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OWNERSHIP STRUCTURE AND CORPORATE FINANCIAL PERFORMANCE

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Abstract: *Capital structure and links with business performance is a very interesting research topic, especially for transition economies in which state-owned companies continue to play an important role. Previous research indicates that sometimes better business performance has private-owned companies and sometimes state-owned companies. Namely, research results are often mixed.*

Considering the available literature it is noted that the relationship between company ownership structure and business performance has not been sufficiently explored in domestic circumstances. This study examines the business performance of companies in BeH ie company that makes the SASX10 index.

The subject of this paper is to examine the ownership structure of the company and financial performance, in the context of companies operating in transition, while the aim is to examine whether there is a link between the ownership structure and business results. The research focuses is on the indicators of return on capital, return on assets, earnings per share, net profit and indebtedness. The observed business period of the analyzed companies is from 2012 to 2020. Two hypotheses are set. The first claims that there is a statistically significant difference in the performance of state-owned and private companies, while the second hypothesis claims that private companies are more profitable than state-owned ones. The hypothesis are tested using a statistical t-test. The results show that there is a statistically significant difference in the business results of companies depending on ownership structure. The results, also, show that private companies use available resources more efficiently but these companies usually realize lower net profit compare to state-owned companies.

Keywords: *ownership structure, private corporations, state-owned corporations, business indicators, profitability.*

INTRODUCTION

The ownership structure of a corporation is one of the quite interesting areas in the research of business finance. The ownership structure of a corporation represents an important mechanism of corporate governance (Denis, 2003), including the quality of corporate governance as well as its ability to reduce agency costs (Berk, 2007). Some authors, like Çitak (2011) claim that ownership structure is one of the main factors influencing the company's business results.

(Çitak, 2011) in his research analyzes the operations of a company whose shares are listed on the Istanbul Stock Exchange. By examining the relationship between ownership structure (measured through ownership concentration and owner identity) and company performance (measured through ROE and MBV) in the period 2000-2004, the authors find a significant positive relationship between these variables. A similar study is conducted by Boroueni et al (2013) investigate the effect of ownership structure and corporate governance on the capital structure of companies listed on the Tehran Stock Exchange. Boroueni et al (2013) analysed financial indicators for 87 companies for eight years, and conclude that corporate governance and capital structure have an impact on the company's financial performance. (Soufeljil M, 2016) conducted similar research in Tunisia. These authors investigated the effect of ownership structure on company performance over a sample of 51 companies in the period 2008-2012. year, the results show that there is a positive and statistically significant impact of ownership structure on business results measured according to the ROA indicator.

Considering these previous research who show that ownership structure has an impact on business performance, this research it is examined is there a statistically significant difference in business performance between the private and public companies in Bosnia and Herzegovina. In that context, this research tested two hypotheses as follow:

Ph1: There is a statistically significant difference between the business results of private and state corporations

Ph 2: Private companies are more profitable than state-owned corporations

To examine these hypotheses it was analyzed the companies that make the SASX10. SASX10 is a benchmark index of the Sarajevo Stock Exchange. This index monitors the movement of prices of the top 10 companies in the market (excluding investment funds) measured by market capitalization and trading frequency.

1. LITERATURE REVIEW

The company's performance should be independent in the relation to the ownership of the company. Nevertheless, research in this domain shows that there is a problem principals and agents, and it has been shown that capital structure is an important mechanism of corporate governance (Denis and McConnell, 2003), including the quality of corporate governance and its ability to reduce agency costs (Berk & DeMarzo, 2007). Such findings lead to the conclusion that the ownership structure has an impact on the management of a corporation and its business performance. Previous research usually shows that this relationship exists and such results also indicate that the value of the company can be enhanced through the optimization of ownership structure. (Demsetz, 2001) examine the relationship

between a company's ownership structure and the performance achieved, with the corporate structure being multidimensional and treated as an endogenous variable in this study. The results of this study showed that there is no statistically significant relationship between ownership structure and company performance.

