312	-2.271	0.132

2006	Number of Companies	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	49074.500	64820.333	-0.131	0.458
ROS	2	-0.020	0.078	-1.122	0.232
ROA	2	-0.005	0.005	-0.493	0.354
ROE	2	-0.018	0.101	-0.765	0.292
Sales per Employee (SALEFF)	2	179.927	107.669	0.403	0.378
EBIT per Employee (INEFF)	2	-0.200	86.376	-0.954	0.258
Employees (EMPL)	2	551.833	-59.833	0.699	0.306
Total Debt over Total Assets (TDTA)	2	0.043	-0.103	3.533	0.088

* This comparison between privatized companies and SOE of similar size is made using the absolute performance differential (APC). The absolute differential approach requires the absolute accounting figures. The results were computed using the following: $APC = P_{i,t} - P_{i,t-1}$, where APC is the absolute performance change, $P_{i,t}$is the mean performance of each variable in the post-privatization period, and $P_{i,t-1}$the mean performance change of each variable in the pre-privatization period. It is used a t-test for paired samples, to compare the two samples. The samples are formed by the two companies privatized in 2003 and 2006 along with the correspondent 2 SOEs that show similar total assets. The null hypothesis is the performance means of the privatized companies are equal to the performance means of SOE. The alternative hypothesis is that the means are different (H_0: $\mu_1 = \mu_2$; H_1: $\mu_1 \neq \mu_2$). The results were reported using Microsoft Excel software.

The first approach (APC) shows that for 2003, the means of privatized companies' profitability variables (EBIT, ROS, ROA and ROE) are lower. By looking at the t-statistic of each value and the corresponding p-value, it can be seen that none of the differences are statistically significant at a 5% level, except the ROS, which mean the difference is significant. When analysing the operational variables, sales per employee (SALEFF) registers a higher absolute figure. Although there is a difference in means, it is not statistically significant at a 5% level. The EBIT per employee (INEFF) sharply decreases, for privatized companies, which is statistically significant at 5%. The number of employees (EMPL) registers approximately the same figure for each group and its difference in means is not statistically significant at a 5% level. The total debt over total assets (TDTA) decreases showing a smaller level of debt for privatized companies. Its difference, as most of the other differences, is not statistically significant at a 5% level. The variables have the expected behaviour, except for the ROS and INEFF which decrease.

The 2006 privatized companies follow the same behaviour of those privatized in 2003. The only statistically significant difference is the TDTA, but at a 10% p-value level. As in 2003, the sales were higher for the privatized companies than for the SOEs. Although the sale per employee (SALEFF) variable favours the privatized companies, the difference between the companies' means is not statistically significant at 5%. In terms of EBIT per employee (INEFF),

the differential is smaller than that of the SOEs. Apparently, the privatization led to a decrease in the number of employees, though not big enough to be statistically significant. The level of debt as percentage of the total assets (TDTA) is higher for privatized companies, but the mean differential is not statistically significant at a 5% level, but only at 10% level. In 2003 the only variables which have the predicted behaviour are SALEFF and TDTA. In 2006 the only variable with the predicted behaviour is SALEFF. All the other variables contradict the predicted behaviour.

After completing this test, the same test was repeated using a larger sample. The SOEs used were raised from 2 to 4 in 2003 and raised to 5 in 2006. The results are shown in table 3. The SOEs used were the ones listed in the indexes and the ones for which there was available data.

Table 3 - Absolute Performance Differential Approach (performance comparison between privatized companies and the SOEs) *

2003	Number of Privatized Companies	Number of SOE	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	4	35576.000	233887.583	-1.297	0.132
ROS	2	4	-0.048	0.058	-1.062	0.183
ROA	2	4	0.003	0.001	0.083	0.471
ROE	2	4	0.029	-0.045	0.649	0.276
Sales per Employee (SALEFF)	2	4	90.366	-250.127	1.125	0.171
EBIT per Employee (INEFF)	2	4	0.003	63.718	-1.528	0.101
Employees (EMPL)	2	4	200.000	1242.917	-0.886	0.220
Total Debt over Total Assets (TDTA)	2	4	0.122	0.166	-0.428	0.349

2006	Number of Privatized Companies	Number of SOE	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	5	49074.500	248439.400	-1.458	0.102
ROS	2	5	-0.020	0.060	-1.575	0.088
ROA	2	5	-0.005	0.000	-0.199	0.438
ROE	2	5	-0.018	0.048	-1.279	0.129
Sales per Employee (SALEFF)	2	5	179.927	50.526	1.290	0.210
EBIT per Employee (INEFF)	2	5	-0.200	81.911	-2.265	0.036
Employees (EMPL)	2	5	551.833	1233.533	-0.477	0.327
Total Debt over Total Assets (TDTA)	2	5	0.043	0.010	0.425	0.346

