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UNDERGRADUATE FINAL PAPER

**PERFORMANCE ANALYSIS OF STATE-OWNED ENTERPRISES
AND PRIVATE FIRMS IN SLOVENIA**

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JAKA VRHOVNIK

AUTHORSHIP STATEMENT

The undersigned Jaka Vrhovnik, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), author of this written final work of studies with the title PERFORMANCE ANALYSIS OF STATE-OWNED ENTERPRISES AND PRIVATE FIRMS IN SLOVENIA, prepared under supervision of doc. dr. Matjaž Črnigoj

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INTRODUCTION

This research investigates possible connections between ownership type – private/state-owned and performance. It is a widespread belief that companies owned by the state are generally less efficient and competitive on the market than their privately owned counterparts. Because of this, many people advocate privatization as a solution for the problems connected with the state-owned enterprises. What many of them fail to notice is that privatization, and the effect it has on the companies, differs between traditional market economies and transition economies.

Countries with market economies rely on the companies present within its borders to contribute (via taxes and employment) towards social and economic stability. Countries collect corporate tax, which they use to provide public goods and services to companies and citizens. Since companies play such an important role in a countries' economy, it is in the best interest of governments to create a positive business environment, which promotes investments and growth. This can be achieved through a transparent legislation, competitive tax rates, and efficient bureaucracy.

Primary objective of most companies is to generate profit with market forces of supply and demand. This is the case in most private enterprises, unless the shareholders decide differently. State-owned enterprises (hereinafter: SOEs) on the other hand do not always pursue profit maximization as their primary goal (Jiang, 2010). In many cases, the main purpose of SOEs is to provide the citizens (i.e. taxpayers) with public goods and services. SOEs that pursue maximization of profit as their main objective are most commonly found in natural monopolies. They are frequently present in industries such as infrastructure, telecommunications, strategic goods and services, natural resources, energetics as well as demerit and merit goods (Shirley, 1983).

Enterprises employ, managers, also called agents, who are professionals hired by the owners, also called principals, to run day-to-day business in a company. Their primary task is managing the operating aspect of the business in accordance with goals set by the owners, which usually means maximizing their wealth. Although the theory on corporate finance does advocate maximizing shareholder value as companies' primary objective, it was found that practice does not always follow theory. A research by Brounen, de Jong and Koedijk (2004) surveyed 313 European Chief Financial Officers (hereinafter: CFOs) on various aspects of corporate finance. Results indicate that CFOs in Germany and France consider maximization of shareholder wealth to be significantly less important than CFOs in UK and Netherlands do (Brounen et al., 2004). Disagreements arise because agents are motivated by self-interest, and agents own best interests may differ from the interest of the owner. This is what is called the "agency problem" or the "agent-principal problem". While it is not possible to eliminate the agency problem completely, the manager can be motivated to act in the shareholders' best interests through the use of incentives. Corporate

governance in SOEs is looser than in private companies. This often results in a lack of control over the agents. It also means that the chance for the agent to make decisions that will maximize shareholders wealth drops significantly. Lack of control over the agents can be seen in the decline of company's performance and its ability to generate profit (Tirole, 1998).

Slovenia is one of the many European countries that went through transition process after its independence from Yugoslavia in 1991. Privatization in Slovenia was not as effective as it could have been. This is due to factors, which originate from slow legislative and regulatory process and which have been preventing fast, transparent, and effective privatization. The legal and regulatory framework adopted to guide privatization was introduced based on flawed assumptions. Evidence shows that privatization has been characterized by limited (foreign) competition, lack of transparency, and low speed. Ignoring the transitional issues Slovenia has wasted the momentum for fast and orderly privatization and made search for better ownership solutions even harder (Simoneti, Böhm, Rems, Rojec, Damjan, & Majcen, 2001). Smith, Cin and Vodopivec (1997) offer a possible solution for this problem in a form of a transparent privatization of the remaining SOEs¹ to foreign investors who would increase their value.

This study focuses on performance comparison between private and SOEs in Slovenia. It will contribute to an already extensive literature on private vs. SOE performance. Whereas most studies encountered so far have focused mainly on analysing company performance before and after privatization, it is my goal to compare the performance of existing private firms and SOEs in Slovenia. This approach will provide a different insight into the performance of SOEs. It has now been more than 25 years since Slovenia's independence and its transition to market economy. This should serve as a sufficient period of time for observation of any significant differences in performance that has occurred, as a result of different governance and managerial practices. An analysis of key financial ratios should then provide us with an answer to the following research question: Which type of ownership is more beneficial for the financial performance of the company?

A quantitative research method will be applied to provide and answer to the research question. It is my hypothesis that SOEs perform worse than those under private ownership. There have been many studies conducted in this field that support this prediction. Following the existing literature, I have decided to conduct a research on this subject within the same methodological framework – T-test and multiple regression analysis. To analyse the effect of ownership type on company performance, a statistical analysis has been conducted on the sample chosen for the study. A series of financial ratios have been chosen as proxies for company performance.

¹ Here I am refereeing to those companies that Slovenian government has announced to sell in accordance with its State Assets Management Strategy 2015.

Results of the independent samples T-test indicate that private companies have higher group mean average values of return on assets, return on equity and profit margin ratios. However, SOEs have displayed higher value added per employee group mean average. Regression analysis exhibited similar results. Again private companies displayed significantly higher values of return on assets, return on equity and profit margin, while SOEs displayed significantly higher value added per employee. Results are intriguing because I did not expect that SOEs would outperform private companies in any of the four performance indicators.

Due to the specific conditions under which the privatization in Slovenia was carried out (transition from socialism to market economy), this study could provide a useful starting point for anyone interested in comparing performance of SOEs between transition economies, i.e. post-communist/socialist countries, and traditional market economies such as those in developed countries. Privatization process was significantly different in transition economies, as opposed to developed countries, mainly due to the scale of privatization (nation level) and different, i.e. underdeveloped, legal, and institutional framework, as Estrin, Hanousek, Kočenda and Svejnar (2009) and Aussenegg and Jelic (2007) have indicated in their studies.

This research could also provide a basis from which further arguments could be developed in support of the continued privatization process in Slovenia². Privatization is a subject of prolonged discussion in Slovenia, with politicians, politically affiliated managers, and supporters of “national interest” on one pole and everyone else on the other. There is a reluctance and fear felt at the mention of the word privatization because of the constant propaganda spread by the media and certain left wing politicians. I hope that this study will shed some light (and reason) on this subject and thus helping to clear any misconceptions created among the citizens.

The remainder of this bachelor thesis is organised as follows. Following this is the chapter on ownership and company performance, which introduces the relevant literature on company performance and some theory regarding owners’ role in a company and state-owned enterprises in Slovenia. After that, I introduce the research question and hypothesis of the study in chapter 2. Chapter 3 describes data and methodology used in this study. In chapter 4, I describe findings and results of the research. Chapter 5 is a conclusion of the study and a summary of the findings.

OWNERSHIP AND COMPANY PERFORMANCE

² Arguments would only be valid if the research will reveal that SOEs are indeed performing worse than private companies are.

1.1 Performance of state-owned enterprises

It is a widespread belief that state-owned enterprises generally perform worse than privately owned companies. This is mainly due to the fact that scattered ownership in SOEs prevents effective control over the management (Stan, Peng, & Bruton, 2013). The field of privatisation and its impact on company performance has been debated far and wide. Even though many papers have been written on this subject, there is still no solid evidence if this hypothesis is true. My review of the literature on this subject has revealed that there are many factors to consider when embarking on a research into this field. Although privatisation is a pretty straightforward process in itself, it is the countries' different political and economic backgrounds play an important role in determining whether it will be a successful one.

Damijan, Gregorič and Prašnikar (2004) have examined how ownership concentration influences firm performance in Slovenia. They have conducted a regression analysis using ROE, ROA or cash flow as dependent variables and alternative definitions of control as explanatory variables. Results of the analysis have provided evidence that firms controlled by domestic non-financial owners and insider owners, when aggregately holding dominant ownership blocks, perform better than firms controlled by state-controlled funds.

A research by Rojec, Damijan, Simoneti and Majcen (2003) was comparing mass privatization programs for listed and non-listed companies with government led pre-privatization restructuring program. They found that companies owned or sold by mass privatization institutions have indicated better performance when compared to companies which were owned or sold by the state. Strong results were acquired using the total factor productivity model, by studying both static and dynamic versions of the model.

Aussenegg and Jelic (2007) researched the operating performance of privatised firms in three Central European Transition Economies between 1990 and 1998. They noted that privatisation in transition economies differs from those in developed markets (non-transition economies). They have perceived that the size of privatisation programmes is much larger and that privatisations are considered a part of a wider reform of political and economic systems. Additionally in all transition economies, the state has continued to hold shares in the vast majority of privatised companies. Their research provided no evidence of a significant improvement in operating performance of the companies for the first six years after privatisation. Their privatised firms experienced no improvement in profitability, capital investments, efficiency, and output, only a significant drop in employment, as well as a significant increase in leverage.