*This comparison between privatized companies and all SOEs with available data is made using the relative performance differential (RPC). The relative differential approach requires the absolute accounting figures. The results were computed using the following: $RPC = (P_{i,t} - P_{i,t-1})/P_{i,t-1}$, where RPC is the absolute performance change, $P_{i,t}$is the mean performance of each variable in the post-privatization period, and $P_{i,t-1}$the mean performance change of each variable in the pre-privatization period. It is used a t-test to compare the two samples. The samples are formed by the two companies privatized in 2003 and 2006 along with the listed SOEs with available data. The null hypothesis is the performance means of the privatized companies are equal to the performance means of the SOEs. The alternative hypothesis is that the means are different (H_0: $\mu_1 = \mu_2$; H_1: $\mu_1 \neq \mu_2$). The results were reported using Microsoft Excel software.

The 2003 results show that once more none of the variables are statistically significant at a 5% level, except for the INEFF variable that can be barely considered significant at a 10%.

For 2006, the results show a similar behaviour after the sample enlargement. The EBIT, ROS, ROA, and ROE differentials continue to be lower for privatized companies and not statistically significant at a 5%. Only the ROS is statistically significant at a 10% level. The remaining

variables are not statistically significant, except for INEFF, which decrease is statistically significant.

The second approach used to compare the privatized firms and the SOEs is the relative differential approach (table 4). This measure can be viewed as the average growth rate of each variable.

Table 4 - Relative Performance Differential Approach (performance comparison between privatized companies and SOEs of similar size) *

2003	Number of Companies	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	0.286	1.050	-1.268	0.213
ROS	2	-0.113	-0.122	0.009	0.497
ROA	2	0.103	0.248	-1.862	0.157
ROE	2	0.483	0.610	-0.244	0.424
Sales per Employee (SALEFF)	2	0.300	-0.165	1.267	0.213
EBIT per Employee (INEFF)	2	0.284	0.706	-1.139	0.229
Employees (EMPL)	2	0.018	0.205	-1.021	0.247
Total Debt over Total Assets (TDTA)	2	0.573	1.530	-1.481	0.189

2006	Number of Companies	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	0.068	0.897	-1.745	0.166
ROS	2	-0.153	0.486	-5.503	0.057
ROA	2	-0.002	0.290	-48.223	0.007
ROE	2	-0.238	-0.030	-0.107	0.466
Sales per Employee (SALEFF)	2	0.186	0.373	-0.578	0.333
EBIT per Employee (INEFF)	2	-0.005	0.960	-2.790	0.110
Employees (EMPL)	2	0.046	-0.038	0.357	0.391
Total Debt over Total Assets (TDTA)	2	0.156	-0.663	1.980	0.149

*This comparison between privatized companies and SOE is made using the relative performance differential (RPC). The relative differential approach requires the absolute accounting figures. The results were computed using the following: $RPC = (P_{i,t} - P_{i,t-1})/P_{i,t-1}$, where RPC is the absolute performance change, $P_{i,t}$ is the mean performance of each variable in the post-privatization period, and $P_{i,t-1}$ the mean performance change of each variable in the pre-privatization period. It is used a t-test for paired samples, to compare the two samples. The samples are formed by the two companies privatized in 2003 and 2006 along with the corresponding SOE that show similar total assets. The null hypothesis is the performance means of the privatized companies are equal to the performance means of SOE. The alternative hypothesis is that the means are different (H_0: $\mu_1 = \mu_2$; H_1: $\mu_1 \neq \mu_2$). The results were reported using Microsoft Excel software.

For the year 2003, all the variables of the privatized firms have a slower growth than the SOEs, except for the return on sales (ROS) and the sales per employee (SALEFF). The difference between the means, however, is not statistically significant at a 5% level.

For 2006, the growth rate of the EBIT for the privatized companies is lower than the SOEs, as well as all the other profitability variables (ROS, ROA and ROE). The differences of the EBIT, ROS and ROA are statistically significant at a 5% level. Unlike in the previous period, the companies privatized in 2006 have slower sales per employee (SALEFF) growth rates than the SOEs. The EBIT per employee (INEFF), which is not statistically significant at 5% level, has a slower growth rate than that of the SOEs, and the growth of the number of employees (EMPL) increased for the privatized companies. Finally, the debt level over total assets (TDTA) has increased, in opposition to what was expected.

The results show that when comparing the performance of the privatized firms with similar size SOEs there is no statistically significant improvement identifiable. This means that, for these companies, the privatization process did not greatly benefit their performance.

When performing the same test with a larger sample, the results (table 5) are similar for the year of 2003. All the variables are not statistically significant at a 5% level. This is consistent with the previous results. In 2006, however, the ROS and INEFF are statistically significant at 5% level. These results are similar to those conducted with a smaller sample. With these results, there is evidence that the privatization process did not improve the companies' performance.

Table 5 - Relative Performance Differential Approach (performance comparison between privatized companies and SOEs) *

2003	Number of Privatized Companies	Number of SOE	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	4	0.286	0.550	-0.296	0.391
ROS	2	4	-0.113	-0.523	0.652	0.280
ROA	2	4	0.103	-0.327	0.658	0.273
ROE	2	4	0.483	7.324	-1.011	0.193
Sales per Employee (SALEFF)	2	4	0.300	0.014	1.505	0.103
EBIT per Employee (INEFF)	2	4	0.284	-0.042	0.442	0.341
Employees (EMPL)	2	4	0.018	0.434	-1.252	0.150
Total Debt over Total Assets (TDTA)	2	4	0.573	0.795	-0.422	0.351

2006	Number of Privatized Companies	Number of SOE	Mean Privatized	Mean SOE	T-statistic	p-value
EBIT	2	5	0.068	0.826	-3.452	0.037
ROS	2	5	-0.153	0.317	-2.830	0.018
ROA	2	5	-0.002	0.097	-0.340	0.383
ROE	2	5	-0.238	0.040	-0.473	0.328
Sales per Employee (SALEFF)	2	5	0.186	0.190	-0.029	0.489
EBIT per Employee (INEFF)	2	5	-0.005	0.559	-2.344	0.033
Employees (EMPL)	2	5	0.046	0.246	-0.734	0.258
Total Debt over Total Assets (TDTA)	2	5	0.156	-0.156	1.085	0.169

*This comparison between privatized companies and SOE is made using the relative performance differential (RPC). The relative differential approach requires the absolute accounting figures. The results were computed using the following: $RPC = (P_{i,t} - P_{i,t-1})/P_{i,t-1}$, where RPC is the absolute performance change, $P_{i,t}$ is the mean performance of each variable in the post-privatization period, and $P_{i,t-1}$ the mean performance change of each variable in the pre-privatization period. It is used a t-test to compare the two samples. The samples are formed by the two companies privatized in 2003 and 2006 along with the corresponding SOE that show similar total assets. The null hypothesis is the performance means of the privatized companies are equal to the performance means of SOE. The alternative hypothesis is that the means are different (H_0: $\mu_1 = \mu_2$; H_1: $\mu_1 \neq \mu_2$). The results were reported using Microsoft Excel software.

The comparison of pre and post privatization periods provides evidence of an increase in operational efficiency, notably in sales per employee. The comparison of privatized firms and the existing SOEs does not indicate any improvements after privatization.

These results are similar to those found by Omran, M. (2004) in his study of the Egyptian market.

3.2 Hypothesis 2

The second hypothesis studies the influence of the capital structure on the performance of a company.

3.2.1 The Expected Sign

The SHARECON variable which represents the percentage of the biggest qualified position in each company is expected to have a positive sign as the biggest shareholder has interest in increasing the EPS. The PRIV variable is expected to have a positive sign, as the theory points to a performance improvement. The variable STATE can be positive if the state does not have special privileges and if it supports a market orientated view. A negative sign can, however, be expected if the state assumes an opposition position and is able to force a deviation from a market orientation view.

The expected sign for the SIZE variable is ambiguous. It can be positive if after privatization there is an expansion of the business. However, if the borrowing conditions deteriorate and interest rates increase, smaller companies may be negatively affected and experience a reduction in the net profits. The IND variable is expected to have a positive sign due to a rise in the commodities prices. (McGuinness and Ferguson, 2005).

The variable VOL is expected to have a positive sign because the investors tend to invest in companies that have good earnings per share. The NYSE variable is expected also to show a positive sign as the companies which perform better have a possibility of being considered to be listed on the New York stock indexes. (McGuinness and Ferguson, 2005).

3.2.2 Result Analysis

The model is used to provide a snapshot of the variables that influence the earnings per share (EPS) of the companies listed in the PSI 20 and IBEX 35, in two year intervals, starting in 2005 (table 4). The results provide low R^2 coefficients, meaning that the variables included do not fully explain the behaviour of the EPS variable.

Table 6 – Results of the OLS regression to determine if the capital structure influences performance*

Variables	2005			2007			2009		
	Coefficient	t-Statistic	p-value	Coefficient	t-Statistic	p-value	Coefficient	t-Statistic	p-value
Constant	0,610	1,291	0,204	-3,328	-0,359	0,721	4,402	0,984	0,330
Shareholders									
Concentration (SHARECON)	0,084	0,105	0,917	-4,597	-0,288	0,775	-3,769	-0,498	0,621
Privatization (PRIV)	0,270	0,547	0,587	3,708	0,431	0,668	-2,352	-0,552	0,584
State as Shareholder (STATE)	-0,204	-0,437	0,664	0,488	0,059	0,953	-1,890	-0,450	0,655
Net Profit of Previous Year (SIZE)	0,105	2,559	0,015	1,003	2,533	0,015	0,072	0,550	0,585
Stock Yearly									
Transaction Volume (VOL)	-0,324	-2,075	0,045	-2,033	-1,143	0,259	-0,396	-0,589	0,558
Industry, Construction, Energy (IND)	0,341	0,894	0,377	2,266	0,314	0,755	3,167	0,936	0,354
Listed in the NYSE (NYSE)	-0,767	-0,975	0,336	13,698	0,823	0,415	0,145	0,018	0,986
R-squared	0,187			0,370			0,064		
F-statistic	1,247			3,769			0,462		
p-value	0,302			0,003			0,857		
N	47			55			53		