Two meta-analyses have been conducted on privatization in Central and Eastern European countries (CEE) and Commonwealth of Independent States (CIS) countries. First was by Megginson and Netter (2001) who have conducted a meta-analysis of 18 studies on

company performance after privatization in transition economies. Studies covered CEE states and CIS countries between the period from 1996–2000. Authors have concluded that the general effect of privatization was beneficial. In most countries, private firms perform better than SOEs. Privatization has a larger effect in CEE countries than in CIS countries. They conclude that most beneficial effects of privatization come from change in ownership structure combined with institutional reforms. Authors Estrin et al. (2009) conducted a second meta-analysis on the effects of privatization in post-communist countries. The research captured all CEE countries and CIS countries. They separately analysed the impact of privatization on efficiency, profitability and other indicators and distinguish between studies on the basis of their econometric methodology. Their findings revealed that the effect of privatization was mostly positive in CEE countries and insignificant in CIS countries. A distinction is observed in both cases among performance improvement depending on the ownership type. In the companies where the new owners are domestic, the performance increase has been much lower than in companies that were sold to foreign owners. The authors addressed the problem by stating that the findings may reflect limited skills of the local managers and accessibility of the world markets.

Domestically owned privatized firms are consistently linked with activities that damage company performance. Among most commonly encountered are looting, tunnelling, and defrauding³ of minority shareholders. Finally, in a number of countries, the nature of the privatization process was such that it initially prevented large domestic private owners from acquiring full ownerships of the companies in the process. Instead insiders or the state obtained significant shares (Hanousek, & Kočenda, 2008). Large shareholders often required long periods of time to squeeze out minority shareholders using such practices as decreasing the company's performance in order to lower the share prices and to dispose of minority shareholders (Estrin et al., 2009).

Authors Astami, Tower, Rusmin and Neilson (2010) assert that because the ultimate owner of the SOEs is the general public, they are in no position to directly supervise the SOEs to ensure that they are well managed. They continue that loans to SOEs are public debt; as a result, overt discipline from creditors does not play much of a role for the manager of SOEs. Nevertheless, accounting losses that are reported by SOEs will generally be covered by other governmental funds. Fully governmental-owned SOEs may thus have inadequate monitoring mechanisms and related lesser pressure for their management, which may result in higher agency costs and inferior performance.

³ Definition of terms related with looting, tunnelling and defrauding:

1. Nepotism - The unfair practice of giving jobs and other favours to friends and relatives coming from a powerful or influential individual.
2. Embezzlement - To steal money that you have been trusted with.
3. Graft – The unethical use of political power and influence for personal gain.
4. Influence peddling - the illegal practice of using one's influence in government or connections with persons in authority to obtain favours or preferential treatment for another, usually in return for payment.

The study of Abu-Tapanjeh (2006) examines how ownership structure influences firm profitability, taking into consideration such major factors as firm size, firm age and debt ratio. He tested his theory on a sample of 48 Jordanian companies. He finds negative significant correlation between government ownership and return on equity. In this specific case of Jordan economy, the difficulties are enlarged due to the instability of the economic environment. This country went through the process of monetary adjustment and economic crisis, which also has an impact due to the uncertainty of the local economy as well as the external unstable environment.

Authors Tsgeba, Herbert and Ene (2014) investigate the relationship between corporate ownership and corporate performance of listed companies in Nigeria. They compare the impact of different ownerships (foreign, concentrated, internal/managerial) on three measures of company performance (market price per share, earnings per share, return on assets). They have found a negative relationship between company performance and concentrated ownership and a significant negative relationship between firm performance and insider ownership. Foreign ownership indicates distinct advantages in relation to internationalization, such as managerial expertise, access to production technology, capital and markets. Because of the competitive advantage of these factors it is possible to expect a significant positive relationship between firm performance and foreign ownership.

Bashir, Riaz, Butt and Parveen (2013) compared performance of 100 Pakistani companies listed on Karachi Stock Exchange from 2008 to 2011. The sample contained 50 private and 50 state-owned companies. Authors determined firm's performance based on financial leverage, Tobin's Q, earnings per share, profit margin, asset turnover ratio and return on assets. The data was analysed using statistical tools, OLS, Correlation and T-Test. They concluded that privately owned firms performed better than state-owned ones. All independent variables except Tobin's Q indicated a significant relationship with dependent variable, which ultimately contributes toward a higher performance. Statistical differences were insignificant between private and state-owned firms. Authors explain that this could be due to the fact that private firms face less agency problems between management and equity holders and trim downs transaction cost.

Researchers Dewenter and Malatesta (2001) analysed the performance of 1,369 of the world's largest firms based on Fortune 500 data. Out of 1,369 firms sampled, 147 were government owned. They have used the data published in the years 1975, 1985 and 1995 respectively. Authors examined three general aspects of the firm: profitability, leverage, and labour intensity. Data was analysed using a simple univariate comparison and a multivariate regression. The results were the same in both analyses: government owned firms are significantly less profitable than privately owned firms. Government firms tend to use more leverage and greater labour intensity than private firms. Even though government firms are less profitable than private companies, the authors do not find any evidence suggesting that firm profitability increases after privatization. According to the

authors, improvement in profitability usually occurs three years before privatization. They also note that most of the accounting measures of profitability are actually lower during the five years following privatization than during the three years before. This suggests that governments efficiently restructure at least some firms before selling them.

Authors Boubakri, Cosset and Guedhami (2001) tested a sample of 201 firms headquartered in 32 developing countries to answer the question when and how privatization works. They documented a significant increase in profitability, efficiency, investment, and output. Using univariate tests, they show that corporate governance mechanisms and economic reforms and environment have an effect on the changes in operating performance. They find that privatization yields better results when stock market and trade liberalizations precede it. Using a regression analysis they have managed to prove that economic reforms, environment and corporate governance can explain the changes in performance that have occurred in the post-privatization period. Particularly, economic growth, control relinquishment by the government and foreign ownership are key determinants of profitability changes. They also find higher improvements in efficiency and output for firms in countries in which stock markets are more developed and where property rights are better protected and enforced. Finally, they conclude that open trade plays an important role in increasing investment in the post-privatization era.

In his research, Alipour (2013) questioned if privatization indeed improves company performance. He analysed 35 firms listed on the TSE (Teheran Stock Exchange) that were privatized in 2000. The performance of these firms was determined by three factors: return on equity, return on assets, and return on sales. Companies were observed in three different periods: one pre-privatisation period (1998–2000) and two post-privatization periods (2001–2003 and 2004–2006). The author found that privatization did not have a positive effect on the profitability of the firms; rather, the effect has been negative. Furthermore, the result revealed that privatization of these firms has had no effect on their sales effectiveness and efficiency; instead, their debts and risks have increased. The answer to the question why privatisation has failed can be found in the research of Wu (2007). Wu states that performance improvement of privatized firms cannot be taken for granted merely by ownership change. Instead, the performance gains of privatization could be realized only in the concert with other institutional arrangements, including market openness, the modest and short-term bureaucratic control after privatization, and corporate health prior to privatization.

Conclusions and findings from the above-mentioned literature can be divided into two groups. First is where privately owned companies were performing better than SOEs (Basheer et al., 2013; Dewenter & Malatesta, 2001; Boubakri, Cosset, & Guedhami, 2001) and second where there is no difference in the performance of privately owned and state-owned companies (Aussenegg, & Jelic (2007); Alipour (2013)). Trying to explain this occurrence, we must look into the economic background the countries where research took

place. Estrin et al. (2009) rightfully highlight the importance of good management, transparent corporate governance, access to world markets, and the presence of a functioning legal and institutional framework on companies' performance. We can conclude that privatization process results in better overall company performance in countries where legal and institutional environment is more developed. That may be one of the reasons why in some transition economies of Central and Eastern Europe privatization was so inefficient. Lack of transparency during privatization of SOEs meant that there have been ample opportunities for under-the-table deals, the results of which were damaging for the companies and their shareholders.

1.2 Owners' role in the firm

An owner or an investor in equity capital of the firm is a person who has committed capital into a company with an expectation of a future financial return. In return, he receives a share of the company, which is proportional to the money invested. By owning shares, he becomes a shareholder, which gives him certain rights within the company. These rights can enable him to vote the members of the board of directors, vote in the case of acquisitions and mergers; he is entitled to a share of the companies' assets in the case of liquidation and has the right to receive a portion of the dividends if the company declares them. Shareholders' rights are defined in the corporation's charter and bylaws (Hiller, Westerfield, Jaffe, & Jordan, 2013).

The main role of shareholders (owners) within a company is to monitor the managers who run the operational part of the corporation. It is in the owner's interest to push through decisions that would increase firm value. These changes are often not coordinated with the incentives of management who prefer a less transparent environment in which they can increase their perquisites. Since managers are prone to act in their own self-interest rather than in the interest of the shareholders, it is necessary that corporate governance mechanisms empower the owners by giving them strong rights to monitor and discipline the management. Shareholder rights define the balance of power between principals and agents (Fox, & Lorsch, 2012). Jiang and Anandarajan (2009) found that stronger shareholder rights are associated with higher earnings quality. However, when firms' stocks are held predominantly by institutions with short investment horizons (transient institutions), the role of shareholder rights in constraining aggressive and opportunistic management of earnings is significantly diminished or rendered essentially ineffective. They believe this is because short-term investors pressure the management into fixing the accounts in order to indicate better company performance that would increase share price.

1.1.1 Private companies

Private companies are business entities that exist on the market to fulfil the demand by supplying products or services to consumers. Ownership in companies is usually limited to

a relatively small number of investors. Private companies can take on many organizational forms, from single man sole proprietorships to large joint-stock companies. They generate revenue and create profit, which is then split into two categories. A proportion of the profit is split among the owners (shareholders) as a form of reimbursement for the investment that they have made into the company. A part is retained within the business entity in the form of reserves and retained earnings. It is the main objective of most private enterprises to maximize company value or profits.

Most private companies operate under the principal of limited liability. This means that partner or shareholder of the company is not personally responsible for business debts and obligations. This means that, if the firm goes bankrupt or is sued, only the assets of the company are in play. The owners' personal wealth (house, car, and savings) is not at risk of being seized.

1.1.2 State-owned enterprises

State-owned enterprise is a business entity the major owner of which is a government or a country. SOEs have two distinct performance dimensions by which they measured: social or economic. The latter being the same as in private companies: maximizing economic benefits for the principals. Social objectives of the SOEs are focused on the redistribution of wealth and goods among the citizens, maximizing social welfare and providing employment protection. SOEs are commonly found in emerging economies, but they are also present in developed countries in certain industries such as energy, transport, infrastructure, utilities, communication and certain natural resources (Aharoni, 1981). The logic behind this is that the state considers certain industries and resources to be strategically important and wants to maintain control over them. Another justification of state ownership is natural monopoly where the state takes on a distributional role to ensure that all citizens get a fair share of goods. The third reason for state intervention on the market is to prevent social disasters that may occur when huge companies go bankrupt. The state interferes in the economy either by temporarily nationalizing the company or implementing a series of soft-budget constraints⁴ (such as subsidies) that would ensure its survival (Stan et al., 2013).

⁴ The soft budget constraint (hereinafter: SBC) or soft budget constraint syndrome is a concept first introduced by Janos Kornai in 1979. It is a behaviour that is common in SOEs that generate consistent losses. Such firms begin to rely on the government to bail them out with subsidies or other financial incentives (Kornai, Maskin, & Roland, 2003; Lin & Tan, 1999). Many of the problems faced by SOEs, such as low efficiency and profitability, are traced to SBCs, due to the fact that firms can trust the state to come to their rescue should they come into trouble (Kornai, 1992). The behaviour of SOEs is influenced by the implicit governmental safety net that insures their survival. Kornai presented a strong case, revealing how the centralized economies of Eastern Europe were rife with soft budget-constraints. When compared with more decentralized economies of the West the latter have seemed far less prone to the syndrome, although they are by no means immune (Maskin, 1994).

The main advantage of SOEs is its capacity to spread financial risk over the diversified portfolio of millions of individuals (citizens) and institutions. By diversifying risks that would otherwise be borne by owner-entrepreneurs and by facilitating the creation of a liquid market for exchanging risk, the SOEs lowered the cost of capital. These also allowed risk to be borne by investors who are best able to bear it, without requiring them to manage the corporations they owned (Jensen, 1989).

Theoretically, SOEs are owned by all the citizens in a country. In reality, they are controlled by state politicians and bureaucrats. Citizens have no say in the decision-making and governance of the companies they are supposed to own. SOEs are usually run in accordance with politicians' goals, which have more to do with their political interest than with social or economic performance. Because the profits generated by SOEs go to the government and not to the bureaucrats there are more incentives for corruptive behaviour than with their counterparts in private companies (Shleifer & Vishny, 1993). Examples of this can be examined in SOEs in Russia in the 1990s and Cuba today. Overall, political interference causes lower transparency and a shift away from companies' original goals (Stan et al., 2013).

SOEs in Slovenia continue play an important role in our economy. The state continues to hold on to some of the most important companies in industries such as banking, insurance, logistics and transport, telecommunication and manufacturing. Slovenia's degree of state ownership in the economy remains one of the highest in the OECD, with majority-and partially-owned SOEs accounting for almost 11% of employment – more than triple the OECD average. Bad corporate governance practices, such as lack of control over the management and non-transparent dealings, have led to huge losses in Slovenian SOEs (OECD, 2015). With the spread of financial crisis, the real picture regarding the state of Slovenian SOEs began to emerge. Instead of trying to minimize its loses by selling the troubled companies or letting them go bankrupt, Slovenian government had instead decided to implement a series of soft budget constraints (most in the form of state subsidies) in order to try to save those companies. In order to fix the open hole that had appeared in Slovenian banks as a result of bad loans (a consequence of political affiliation and cronyism), the government resorted to heavy borrowing which greatly increased the countries' public debt, from 21.6% of GDP in 2008 to 80.8% of GDP in 2014. After the bail-out the banks have passed a strict credit policy which cut the supply of money to most of the economy. Because the firms were cut off from debt capital, their liquidity plummeted as well. As a result, many firms which did not have enough reserves became insolvent and went bankrupt (OECD, 2013).

The situation in Slovenia (today) is improving, but at a creeping pace. The situation has improved recently, thanks to major policy initiatives to strengthen the banking system, enhance bankruptcy legislation, reform labour market policies, and support low-income households through the tax-and-transfer system. Slovenia needs to increase its productivity

levels and prepare the ground for faster convergence in per capita income. Corporate governance of the SOEs needs to be improved, through appointment of independent and professional board members. Competition policy should be strengthened and a reduction of state ownership in the economy would be beneficial (OECD, 2014).

1.3 Privatization in Slovenia

Privatization is a process of transferring ownership of property or business from a government to a private entity. The most common reason for privatization is to substitute inefficient and often politically influenced state ownership with more efficient private ownership (Poole, 2008). Inefficiency of SOEs usually originates from dispersed and inefficient ownership and from reliance on government bailouts which lead to soft budget constraints. Since it is unlikely that the state will allow large SOEs to fail (go bankrupt), there is less pressure from capital markets and the risk of financial distress is not as threatening as it is in private firms. Megginson and Netter (2001) present their view on the inefficiency of SOEs stating that: “Government’s inability to credibly commit to a policy can significantly reduce the efficiency of SOE’s operations and governance. Even if the government does attempt to maximize social welfare ... (it) is a difficult thing to measure...In addition, the government’s goals can be inconsistent with efficiency and maximizing social welfare or even malevolent.” Even though there are many arguments that advocate privatization, it should be noted that the state should not completely withdraw itself from the markets. Regulation and control are still necessary as they provide stability and prevent private firms from engaging in illegal and corruptive practices.

Privatization in transition economies, such as Slovenia, is different from those in developed countries. Most notable difference is in the scale of privatization. In transition economies, privatization process had occurred over a relatively short period of time during which a large number of SOEs were privatized. This is a direct result of large scale nationalization of the economy that was carried out during the socialist/communist regime. During that time, governments have established what is known as a centrally planned economy. Following the collapse of the Eastern Block and Yugoslavia most newly independent countries adopted market economy, in order to be able to compete with the developed markets in the West and to jump-start their economic growth. During that time, privatization was believed to be the key to the entire transition process. The reasoning behind it was successful experience with privatization in developed economies and evidence from other countries that emphasized improvements in enterprise efficiency (Estrin et al., 2009).

Estrin et al. (2009) investigate the effects of privatization in CEE and in CIS countries over a period of fifteen to twenty years. Table 1 outlines the scale of privatization in each country across the seventeen-year period. We can see that some transition countries privatized up to 70% of its economy in less than 10 years (such as Czech and Slovak

Republic), while other were not so successful in their endeavour (such as Slovenia, Russia and Ukraine)⁵.