* The OLS regressions were made using the dependent variable earnings per share and explanatory variables SHARECON, PRIV, STATE, SIZE, VOL, IND, and NYSE. The p-value level used to determine the significance is 5%. The results were reported using Eviews 3.1 software.

The p-value associated to F-statistic of the OLS regression for 2005 is 0.302 and thus, in its whole, there is not statistical significance at a 5% level.

The results of 2005 show that the Shareholder Concentration (SHARECON) has a positive coefficient, meaning that an increase of majority shareholder' capital increases the EPS. However, this variable proves not to be statistically significant at a 5% level, which leads to the conclusion that the share concentration does not influence the EPS. Another important factor studied is the influence of the privatization. As expected, the variable PRIV has a positive coefficient which indicates that the EPS, and therefore the performance, increases after privatization. In spite of this relation, this variable is not statistically significant at the 5% level, a factor which might indicate that the privatization of some of the companies present in the sample does not influence the EPS.

The presence of the state as a shareholder is another factor which may influence the performance of a company. For 2005, the variable STATE has a negative coefficient. This, in line with was expected, indicates that if there is a state presence, the EPS tends to decrease. However, once more, the variable is not statistically significant, hence not being relevant in influencing the EPS. In regard to the SIZE variable, which represents the net profits of the previous year, the coefficient is positive and the variable is statistically significant at a 5% level. This result is consistent with what was expected, since the EPS incorporates the net profits and so proves to be a great influence on the EPS. The VOL variable that represents the yearly stock transaction volume has a negative coefficient and thus has a negative influence on the EPS. Contrary to what was expected, as the transactions increase the earnings per share tend to decrease. This variable is statistically significant at a 5% level. It symbolizes the relevance of the stock market's volatility impact on the EPS. The IND variable which identifies the industrial, construction and energy companies has a positive coefficient, as expected, which suggests that

these companies have a tendency to increase the EPS as commodity price rises. The last variable is the NYSE that represents the companies that are listed on the Dow Jones or NASDAQ indexes. It has a negative coefficient and it is not statistically significant at a 5% level. Being listed on one of the New York indexes is not relevant to explain the EPS behaviour. This result is different from what was expected. Normally, being listed on the NYSE is a factor that attracts future investors.
Since the regression is not statistically significant there cannot be concluded any influence to the EPS, despite the significance of individual variables.

In 2007, the OLS regression is statically significant at a 5% level, registering a p-value of 0.003. The SHARECON variable also has a negative coefficient. In this year the shareholder capital concentration continues to negatively influence the EPS. It continues to contradict what was expected. Despite this relation, the variable is not statistically significant at a 5% level, which indicates that the EPS continues not to be influenced by the shareholders' capital concentration.
The PRIV variable, in 2007, has a positive coefficient, aligning its behaviour with the expectations. This confirms an increase in performance after privatization. However, since the variable is not statistically significant at a 5% level, one can conclude that in this case privatization does not influence the EPS. Contrary to 2005, the variable STATE has a positive influence on the EPS, but once more it is not statistically significant at a 5% level. This fact leads to a conclusion that in 2007 the presence of the state is not relevant in influencing the EPS. The net profits (SIZE) remains, like in 2005, statistically significant at a 5% level and positively influences the EPS. The VOL variable is not statistically significant at a 5% level. The coefficient is negative, as it was in 2005, which suggests that the transactions' volume tends to decrease the EPS. The IND variable, opposing 2005, has a positive coefficient. This influence is corresponding to what was expected, showing that the increase of the commodity prices, which began in 2007, influences the EPS. Despite the positive influence, it is not strong enough as this variable is not statistically significant at a 5% level. Finally, the NYSE variable has a positive coefficient, reflecting the original expectations, but it remains not statistically significant at a 5% level and therefore being listed in the New York indexes does not influence the EPS.