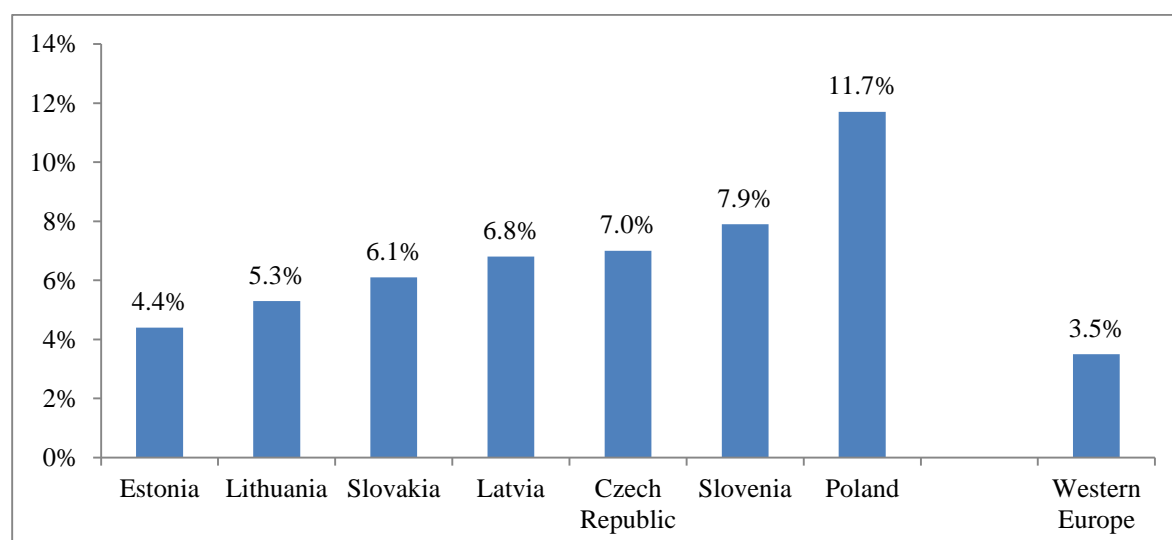
Table 1. Private sector share of gross domestic product (1990-2006)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CZE	10	15	30	45	65	70	75	75	75	80	80	80	80	80	80	80	80
HUN	25	30	40	50	55	60	70	75	80	80	80	80	80	80	80	80	80
POL	30	40	45	50	55	60	60	65	65	65	70	75	75	75	75	75	75
SVK	10	15	30	45	55	60	70	75	75	75	80	80	80	80	80	80	80
SVN	15	20	30	40	45	50	55	60	60	60	65	65	65	65	65	65	65
EST	10	10	25	40	55	65	70	70	70	75	75	75	80	80	80	80	80
LVA	10	10	25	30	40	55	60	60	65	65	65	65	70	70	70	70	70
LTU	10	10	20	35	60	65	70	70	70	70	70	70	75	75	75	75	75
BGR	10	20	25	35	40	50	55	60	65	70	70	70	70	75	75	75	75
ROU	15	25	25	35	40	45	55	60	60	60	60	65	65	65	70	70	70
RUS	5	5	25	40	50	55	60	70	70	70	70	70	70	70	70	65	65
UKR	10	10	10	15	40	45	50	55	55	55	60	60	65	65	65	65	65

Source: Estrin et al., *The Effects of Privatization and Ownership in Transition Economies*, 2009, p. 699–728.

The scale of privatization in CEE countries can be seen also in the graph below. It presents the share of employment in SOEs by individual country. All countries included are ex-socialist/communist countries. Western Europe average is included as a reference.

Figure 1. The percentage share of employment in state-owned enterprises in total employment in 2010



Source: Zalicki, *Privatization in Central and Eastern Europe*, 2013.

⁵ Although it is not the goal of this study, it would be interesting to test the theory if large scale privatization in the period immediately after transition, results in better economic performance today.

Slovenia began its transition after gaining its independence in 1991. The most important goal of economic policy immediately after achieving sovereignty was the implementation of privatization. There was a split of opinion, about how to privatize social property, between the left and right political elite. In 1992, the Parliament passed the Law on the Transformation of Social Property, which allocated firm's shares between insiders (workers), investment funds, National Pension Fund and Restitution Fund. Main goal of the first privatization phase was the transformation the ownership structure of SOEs. Some 40 percent of the company shares were given to worker's council or board of directors who were committed to selling them on to insiders or outside investors, 20 percent was to be allocated to employees and the remaining 40 percent was transferred to pension, restitution and development funds. Even though the enterprises could choose among different privatization methods, the internal buy-out of shares and internal division of the remaining shares were the most popular. A second method was available as a combination of public auction with internal distribution of shares, which was the preferable choice of large firms (Simoneti et al., 2001).

By the end of the millennia, the first phase of privatization was almost completed. The majority of small and medium sized enterprises in Slovenia were controlled by state funds, investment funds, and insiders (managers and workers). Large firms were mostly controlled by state funds and investment funds due to their size and dispersed ownership. The process of privatization in SMEs was successful, which allowed them to quickly buy-out the shares owned by the state and investment funds. The situation in large Slovenian companies was not so straightforward. The state retained control over these enterprises through the indirect ownership of various investment funds. The politicians soon found a loophole in legislation that enabled them to control the supervisory boards of these quasi-privatized firms and consequently influence the appointment of managers (Domadenik, Prašnikar, & Svejnar, 2014).

The second wave of privatization, which was aimed at selling the SOEs to private owners, begun in 2001 with a managerial buy-out of a large Slovenian company called BTC. This event had spawned a succession of other similar managerial takeovers. In the case of BTC, the companies' cash flow had been used to finance the buy-out. All the successive takeovers were initiated by politically affiliated managers of those with close ties to various political elites. Result of the second wave of privatization, which had ended in 2008, was a few successful cases, while some of the largest Slovenian firms ended up indebted and bankrupt or had their shares seized by the banks. Meanwhile the politicians continued to exert their will and power over SOEs by appointing politically selected supervisors who in turn elected politically affiliated managers who were never held accountable for their actions of poor management and abuse of position (Domadenik et al., 2014).

As a part of national reform program a new state assets management strategy was formed⁶. It was put in action in April 2015. In it, the Slovenian government has committed to effectively manage state assets and reduce the involvement of the state in the economy by means of careful privatisation, as a part of wider structural reforms. In the time of writing, six major SOE has been privatised⁷ and two privatisations of major SOEs have failed⁸.

HYPOTHESIS OF THE STUDY

The main goal of this study is to examine the relationship between ownership type and company performance. Research indicates that state-owned companies (SOEs) are not as efficient as those under private ownership. In this research, I am trying to provide an answer to the question – are SOEs performing worse than private companies. To find an answer to this question it must first be broken down into testable statements – hypothesis. In the study, I will test the following hypothesis:

- H0 – SOEs generate the same return on assets as private firms in the observation period.
H1 – SOEs generate lower return on assets as private firms in the observation period.
- H0 – SOEs generate the same return on equity as private firms in the observation period.
H1 – SOEs generate lower return on equity as private firms in the observation period.
- H0 – SOEs generate the same profit margin as private firms in the observation period.
H1 – SOEs generate lower profit margin as private firms in the observation period.
- H0 – SOEs generate the same value added per employee as private firms in the observation period.
H1 – SOEs generate lower value added per employee as private firms in the observation period.

DATA AND METHODOLOGY

Data for the study was collected from the Amadeus database (Bureau van Dijk). Amadeus contains comprehensive information on around 21 million companies across Europe. It can be used to research individual companies, search for companies with specific profiles and for analysis. I have gathered data on Slovenian firms during the 5-year period from 2009 to

⁶ For more details, see Government of the Republic of Slovenia (2015), NATIONAL REFORM PROGRAMME 2015–2016.

⁷ Successful sales were made for: Adria Airways, d. d., Adria Airways Tehnika, d. d., Aerodrom Ljubljana, d. d., Elan d. o. o., Nova KBM, d. d. and Žito, d. d.

⁸ Privatizations of Cinkarna Celje, d. d. and Telekom Slovenije, d. d. have failed.

2013. This period has been chosen because it had the most comprehensive data for all the firms. Although I could have obtained data for the year 2014, I chose not to, because of the large amount of missing entries and such data would not be suitable for the analysis. Companies were chosen for the study based on their size (headcount) according to the European Commission definition for company size (European Commission, 2015). Study included medium-sized and large enterprises in Slovenia – companies that had 50 or more employees over the chosen period (from 2009-2013). After applying the filter, I was left with a sample of 683 firms. Sample consisted of 552 private and 131 state-owned companies and did not include banks or financial institutions⁹. The ratio between private companies and SOEs was roughly 4.2:1.

Data had to be adjusted before it could be used in the analysis. I had to eliminate any outliers that could have skewed the results of the analysis. To do this I have used an “Outlier labelling rule” first developed by Tukey (1977) in his work *Exploratory Data Analysis*, which is based on multiplying the Interquartile Range (IQR) by a factor (g)¹⁰ of 1.5. The factor used to detect outliers on both ends of the distribution was 2.2. This value was introduced by Hoaglin and Iglewitz (1987), who found that 2.2 is better suited for detecting outliers in a normal distribution than the old factor 1.5 was. After controlling my sample for outliers, the size was reduced for each variable. Detailed overview reporting descriptive statistics on the sample used in the analysis can be found in Table 3.

Table 2. Descriptive statistics on the final data sample

Ownership type		Profit Margin	ROA	ROE	Value added per employee
Public	Mean	,004	,007	,004	40,695
	N	66	66	66	66
	Std. Deviation	,040	,136	,047	14,961
Private	Mean	,026	,071	,018	31,361
	N	384	384	384	384
	Std. Deviation	,042	,124	,036	12,023
Total	Mean	,023	,061	,016	32,730
	N	450	450	450	450
	Std. Deviation	,043	,127	,038	12,908

Company ownership was divided into two different categories: privately owned and state-owned. Company classification has been done according to ultimate ownership of each company listed in the Amadeus database. A company was labelled state-owned if it was

⁹ Banks and financial institutions have been removed from the sample, because Amadeus database accounts for this information in a separate database.

¹⁰ For more information on the » g factor«, see the work of Tukey (1977) in the reference section.

located in Slovenia and the ultimate owner was a public authority, state, or government. Private company was defined as being located in Slovenia with the ultimate owner being other than public authority, state, or government.

Company performance was represented with a number of key financial ratios. The performance measures that used in the study were Return on Assets (ROA), Return on Equity (ROE), Profit margin (PM) and Value Added per Employee (VA)¹¹.

Return on assets (ROA) is a financial ratio that measures income to average total assets, both before and after tax. It is one of the most commonly used ratios of managerial performance. Net income is obtained from the income statement while total assets are derived from the balance sheet of the company. It is calculated as:

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Return on equity (ROE) is a financial ratio that shows the companies' ability to generate profit from shareholders investments. It is the most important accounting ratio, which measures net income to shareholders equity. It can also be used as a measure of efficiency. Rising ROE indicates that a company is able to generate profit without requiring too much capital. Additionally, it is important to know that decrease in the shareholders equity will show as an increase in ROE. It is formulated as:

$$ROE = \frac{Net\ Income}{Shareholder's\ Equity}$$

Profit margin is profitability ratio calculated as net income divided by revenue, or net profits divided by sales. Generally, profit margin reflects the companies' ability to produce a product or service at a low cost or a high price. It is not a direct measure of profitability because it is based on total operating revenue and not on the investment made in assets by the firm or an investor. It is calculated as:

$$Profit\ margin = \frac{Net\ Income}{Revenue}$$

Value Added per Employee is performance indicator that shows how well a company is utilizing its employees. Higher value means higher productivity, which is essential in profit maximization. It is calculated as:

$$Value\ Added\ per\ Employee = \frac{Value\ Added\ per\ Annum}{Total\ Number\ of\ Employees}$$

¹¹ Ratios were recapped from Brigham and Ehrhardt (2005) and Ross, Westerfield, and Jordan (2003).

First, an independent samples t-test was performed on the sample to measure the discrepancy between the means of financial ratios. The purpose of this test was to detect if statistically significant differences exist between the means of two populations. It is important to note that the t and F tests for independent means only examine means and give us no data about individual companies. Additionally, independent samples t-test does not control for any additional variables, which could affect the differences in between groups. For example, some of my variables (such as ROA) are highly industry dependent. Failing to control for the effects of industry might provide us with results that would lead us to the wrong conclusions.

Being aware of the drawbacks of the t-test, I have conducted a multiple regression analysis, which controls for industry effects, as well as company size. Industry dummy variables were created to assign each company to its depended industry. Altogether nine different groups of industry were formed and were assigned to corresponding companies. More than 54% (N = 243) of the firms in the sample were assigned to manufacturing, mining and quarrying and other industry sector, followed by wholesale and retail trade, transportation and storage, accommodation and food service activities with 20% of the sample (N = 90). To control for size, a dummy variable was used that divided the companies in two groups corresponding to their number of employees. The first group included medium sized firms (<250 employees), while the second was for large firms (>250 employees). The medium sized firms accounted for 84% of the sample (N = 378), while large firms represented the other 16% (N = 72).

Financial ratios are used as dependent variables, while company ownership dummy variable and control variables - industry and size dummy variables were included as independent variables in the regression model:

$$Y_{ij} = \alpha + \beta_1 OWNER_{ij} + \beta_2 IND_{ij} + \beta_3 SIZE_{ij} + \varepsilon_{ij}$$

Y_{ij}

= *Perfromance for company i between 2009 and 2013 measured by financial ratios*

α = *Constant of the regression equation*

$\beta_1 \dots \beta_n$ = *Partial regression coeficients*

$OWNER_{ij}$ – *Dummy variable denoting ownership for firm i in period j;*

Firm was assigned value 0 if public and 1 if private

IND_{ij} – *Dummy variable denoting industry for firm i in period j*

$SIZE_{ij}$ – Dummy variable denoting size for firm i in period j

ε_{ij} – The error term

Ordinary Least Squares (OLS) statistical technique was used to investigate the relationship between outcome and predictor variable. The Ordinary Least Squares (OLS) estimator is the most basic estimation procedure in econometrics for estimating the unknown parameters in a linear regression model. The goal is minimizing the differences between the observed responses in a dataset and the responses predicted by the linear approximation of the data (Hayashi, 2000).

RESULTS AND FINDINGS

1.4 Independent samples t-test

An independent samples t-test was conducted to compare the means of independent variables. Variables used in the test were ROA, ROE, PM and VA. Means of financial ratios were tested. Null hypothesis of a one-tailed test predicts that the means of the independent samples are equal ($\mu_{PUBLIC} = \mu_{PRIVATE}$). The results of the test are presented in Table 4. The tables report the following data: a sample mean for SOEs, a sample mean for private companies, the mean difference between the samples, t-value, degrees of freedom, 1-tailed p-value and effect size measured by Cohen's d .

Cohen's d is a common measure of effect size expressed in units of standard deviation. SPSS does not provide this information. Therefore, it had to be calculated. It is simply the difference in the two groups' means divided by the average of their standard deviations. Cohen suggested that $d = 0.2$ be considered a 'small' effect size, 0.5 represents a 'medium' effect size and 0.8 a 'large' effect size. Effect size under 0.2 is considered to be trivial, even if it is statistically significant.

Table 3. Results of an independent-samples t-test

Variables	Mean Public	Mean Private	Mean diff.	T-value	Df	Sig. (1-tailed)	Cohen's d
ROA*	0,0045	0,0265	-0,0220	-4,0635	91,49	,000	0,524
ROE*	0,0066	0,0709	-0,0643	-3,6041	84,62	,000	0,514
PM	0,0039	0,0181	-0,0142	-2,8052	448,00	,003	0,375
VA	40,6954	31,3611	9,3343	5,6077	448,00	1,000 ¹²	0,749

* Result of Levene's Test for Equality of Variances was statistically significant; equal variances not assumed (P < 0.05).

¹² The actual p value is 0.99999996.

Testing for return on assets (ROA) the mean value of SOEs was $M = 0.005$ ($SD = 0.040$) and the mean value of private companies was $M = 0.027$ ($SD = 0.042$). Result of the test was statistically significant at 95% confidence interval ($t_{91.491} = -4.063$, $p < 0.001$). We can reject the null hypothesis (equality of populations) and accept the alternative hypothesis, which states that means of SOEs are lower than means of private companies.

SOEs displayed a mean return on equity (ROE) value of $M = 0.007$ ($SD = 0.136$). The mean value for private companies was $M = 0.071$ ($SD = 0.124$). There was a significant difference in the mean ROE between SOEs and private companies ($t_{84.622} = -3.604$, $p < 0.001$). We can reject the null hypothesis (the means of the two populations are equal) and accept the alternative hypothesis. The means for ROE of SOEs are significantly lower than the means of private companies.

SOEs had a profit margin (PM) mean value of $M = 0.004$ ($SD = 0.047$). By comparison, the PM of private companies was $M = 0.018$ ($SD = 0.036$). There was a significant difference in the mean PM value between SOEs and private companies ($t_{448} = -2.805$, $p < 0.01$). This means we can reject the null hypothesis that the two populations are equal and accept the alternative hypothesis, that the means of SOEs are significantly lower than the means of private companies.

SOEs had an added value per employee (VA) mean value of $M = 40.695$ ($SD = 14.961$). By comparison, the VA mean of private companies was $M = 31.361$ ($SD = 12.023$). No significant difference was found in the mean values between SOEs and private companies ($t_{448} = 5.608$, $p \cong 1.000$). If this was a 2-tailed test, we would find statistical significance and we would be able to reject the null hypothesis. Because this is a 1-tailed test with a directional prediction we fail to reject the null hypothesis – even though statistical differences exist we cannot reject it. Nonetheless, it is possible to draw certain conclusions about this analysis. Statistical significance exists, even if we did not prove it. It would have been found, if we would predict the alternative hypothesis to be significant in the opposite direction (mean VA Private $<$ mean VA SOE). We can conclude, that SOEs indicate higher value added per employee mean average when compared to private companies. This anomaly could be the result of different industry participation of the two company groups.

Following the results of the Independent t-test, we can see that private companies perform better than state-owned ones in three out of four performance ratios. Private companies displayed higher mean average values for ROA, ROE and profit margin, while SOEs indicated higher average value added per employee. Results for the most case confirm our initial observations regarding the performance of SOEs. They are in line with the findings of Rojec et al. (2003) and Estrin et al. (2009). However, it is notable that SOEs have indicated higher value for VA. Hopefully, a regression analysis will help to clarify this anomaly.