For 2009, the OLS regression is not statistically significant at a 5% level (F-statistic's p-value of 0.833) and the R^2, as shown on table 6, is close to 0. The SHARECON variable continues to have a negative coefficient, confirming once more that a higher qualified position in the capital structure reduces the EPS, in opposition to what was expected. The PRIV variable, for this year,

shows a negative coefficient, differing from what was seen in the previous periods and from what was expected. The STATE variable, like in 2005, has a negative coefficient, decreasing the EPS if the State's stake in the companies increases. The SIZE variable, once more, has a positive coefficient, although lower than in previous periods. The VOL variable continues showing a negative coefficient, highlighting once more the apparent EPS decrease with a higher transaction volume, contrary to what was expected. The IND variable remains positive as in previous years, as expected, and the NYSE variable also remains positive. In spite of these interactions, none of the variables are statistically significant at a 5% level or at a 10% level. The low R^2 suggests that none of the variables used explain the behaviour of the EPS do so, and one tends to conclude that other factors not present in the model may provide a better explanation.

Additionally, it was introduced another dummy variable expressing the company's nationality (PORT), being 1 if the companies were Portuguese and 0 if the companies were Spanish. This variable is introduced to see if the performance is affected by the country in which it is listed. The results are shown in table 7.

Table 7 - Results of the OLS regression to determine if the capital structure influences performance*

Variables	2005			2007			2009		
	Coefficient	t-Statistic	p-value	Coefficient	t-Statistic	p-value	Coefficient	t-Statistic	p-value
Constant	0.846	1.809	0.079	-3.879	-0.407	0.686	5.611	1.236	0.223
Shareholders									
Concentration (SHARECON)	0.237	0.306	0.762	-5.107	-0.315	0.754	-3.112	-0.413	0.682
Privatization (PRIV)	0.052	0.108	0.915	3.738	0.430	0.669	-2.378	-0.562	0.577
State as Shareholder (STATE)	-0.001	-0.003	0.997	0.016	0.002	0.999	-1.155	-0.274	0.785
Net Profit of Previous Year (SIZE)	0.079	1.930	0.061	1.057	2.422	0.020	0.033	0.253	0.801
Stock Yearly									
Transaction Volume (VOL)	-0.279	-1.838	0.074	-2.196	-1.173	0.247	-0.338	-0.506	0.615
Industry, Construction, Energy (IND)	0.444	1.202	0.237	1.992	0.272	0.787	3.389	1.008	0.319
Listed in the NYSE (NYSE)	-0.212	-0.265	0.793	12.802	0.750	0.457	0.396	0.050	0.960
Nationality (PORT)	-0.782	-2.055	0.047	2.247	0.311	0.758	-4.089	-1.288	0.204
R-squared	0.270			0.371			0.097		
F-statistic	1.711			3.244			0.617		
p-value	0.128			0.005			0.759		
N	47			55			53		

* The OLS regressions were made using the dependent variable earnings per share and explanatory variables SHARECON, PRIV, STATE, SIZE, VOL, IND, NYSE and PORT. The p-value level used to determine the significance is 5%. The results were reported using Eviews 3.1 software.

The results are similar to the ones obtained using the original model. In 2005, the R^2 increases slightly but the p-value associated to the regression F-statistic remains higher than the 5% level, which makes it not statistically significant. The only variables statistically significant are the SIZE, VOL and PORT variables. However, the coefficient associated to the latter variable is negative.

For 2007, the results are identical to those found earlier. The R^2 is 0,371, the higher of the three years, and the p-value associated to the regression F-statistic is below the 5% level, therefore making it statistically significant. The variables are all not statistically significant, except for the SIZE variable which is the only influencing the EPS.

In 2009, the R^2 remains near 0 and the regression is not statistically significant at a 5% level. The p-value associated to the F-statistic is 0,759. All the variables are not statistically significant.

Taking only the results of 2007 (the only regression statistically significant) into account, there is a significant positive relation between the net income and the earnings per share. In addition, there seems to be a slight negative association between capital structure and the earnings per share and a positive association with the privatization process. However these last two indications are not strong enough, as both variables are not statistically significant. These results were unable to provide the same conclusions of McGuinness and Ferguson when studying the Chinese markets.

The results may differ from what was originally expected because the years used correspond to the beggining of the financial crisis, which had a negative influence on the companies'results. Another factor that could have affected the results is the fact that only listed companies were studied. Therefore, both privatized and SOEs (companies with the state as a shareholder) have to be similarly organized and follow the same set of rules set by the regulator committees in both countries.

4. Conclusion

This study was conducted to determine whether the performance of privatized SOEs in Portugal and Spain improved after privatization, and to determine if the capital structure influenced such improvements.

The comparison of the years before and after privatization provides evidence that the differences of many indicators are not statistically significant. In 2003, apart from the sales per employee and the debt level, none of the differences are statistically significant. In 2006 however, there is no statistical significance increase in any variable for the privatized companies. When comparing the performance of privatized with that of the existing SOEs, the results confirm that there is no statistical significant increase performance.
With these results, it can be concluded that there are only greater improvements within the company, at an efficiency level, rather than performance improvements.

When analysing the influence of the capital structure on the performance of a company the results were very clear in denying such an association. Using the companies listed on the Portuguese and Spanish stock markets, there seems to be evidence that capital structure and the presence of the state as a shareholder does not influence the performance.

From the results, it can be inferred that, for the Portuguese and Spanish privatized companies during the last decade, there is not a significant increase in performance, but rather an increase in efficiency of some of the operational areas.

4.1 Limitations and Future Studies

This study has the limitation of being based on a small sample, when analysing the first hypothesis, which limits the interpretations and conclusions drawn. However, it constitutes a contribution to the research of the privatization's impact in Portugal and Spain and can be a helping tool for the development of future studies.

5. References

AHARONI, Y. (1982).” State-Owned Enterprise: An Agent without a Principal. In Public Enterprise in Less- Developed Countries”. *ed. L. P. Jones et al.*, pp. 67.-75, Cambridge University Press, Cambridge, UK.

ANDERSON, C., MAKHIJA, A., and SPIRO, M. (1997). “Foreign Ownership in the Privatization Process: Empirical Evidence from Czech Privatization”. *Working Paper*. University of Missouri and University of Pittsburgh.

ASIEDU, K. F., and FOLMER, H. (2007). “Does Privatization Improve Job Satisfaction? The Case of Ghana”. *World Development , vol. 35: 10*, pp. 1779–1795.

BEL, G. (1998). "Privatization on the Stock Market: Sale at One Go or Sale in Tranches". *Economics Letters , vol. 58*, pp. 113–117.

BEL, G., and TRILLAS, F. (2005). "Privatization, Corporate Control and Regulatory Reform: The Case of Telefonica". *Telecommunications Policy , vol. 29*, pp. 25–51.

BIAIS, B., PEROTTI, E., (1997). “Machiavellian Privatization”. *Unpublished working paper*. Amsterdam University and University of Toulouse.

BIRDSALL, N., and NELLIS, J. (2003). "Winners and Losers: Assessing the Distributional Impact of Privatization". *World Development , vol. 31: 10*, pp. 1617–1633.

BLACK, B. (2001). “The Legal and Institutional Preconditions for Strong Securities Markets”. *UCLA Law Review, vol. 48*, pp. 781−858.

BOARDMAN, A., and VINING, A. (1989). “Ownership and Performance in Competitive Environment: a Comparison of the Performance of Private, Mixed and Stateowned Enterprises”. *Journal of Law and Economic, vol. 17*, pp. 497–508

BORTOLOTTI, B., D'SOUZA, J., FANTINIC, M., and MEGGINSON, W. (2002). “Privatization and the Sources of Performance Improvement in the Global Telecommunications Industry”. *Telecommunications Policy, vol. 26*, pp. 243–268.

BORTOLOTTI, B., JONG, F. d., NICODANO, G., and SCHINDELE, I. (2007). "Privatization and Stock Market Liquidity". *Journal of Banking and Finance, vol. 31*, pp. 297–316.

BOUBAKRI, N., and HAMZ, O. (2007). The Dynamics of Privatization, the Legal Environment and Stock Market Development. *International Review of Financial Analysis , vol. 16*, pp. 304–331.

BOUBAKRI, N., COSSET, J., and GUEDHAMI, O. (2004). "Privatization, Corporate Governance and Economic Environment - Firm-Level Evidence from Asia". *Pacific-Basin Finance Journal, vol. 12*, pp. 65-90.

BOUBAKRI, N., COSSET, J., GUEDMANI, O. (2005). Liberalization, corporate governance, and the performance of newly privatized firms. *Journal of Corporate Finance, vol. 11*, pp. 767– 790.

BOUBAKRI, N., COSSETA, J., and GUEDHAMI, O. (2004). “Post-Privatization Corporate Governance: The Role of Ownership Structure and Investor Protection”. *Journal of Financial Economics, vol. 76*, pp. 369–399.

BRADA, J. C., and MA, C.-Y. (2007). "The Optimal Timing of Initial Public Offerings in the Course of Privatization: Theory and an Illustrative Application". *Economic Systems*, *vol. 31*, pp. 121–137.

CARREIRA, M. d. *"*Una visión crítica del Proceso de Privatizaciones en la Economía Española*".* Departamento de Economía Aplicada, Universidad de Santiago de Compostela.

CHONG, A., and LÓPEZ-de-SILANES, F. (2002). "Privatization and labor force restructuring around the world". *World Bank Policy Research Working Paper 2884*.

COFFEE, J. C. (1999). "The future as history: the prospects for global convergence in corporate governance and its implications". *Columbia Law School Center for Law and Economic Studies. Working paper,144*.

COMSTOCK, A., KISH, R. J., and VASCONCELLOS, G. M. (2003). "The Post-Privatization Financial Performance of Former State-Owned Enterprises". *Inernational Financial Markets, Institutions and Money, vol. 13*, pp. 19-37.