1.5 Multiple linear regression

A multiple linear regression has been conducted to assess differences in performance between SOEs and private companies in Slovenia. Performance measures (dependent variables) used are the same as in t-test: (i) ROA, (ii) ROE, (iii) PM and (iv) VA. The performance is a function of ownership dummy (state-owned/private) and several control variables. Control variables are dummies for industry sector (agriculture, forestry and fishing; manufacturing, mining and quarrying and other industry, construction, wholesale and retail trade, transportation and storage, accommodation and food service activities, Information and communication, real estate activities, professional, scientific, technical, administration and support service activities, public administration, defence, education, human health and social work activities and other services) and a dummy for company size (medium-sized enterprise/large enterprise). Results of the regression can be found in Table 4.

Results of the regression analysis for first dependent variable predicted that ROA in private companies is higher by 2.0 percentage points (PP) compared to SOEs ($\beta = 0.020$). The results for this ratio are consistent with the finding from independent t-test. Both tests indicate that private companies have a higher average return on assets ratio. A significant regression equation was found ($F = 4.302$, $p < 0.001$), with an R^2 of a 0.089 and an *adjusted R²* of 0.069. Additionally, the model predicts significant results for companies in construction sector ($\beta = 0.018$), professional, scientific, technical, administration and support service activities ($\beta = 0.029$) and in large companies ($\beta = -0.010$).

The results of the regression analysis for ROE dependent variable predicted significant results for private companies ($\beta = 0.054$). Private companies indicate a higher ROE ratio by 5.4 PP when compared with SOEs. Both regression and t-test results indicate a higher average ROE value than SOEs. A significant regression equation was found ($F = 4.482$, $p < 0.001$), with an R^2 of a 0.093 and an *adjusted R²* of 0.072. The model additionally predicts significant results for companies construction ($\beta = 0.068$), information and communication ($\beta = -0.056$), professional, scientific, technical, administration and support service activities ($\beta = 0.071$) and large companies ($\beta = -0.033$).

The results of the regression analysis for PM dependent variable indicate that private companies have a 1.3 PP higher profit margin when compared to SOEs ($\beta = 0.013$). The results are again consistent with independent t-test. In both, private companies indicate a higher average profit margin than SOEs. A significant regression equation was found ($F = 3.283$, $p < 0.001$), with an R^2 of a 0.070 and an *adjusted R²* of 0.048. Furthermore, the model predicted significant results for manufacturing, mining and quarrying and other industry ($\beta = 0.009$), real estate activities ($\beta = 0.037$), professional, scientific, technical, administration and support service activities ($\beta = 0.023$), public administration, defence,

education, human health and social work activities ($\beta = 0.029$) and large companies ($\beta = -0.010$).

The regression model predicts that value added per employee is 8,459.3€ higher in SOEs when compared to private companies ($\beta = -8.459$). The results for this ratio are consistent with the finding from independent t-test. Both tests indicate that SOEs have a higher average value added per employee ratio. A significant regression equation was found ($F = 4.807$, $p < 0.001$), with an R^2 of a 0.099 and an *adjusted* R^2 of 0.078. Additionally, the model predicted significant results for Information and communication industry ($\beta = 10.432$).

Table 4. Results of the Multiple Linear Regression

Explanatory variables	Dependent variables			
	ROA	ROE	Profit Margin	Value added per employee
(Constant)	,001	,008	-,002	38,511
Private ¹	,020*	,054*	,013**	-8,459*
Agriculture, forestry and fishing	-,007	-,059	-,014	5,425
Manufacturing, mining and quarrying and other industry	,007	,006	,009***	1,959
Construction	,018**	,068*	,010	-2,083
Wholesale and retail trade, transportation and storage, accommodation and food service activities				
Information and communication	-,014	-,056***	,000	10,432*
Real estate activities	,024	,013	,037	-,865
Professional, scientific, technical, administration and support service activities	,029*	,071*	,023***	-,699
Public administration, defence, education, human health and social work activities	,009	,015	,029*	-2,122
Other services	-,007	-,006	-,009**	-1,755
Large	-,010	-,033**	-,010**	1,516

Notes: Ownership type is approximated with a dummy variable taking the value 0 if state-owned and 1 if private. Industry sector was assigned to each individual company *i* according to the NAVCE Rev. 2 sections (Eurostat (2008), NACE Rev. 2, Statistical classification of economic activities in the European Community). Company was assigned a dummy variable taking the value 1 for its dependent industry and 0 for all other industry sectors. Size of the companies was defined according to the average number of employees across the observed period (2009-2013). Dummy variable was assigned to each company: 0 if company was medium-sized enterprise (250 < employees) and 1 if a company was a large enterprise (250 > employees).

*Denotes significance at 1% level.

**Denotes significance at 5% level.

***Denotes significance at 10% level.

¹ Number of units tested was $N = 450$ with R^2 values of 0.099 for ROA, 0.093 for ROE, 0.070 for Profit Margin and 0.099 for Value added per employee.

CONCLUSION

In the research, I have examined performance between SOEs and private companies in Slovenia across the 5 years period (from 2009 to 2013). Given the hypothesis, the expected result of the research was that private companies will display an overall higher performance than SOEs. Most of the literature on privatization supports this fact. It also advocated the lack of control from shareholders over the management of SOEs as the main reason for their poor performance.

Two different tests have been conducted to test this prediction: first, an independent samples t-test to compare the means of the two samples and second a multiple linear regression to control for influence of industry and size. The results of the test were consistent with each other. In both tests, private companies indicated higher values of the selected financial ratios in three out of four tests. Private companies showed a significantly better performance when compared to SOEs for return on assets, return on equity and profit margin. The opposite can be said for value added per employee where results for SOEs indicate significantly higher values.

The research results demonstrate an interesting fact: SOEs show significantly higher values of valued added per employee. A reason for this could stem from the data; sample size for public companies was much smaller (15%) than the sample size for private companies. Another reason could be that the data from the database is imperfect. Amadeus database does not have the most comprehensive data capture for all the countries and it is possible that some entries might be missing.

An important and perhaps key fact to be considered when examining the results of this study is that the time period for which the data has been collected (2009–2013) corresponds to the height of the global financial crisis that begun in the USA in 2007. Global financial crisis struck Slovenia at the end of 2008 and lasted until 2013. Slovenian economy is export oriented, which means that it is highly dependent on the trade. As the crisis worsened, consumer demand in Slovenia's main export partners plummeted (Zorc, 2013).

Because of the period when the research took place, the results could be biased and in favour of SOEs. During this period, the Slovenian government had access to practically unlimited source of money through public debt, which it could use to bail out troubled companies under the state ownership. Evidence of this can be seen in growth of Slovenian public debt, which nearly doubled in the observed period from 2009 to 2013 (34.6% to 71.0%)¹³. Still, this fact alone does not explain why only the value added per employee is higher.

¹³ Source: Republic of Slovenia Statistical Office RS

Considering everything I can conclude that private companies in Slovenia perform better when compared to state-owned enterprises. The results of both independent samples t-test and multiple linear regression confirm that private companies indicate higher performance in the chosen period for three out of four financial ratios, when compared to SOEs.

Although certain evidence exists to indicate that private companies perform better than SOEs, further research should be done in this field. Most importantly, a follow up study should be done within a different time period – either in one that precedes this research (before 2009) or one that succeeds it (after 2013). This way we could obtain an additional set of results that could be compared with the current ones. This would improve an overall reliability of this study and could furthermore provide us with an insight of the effects of global financial crisis in Slovenia.

Taking into account the results of this study, a case could be made for improvement of corporate governance practices in Slovenian SOEs, as they clearly perform worse than their privately owned counterparts. I believe that improving the control over the managers of SOEs would improve company performance. If this did not prove to be the case, more dire measures should be taken in a form of quick and transparent privatization of the troubled SOEs. I believe that in doing so the state could avoid potential further losses and unnecessary investments into SOEs.

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APPENDIX

Appendix A: POVZETEK VSEBINE NALOGE

Opis področja dela in opredelitev problema

Namen te raziskave je ugotoviti, ali obstaja povezava med lastništvom in finančno uspešnostjo poslovanja podjetij v državni lasti in zasebnih podjetij v Sloveniji. Prevladuje prepričanje, da so javna podjetja manj uspešna od zasebnih. Kot morebitna rešitev za slabo poslovanje javnih podjetij se izpostavlja privatizacija. Mnogokrat se pozablja, da je uspešnost procesa privatizacije odvisna od številnih dejavnikov in se razlikuje med državami s tradicionalnim tržnim gospodarstvom ter tranzicijskimi državami.