CRAGG, M. I., DYCK, I. A. (2003). "Privatization and Management Incentives: Evidence from the United Kingdom". Journal of Law, Economics and Organization, *vol. 19*, pp. 176-218.

D'SOUZA, J., MEGGINSON, W., and NASH, R. (2001). "Determinants of Performance Improvements in Privatized Firms: The Role of Restructuring and Corporate Governance". *Working Paper, University of Oklahoma*, Norman

D'SOUZA, J., MEGGINSON, W., and NASH, R. (2005). "Effect of Institutional and Firm-Specific Characteristics on Post-Privatization Performance: Evidence from Developed Countries". *Journal of Corporate Finance*, *vol. 11*, pp. 747– 766.

DAVIS, J., OSSOWSKI, R., RICHARDSON, T., and BARNETT, S. (2000). "Fiscal and Macroeconomic Impact of Privatization". *International Monetary Fund Occasional Paper No. 194*, IMF, Washington, DC.

DE ALESSI, L.,(1983). "Property Rights Transaction coSts and X-Efficiency: An Essay in Economic Theory". *American Economic Review, vol. 73*, pp. 64–81.
DJANKOV, S., MURRELL, P., 2002. Enterprise restructuring in transition: a quantitative survey. Journal of Economic Literature, *vol. 40*, pp. 739 – 792.

DJANKOV, SIMEON and MURRELL, P, 2000a. "The Determinants of Enterprise Restructuring in Transition: An Assessment of the Evidence," working paper University of Maryland, College Park, MD.

DJANKOV, SIMEON and MURRELL, P. 2000b. "Enterprise Restructuring in Transition: A Quantitative Survey," working paper, University of Maryland, College Park, MD.

DOSHI, K. (2000). "Privatization of State-Owned Enterprises in Mexico". *Journal of Public Administration, vol. 23: 5*, pp. 667-676.

D'SOUZA, J., MEGGINSON, W., and NASH, R. (2007). "The effects of changes in corporate governance and restructurings on operating performance: Evidence from privatizations". *Global Finance Journal, vol. 18*, pp. 157–184.

FARINÓS, J. E., GARCÍA, C. J., and IBÁÑEZ, A. M. (2007). "Operating and Stock Market Performance of State-Owned Enterprise Privatizations: The Spanish Experience". *International Review of Financial Analysis*, pp. 367–389.

GROSSMAN, S., and HART, O. (1986). "The Costs and Benefits of Ownership: A Theory of Lateral and Vertical Integration". *Journal of Political Economy*, *vol. 94*, pp. 691-719.

HUANG, Z., and WANG, K. (2011). "Ultimate Privatization and Change in Firm Performance: Evidence from China". *China Economic Review, vol. 22:1,* pp. 121-132.

HUSSAINI, W. A., and MOLZ, R. (2009). "A Post-Keynesian Regulatory Model of Privatization". *The Journal of Socio-Economics, vol. 38*, pp. 391–398.

JIANG, G., YUE, H., and ZHAO, L. (2009). "A Re-Examination of China's Share Issue Privatization". *Journal of Banking and Finance, vol. 33*, pp. 2322–2332.

JONES, S. L., MEGGINSON, W. L., NASH, R. C., and NETTER, J. M. (1999). "Share Issue Privatizations as Financial Means to Political and Economic Ends". *Journal of Financial Economics, vol. 53*, pp. 217 - 253.

KIKERI, S., and NELLIS, J. (2004). "An Assessment of Privatization". *World Bank Research Observer, vol. 19:1*, pp. 87–118.

KIM, K. A., and NOFSINGER, J. R. (2007). *Corporat Governance* (Second ed.). Upper Saddle River, New Jersey, United States of America: Pearson Education, Inc.

KOČENDA, E., and HANOUSEK, J. (2010, October). "Divide and Privatize: Firms Break-up and Performance". *Wirtschaftswissenschaftliche Abteilung Working Papers / Nr. 291 , Osteuropa-Institut Regensburg*.

KRUGMAN, P. and WELLS, R. (2005). "*Microeconomics*", Worth Publishers, New York, NY, United States of America.

LAFFONT, Jean-Jacques and TIROLE , Jean. (1993) "A Theory of Incentives in Procurement and Regulation". Cambridge, MA, MIT Press.
LEVINE, R., ZERVOS, S. (1998). "Stock Markets, Banks and Economic Growth". *American Economic Review, vol. 88*, pp. 537–558.

LEVY, N. (1987). "A Theory of Public Enterprise Behavior". *Journal of Economic Behaviour and Organization, vol. 8*, pp. 75–96.

LIN, C., and SU, D. (2009). "Does State Control Affect Managerial Incentives? Evidence from China's Publicly Listed Firms". *Journal of Business Economics and Management*, *vol. 10:4*, pp. 291-311.

McGUINNESS, P. B. (2005). "The ownership structure of listed Chinese State Owned Enterprises and its relation to corporate performance". *Applied Financial Economics , vol. 15:4*, pp. 231 – 246.