Študija se osredotoča na analizo uspešnosti zasebnih in državnih podjetij v Sloveniji. S tem želim dodati svoj prispevek k literaturi o tej temi. Osredotočil se bom na podjetja, ki so trenutno še v lasti države in jih primerjal z zasebnimi. S tem bom omogočil drugačen vpogled v poslovanje državnih podjetij. Od slovenske samostojnosti je minilo že več kot 25 let, kar bi moralo zadostovati za ugotovitev morebitnih sprememb v poslovanju in upravljanju dveh tipov podjetij. Analiza ključnih finančnih kazalcev uspešnosti bi morala podati odgovor na vprašanje, kateri tip lastništva rezultira v uspešnejšem poslovanju podjetij.

Podjetje oz. gospodarska družba je osnovna enota gospodarstva. Od nje je odvisno celotno delovanje države. Razvoj, blaginja in bogastvo vsake države, ki deluje v tržnem kapitalizmu, so neposredno povezani z uspešnostjo poslovanja gospodarskih družb. Podjetja s svojim delovanjem (prodaja izdelkov, zagotavljanje storitev) ustvarjajo denarni tok, katerega nato uporabljajo za plačevanje zaposlenih ter davkov in prispevkov za državo. Država pobrane prihodke uporablja za zagotavljanje javnih dobrin in storitev, ki naj bi (med drugim) omogočale lažje in boljše delovanje podjetij. Ker so podjetja ključni del gospodarstva, gospodarstvo pa predstavlja glavni vir prihodkov za državo, naj bi bilo državi v interesu, da spodbuja rast in razvoj podjetij. To lahko doseže predvsem z zagotavljanjem dobrega poslovnega okolja. S tem mislim predvsem na zakonodajo in predpise, davčno politiko in storitve javnega sektorja.

Podjetje deluje uspešno oz. v skladu s svojimi namenom, kadar maksimizira svojo vrednost in tako ustvarja dobiček za lastnike. Če je podjetje v poslovnem letu ustvarilo dobiček, se le-ta razdeli med lastnike (oz. se reinvestira v podjetje), del pa se ga nameni za obvezne rezerve. To velja predvsem za zasebna podjetja. Poznamo tudi drugi tip podjetij, ki jih imenujemo javna oz. državna podjetja. Njihov primarni namen navadno ni ustvarjanje dobička, temveč je zagotavljanje javnih dobrin in storitev državljanom (Jiang, 2010). Državna podjetja pogosto srečujemo v specifičnih industrijskih sektorjih, ki zaradi svoje specifičnosti ustvarjajo pogoje za nastanek naravnih monopolov, ter v infrastrukturnih dejavnostih (npr. železnice, telekomunikacije, strateške dobrine, naravni viri, energetika, radiotelevizija, zdravstvo ipd.) (Shirley, 1983).

Managerji oz. agenti vodijo podjetja in v imenu lastnikov zasledujejo njihove cilje ter so za svoje delu tudi ustrezno nagrajani (ali kaznovani). Konstanten nadzor in strah pred posledicami delujeta motivacijsko in managerje spodbujata k boljšemu opravljanju svojega dela. V primeru pomanjkanja enega izmed faktorjev (nadzor ali kazen) lahko manager prične opravljati svoje delo slabše oz. v skladu s svojimi interesi. Takrat uspešno poslovanje podjetja ni več glavni cilj managerjev, kar se kmalu pozna na dobičku in drugih dejavnikih (motivacija zaposlenih, odnos s kupci...). Temu pojavu pravimo problem agenta. Rešitev konflikta med agenti (managerji) in principalami (lastniki) je mogoča v obliki spodbud in nagrad, ter kaznovanja za managerje. S tem, ko vežemo dohodek agentov na uspešnost podjetja jih spodbudimo k boljšemu vodenju podjetij – tako, ki je v skladu z željami lastnikov. V državnih podjetjih smo pogosto priča pomanjkanju nadzora nad managerji. To je posledica lastništva, saj glavni lastniki teh podjetij (državljeni) navadno ne morejo vplivati na cilje poslovanja podjetij, oz. ne morejo izvajati učinkovitega nadzora nad managementom. Posledice slabega korporativnega upravljanja se kažejo v slabšem poslovanju državnih podjetij (v primerjavi z zasebnimi) ter v korupciji med državnimi uradniki (Tirole, 1998).

Slovenija je ena izmed številnih evropskih tranzicijskih držav. Tranzicija v Sloveniji je bila zaradi pomanjkanja politične volje manj uspešna kot v drugih evropskih državah (glej Tabela 1 – Table 1). To je predvsem posledica slabo razvitih institucij (sodna in zakonodajna oblast), ki so postopek privatizacije, z vidika hitrosti, transparentnosti in učinkovitosti, samo še poslabšale. S tem je Slovenija izgubila zagon, ki bi ji omogočil hitro privatizacijo (Simoneti, Böhm, Rems, Rojec, Damjan, & Majcen, 2001). Država bi morala s hitro privatizacijo prodati državna podjetja zasebnim vlagateljem, ki bi skrbeli za njihovo uspešno poslovanje (Smith, Cin, & Vodopivec, 1997).

V slovenskih državnih podjetjih smo zaradi pomanjkanja nadzora in ustrezne sodne zakonodaje, ki bi kaznovala kršitelje, vse pogosteje priče primerom slabih managerskih praks, ki negativno vplivajo na poslovanje državnih podjetij in posledično ustvarjajo izgubo za celotno družbo. Politično nastavljeni managerji državna podjetja izkoriščajo za lastno dobrobit in se ne ozirajo na cilje lastnikov (državljanov) (OECD, 2015). Problem državnih podjetij je v tem, da jih država ne pusti propasti v primeru, če zaidejo v težave. Posledično to pomeni, da napake, ki jih povzročajo vodilni, v podjetjih plačujemo iz proračuna oz. iz žepov državljanov (Stan et al., 2013). Tako ravnanje ni samo ekonomsko neučinkovito, ampak je tudi moralno sporno, saj so odgovorni večinoma nekaznovani, vsa povzročena škoda pa se prenese na državljane, ki so posredno lastniki podjetij.

V okviru diplomskega dela sem izvedel raziskavo s katero sem odgovoril na raziskovalno vprašanje. S primerjavo uspešnosti poslovanja podjetij v državni lasti, s tistimi v zasebni lasti, sem testiral hipoteze, da ni razlik v uspešnosti poslovanja državnih in zasebnih podjetij oz. da so državna podjetja manj uspešna od zasebnih. Uspešnost sem meril s

pomočjo različnih finančnih kazalcev. Analizo sem opravil s pomočjo statističnega paketa SPSS, v okviru katerega sem izvedel t-preizkus o razliki med aritmetičnima sredinama za neodvisne vzorce ter multiplo linearno regresijo. Vzorec za raziskavo sem pridobil iz podatkov razpoložljivih v bazi podatkov Amadeus (Boreau van Dijk).

Z raziskavo sem pridobil ustrezne, statistično značilne rezultate. Rezultati t-preizkusa in regresije izkazujejo boljšo uspešnost zasebnih podjetij. Rezultati so bili povečini v skladu s predvidevanji in pričakovanji. V treh, izmed štirih finančnih kazalnikov so državna podjetja poslovala slabše od zasebnih. Višje vrednosti, so presenetljivo, izkazala samo pri merjenju dodane vrednosti na zaposlenega.

Rezultati raziskave bi lahko predstavljali osnovo za izboljšanje korporativnega upravljanja v državnih podjetjih, oz. za nadaljevanje privatizacije državnih podjetij. V Sloveniji je privatizacija tema debat že od osamosvojitve dalje. Obstajajo različni razlogi, ki spodbujajo ali zavirajo prodajo državnih podjetij. Kot slednje se največkrat omenja politiko in različne interesne skupine. Upam, da bo ta raziskava pomagala razjasniti dvome o spremembah, potrebnih za boljše poslovanje državnih podjetij.

Namen, cilji in teze diplomskega dela

Glavni cilj diplomske naloge je na podlagi ustreznih podatkov analizirati izbrane kazalnike uspešnosti podjetij in preveriti hipoteze, da država res slabše upravlja svoja podjetja kot zasebni lastniki. Hipoteze raziskave za vsak finančni kazalnik preverjajo trditev, ali državna podjetja izkazujejo nižje vrednosti izbranega kazalnika v izbranem časovnem intervalu (celotne hipoteze lahko najdete v poglavju »Hypothesis of the study«),

V diplomskem delu izhajam iz predpostavke, da je država slab lastnik podjetij. S tem mislimo, da država ne skrbi za maksimiziranje tržne vrednosti svojih podjetij. Po opravljeni analizi poslovanja bom v zaključku opredelil ugotovitve povezane s postavljenimi hipotezami.

Podatki in metodologija

Vzorčne podatke za raziskavo sem pridobil iz podatkovne zbirke Amadeus, ki vsebuje celovite podatke o 21 milijonih podjetij iz celotne Evrope. Izbrani podatki so vsebovali izbrane kazalnike uspešnosti državnih in zasebnih podjetij med leti 2009 in 2013. Za analizo sem uporabil srenje-velika in velika slovenska podjetja (po evropski klasifikaciji SME), tj. podjetja, ki imajo 50 ali več zaposlenih (European Commission, 2015). Podjetja sem razdelil na državna in zasebna po definiciji »Ultimate ownership« iz zbirke Amadeus. Podjetje sem opredelil kot državno, če se je nahajalo v Sloveniji in je bil njegov lastnik (več kot 50 % lastniškega deleža) država, vlada ali vladni organ. V nasprotnem primeru je

bilo podjetje zasebno. Pridobljeni vzorec je obsegal 683 podjetij. Od tega je bilo 552 zasebnih in 131 državnih podjetij.

Tako pridobljen vzorec sem nato pripravil za analizo. Na podlagi pridobljenih podatkov sem izračunal finančne kazalnike. Obeh skupini podjetij sem popravil za ekstremne vrednosti, ki bi lahko popačile rezultate raziskave. Podatke o končni velikosti vzorca, skupaj z osnovnimi statističnimi podatki sem predstavil v Tabeli 2 (Table 2). Vse analize in obdelave podatkov sem opravil s pomočjo statističnega programa IBM SPSS Statistics 21.

Uspešnost sem določil z štirimi kazalniki finančne uspešnosti podjetij: donosnost sredstev (ROA), donosnost kapitala (ROE), dobičkonosnost prihodkov (PM) ter dodana vrednost na zaposlenega (VA).

S t-preizkusom sem poskušal ugotoviti, ali obstaja statistično značilna razlika med aritmetičnima sredinama obeh vzorcev za vse izbrane spremenljivke (kazalniki uspešnosti). Zavedal sem se pomanjkljivosti t-preizkusa in z njim pridobljenih rezultatov. Vrednosti t in F nam podata le informacije o aritmetičnih sredinah vzorcev brez podatkov o posameznih podjetjih. Poleg tega t-preizkus ne upošteva dodatnih omejitev, ki bi jih želel uporabiti (npr. kontrola za dejavnosti, v katerih podjetja delujejo). T-preizkus tako ni zadosten test s katerim bi lahko potrdili rezultate raziskave.

Zaradi omejitev t-preizkusa sem se odločil uporabiti še multiplo linearno regresijo, s katero sem lahko nadzoroval vpliv panoge in velikosti. Za dejavnik kontrole sem uporabil dummy oz. slamnate spremenljivke. Iz vzorca sem ustvaril 9 dummy spremenljivk za dejavnosti po NACE 2 klasifikaciji ter dve spremenljivki za velikost podjetja (srednje-veliko podjetje, veliko podjetje).

V regresijskem modelu so finančni kazalniki predstavljali odvisne spremenljivke, za neodvisne pa sem izbral lastništvo, dejavnost ter velikost, ki sem jih opredelil z dummy spremenljivkami:

$$Y_{ij} = \alpha + \beta_1 OWNER_{ij} + \beta_2 IND_{ij} + \beta_3 SIZE_{ij} + \varepsilon_{ij}$$

Lastništvo (OWNER) sem opredelil z vrednostima 0 (državno podjetje) ter 1 (zasebno podjetje). Dejavnost (IND) je predstavljalo 9 skupin različnih panog. Podjetju je bila dodeljena vrednost 1, v primeru, da je poslovalo v tej dejavnosti, oz. vrednost 0, če ni. Za velikost (SIZE) je bila podjetju dodeljena vrednost 0, če je imelo podjetje manj kot 250 zaposlenih, ter vrednost 1, če je bilo zaposlenih v podjetju 250 ali več. Odnos med spremenljivkami sem pojasnil z metodo najmanjših kvadratov (OLS), ki temelji na minimiziranju vsote kvadratov odklonov opazovanih vrednosti odvisne spremenljivke od vrednosti, izračunanih na podlagi ocenjene regresijske funkcije (Hayashi, 2000).

Rezultati raziskave

Rezultati t-preizkusa za aritmetične sredine neodvisnih vzorcev so pokazali, da državna podjetja poslujejo slabše od zasebnih. Zasebna podjetja so izkazala statistično značilne višje povprečne vrednosti za izbrane kazalnike v treh izmed štirih kategorij. Rezultati t-preizkusa so objavljeni v tabeli 3 (Table 3).

Preizkus za ROA je pokazal, da zasebna podjetja v povprečju izkazujejo za 2.2 odstotni točki višje vrednosti od državnih ($p < 0.001$). Analiza za ROE je pokazala, da zasebna podjetja dosegajo v povprečju 6.4 odstotne točke višje vrednosti v primerjavi z državnimi podjetji ($p < 0.001$). Za kazalnik PM zasebna podjetja dosegajo v povprečju 1.4 odstotne točke višje vrednosti ($p < 0.01$). VA je bil edini kazalnik, kjer so državna podjetja izkazovala povprečno višje vrednosti, v višini 9,334.3€ ($p > 0.05$). To me je rahlo presenetilo, saj sem pričakoval, da bodo zasebna podjetja bolj uspešna v vseh štirih kazalnikih.

Sledil je preizkus z uporabo multiple linearne regresije. Rezultati analize so objavljeni v tabeli 4 (Table 4). Regresijska analiza je podala statistično značilne rezultate za vse odvisne spremenljivke.

Test za ROA je predvidel statistično značilno razliko med državnimi in zasebnimi podjetji ($\beta = 0.020$). Zasebna podjetja so imela za 2.0 odstotni točki višji ROA. Preizkus za ROE je predvidel podobne rezultate. Zasebna podjetja so izkazala 5.4 odstotne točke višje vrednosti ROE ($\beta = 0.054$). Vrednosti PM so bile v državnih podjetjih 1.3 odstotne točke višje kot v državnih ($\beta = 0.013$). Test za VA je tudi tu pokazal, da so državna podjetja bolj uspešna – v povprečju so izkazala 8,459.3€ višje vrednosti kot zasebna ($\beta = -8.459$). Rezultati regresije so se pri vseh kazalnikih ujemali z t-preizkusom.

Ugotovitve in zaključek

V raziskavi sem ugotavljal povezavo med finančno uspešnostjo podjetij in lastništvom – državno oz. zasebno v Sloveniji za obdobje petih let (od 2009 do 2013). V skladu z literaturo za področje privatizacije sem pričakoval boljše finančne rezultate zasebnih podjetij.

Raziskava je zajemala uporabo dveh statističnih metod: a) *t*-test za preizkus enakosti aritmetičnih sredin za neodvisna vzorca ter b) multipla linearna regresija. Rezultati obeh analiz so enaki. Zasebna podjetja so izkazala višje vrednosti finančnih kazalcev za tri izmed štirih finančnih kazalnikov. Zasebna podjetja so imela statistično višje vrednosti pri kazalcih za donosnost sredstev, donosnost kapitala ter dobičkonosnost prihodkov, medtem ko so državna podjetja izkazala višje vrednosti dodane vrednosti na zaposlene.

Razlogov za odstopanje rezultatov pri analiziranju dodane vrednosti na zaposlenega je lahko več. Velikost vzorca je lahko dejavnik, ki je lahko vplival na analizo, saj je bila porazdelitev populacije znotraj vzorca nesorazmerna. Drugi razlog morda leži v podatkovni zbirki Amadeus, ki ne zajema celotnih podatkov za državo, kar lahko vodi do popačenja vzorca. Pomemben dejavnik je tudi obdobje v katerem je bila raziskava narejena. To sovpada z globalno finančno krizo, ki je v tem času doživela svoj vrhunec v Sloveniji (Zorc, 2013). Vlada je z zadolževanjem reševala državna podjetja in jih tako rešila pred propadom. To dejstvo bi lahko pomembno vplivalo na rezultate. Raziskava je kljub temu dokazala, da so zasebna podjetja bolj uspešna. V obeh preizkusih so trije od štirih kazalcev potrdili postavljene hipoteze. Tako lahko zaključim, da zasebna podjetja v Sloveniji, v izbranem obdobju izkazujejo statistično značilne višje vrednosti izbranih kazalcev finančne uspešnosti v primerjavi z državnimi.

Čeprav sem uspel dokazati moje hipoteze, predlagam, da se opravijo nadaljnje raziskave na to temo - ki bi potrdile moje dosedanje ugotovitve. Predlagal bi, raziskavo podobnih kazalcev uspešnosti v drugem časovnem obdobju (pred 2009 ali po 2013). S tem bi izločili vpliv finančne krize, ki je nedvomno pustila pečat na slovenskem gospodarstvu.

Rezultati te raziskave dokazujejo pomen dobrega korporativnega upravljanja v državnih podjetjih. Izboljšanje nadzora nad managerji lahko pomembno vpliva na izboljšanje poslovanja. Nadaljnje bi predlagal, da država zagotovi ustrezne pogoje za hitro in transparentno privatizacijo svojih podjetij. Z uvedbo teh priporočil bi po mojem mnenju lahko občutno zmanjšali izgube, ki jih povzročajo nepotrebna vlaganja v državna podjetja.