MEGGINSON, W. (2010). "Privatization and Finance". *Annual Review of Financial Economics, vol. 2:6*, pp. 6.1-6.30.

MEGGINSON, W. L., and NETTER, J. M. (2001). ” From State To Market: A Survey Of Empirical Studies On Privatization”. *Journal of Economic Literature*, *vol. 39*, pp. 321-389.

MEGGINSON, W., NASH, R.C., VAN RANDENBORGH, M. (1994). “The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis”. *Journal of Finance, vol. 49*, pp. 403–452.

MIZUTANI, F. U. (2010). “Determinants of Privatization of Public Corporations: Evidence from the Japanese Experience”. *Empirical Economics, vol. 39*, pp. 515–535.

NEWBERY, D., POLLITT, M. (1997). “The Restructuring and Privatization of Britain’s CEGB: Was it worth it?”. *Journal of Industrial Economics, vol. 45*, pp. 269– 303.

NG E., BARTSCH E. (2009). “European Economics and Strategy: Poor State of Government Finance and Implications for Equities”. *Morgan Stanley Research, 10.*

OECD. (2005). *Corporate Governance of State owned Enterprises - A Survey of OECD Countries.* OECD Publishing.

OECD. (2005). *OECD Guidelines on Corporate Governance of State-Owned Enterprises.* OECD Publishing.

OECD. (2009). State Owned Enterprises in China: Reviewing the Evidence. *OECD Working Group on Privatization and Corporate Governance of State Owned Assets* , available at http://www.oecd.org/dataoecd/14/30/42095493.pdf.

OKTEN, C., and ARIN, K. P. (2006). “The Effects of Privatization on Efficiency: How Does Privatization Work?”. *World Development , vol. 34: 9*, pp. 1537–1556.

OMRAN, M. (2004). “The Performance of State-Owned Enterprises and Newly Privatized Firms: Does Privatization Really Matter?”. *World Development , vol. 32: 6*, pp. 1019–1041.

OMRAN, M. (2009). “Post-privatization Corporate Governance and Firm Performance: The Role of Private Ownership Concentration, Identity and Board Composition”. *Journal of Comparative Economics , vol. 37*, pp. 658–673..

OUMA, T. H., ADLERB, N., and YU, C. (2006). “Privatization, corporatization, ownership forms and their effects on the performance of the world’s major airports”. *Journal of Air Transport Management , vol. 12*, pp. 109–121.

PEROTTI, E. C., and OIJEN, P. v. (2001). “Privatization, Political Risk and Stock Market Development in Emerging Economies”. *Journal of International Money and Finance , vol. 20*, pp. 43–69.

PEROTTI, E.C. (1995). “Credible Privatization”. *American Economic Review, vol. 85*, pp. 847–859.

PEROTTI, E.C., GUNEY, S.E., 1993. “The Structure of Privatization Plans”. *Financial Management, vol. 22*, pp. 84–98.

RAMAMURTI, R. (1997). “Testing the Limits of Privatization: Argentine Railroads”. *World development , vol. 25: 12*, pp. 1971-1993.

SALMON, K. (2001). “Privatisation of SOE in Spain: Redefining the Political Economy”. *International Journal of Iberian Studies, vol. 14: 3*, pp. 136–147.

SHIRLEY, M. M. (1999). “Bureaucrats in Business: The Roles of Privatization versus Corporatization in State-Owned Enterprise Reform”. *World Development , vol. 27: 1*, pp. 115-136.

SHLEIFER, A. (1998).“State Versus Private Ownership”, *Journal of Economic Perspectives, vol. 12*, pp. 133-150.

SMITH, S., CIN, B., and VODOPIVEC, M. (1997). “Privatization Incidence, Ownership Forms and Firm Performance: Evidence from Slovenia”. *Journal of Comparative Economics, vol. 25*, pp. 158−179.

VINING, A., and BOARDMAN, A. (1992). “Ownership Versus Competition: Efficiency in Public Enterprise”. *Public Choice, vol. 37*, pp. 205–239.

WALLSTEN, S. J. (2001). “An Econometric Analysis of Telecom Competition, Privatization, and Regulation in Africa and Latin America”. *Journal of Industrial Economics, vol. 49*, pp. 1–19.

WHILHEM, William J., Jr. (2005). *“*Bookbuilding, Auctions, and the Future of the IPO Process”. *Journal of Applied Corporate Finance, vol. 17:1*, pp.3.

WOLF, C. (1988). “Markets or Governments? Choosing Between Imperfect Alternitives”. MIT Press. Cambridge,MA.

ZINNES, C., EILAT, Y., SACHS, J. (2001). “The gains from privatization in transition economies: Is change of ownership enough?”. *International Monetary Fund Staff Paper, vol. 48*, pp. 146–70.