Authors (Soufeljil M, 2016) conducted a study in which they examined the effects of a company's ownership structure on a company's business performance. The authors point out that research on this relationship does not provide a unified view of the impact of ownership structure on company performance. To examine this connection, the authors made a sample of 51 companies from Tunisia, which are listed on the stock exchange in Tunisia. The period observed was from 2008 to 2012. The results show that there is a positive and statistically significant impact of ownership concentration on the companies and business performance measured through the return on assets indicator, ROA.

Some research assumes that the ownership structure is the main factor influencing the company's business performance, both accounting and market (Çitak, 2011). In this context, (Çitak, 2011) uses panel data and conducts a panel analysis in which he investigates the relationship between ownership structure (ownership concentration and ownership identity) and company performance measured through ROE as well as the relationship between market and accounting value of the company. The period that was analysed is from 2000-2004 and included companies listed on the Stock exchange in Istanbul. The results show that there is a statistically significant positive relationship between corporate ownership concentration and performance measured through MBV, which is one of the measures of market performance.

State ownership and business performance

The research that explores business results of state-owned companies usually shows that state-owned companies are less profitable than private ones. (Najid, 2011) perceive that state-owned companies generally lack entrepreneurial competency and tend to be politically rather than commercially motivated what leads to poor financial performance. (Mak, 2001) argue that the government, generally, shows less activity in overseeing its investments, so weaker accounting and oversight of state-owned companies as well as their easier access to finance are likely to reduce these companies' initiatives to adopt stronger governance mechanisms. Likewise, if the government dominates the company's management process, then the government may have the initiative to closely oversee management thus reducing agency costs for other stakeholders and boosting profitability.

(Eng, 2003) conclude that state-owned companies tend to avoid the problem of asymmetric information resulting in imperfect information about company value to such companies generally having easier access to funding sources compared to other

companies. In addition, state-owned companies face less pressure in terms of financial reporting, regulation, which can motivate management to choose those accounting choices that improve business performance

(Aljifri, 2007). In any case, empirical findings indicate that state ownership of the company gives quite mixed results, ie insufficiently precise results. (Aljifri, 2007) show that state-owned companies have a positive impact on business performance. (Wallace, 1995) also, show that there is a negative link between state ownership and the company's business performance.

Private ownership and business performance

In addition to analyzing state ownership and its profitability, it is important to explore the profitability of the private sector.

(Manglik., 2011) points out that profit is the „soul“ of business and without profit, every job is „dead“. In these cases, profit is a reflection of the entire aspect of the company's business, including the quality of the offer of a particular business. (Manglik., 2011) examining the hypothesis that there is no statistically significant difference in the profitability of the private and state-owned companies. Profitability is measured through the net profit ratio and return on investment. The author analyzed the five years from 2005 to 2010. The results confirm the hypothesis and there is no statistically significant difference between the profitability of public and private companies.

Alle et al (2015) examined the relationship in profitability between public and private companies. These authors showed there is a significant number of advantages and disadvantages of state-owned companies to private ones, although there is insufficient evidence to fully prove these relations. Therefore, these authors examined the relationship or consequences of ownership, private or state, to the profitability of the company or the amount of profit. In a sample of companies included in this study, the authors came to empirical findings that state-owned companies generate significantly lower operating profits than private companies and that the difference in profits is mainly driven by future profit margins.

(Mijić, 2015) conducted a study to explore the profitability of the private and public sectors in the CEE region. The authors conducted a comparative analysis of the productivity and profitability of companies operating in the private and public sectors in this region. The results show that there is a statistically significant difference between the degree of productivity and profitability of these two sectors. Profitability and productivity are more visible in the private sector, except Slovenia, where public companies record a better level of productivity compared to the private sector.

(Phi, 2019) conducted an empirical study and examined the relationship between company ownership, ownership identity and business performance in terms of

profitability and solvency. The authors used data from 25,000 companies worldwide, with a focus on examining profitability between private and public companies. The results showed that state-owned companies, generally, show a lower level of profitability compared to private ones. Yet, as the results have shown, private companies are more dependent on financing and borrowing needs than state-owned companies. Ultimately, the authors conclude that the privatization of state-owned companies could improve the business performance of state-owned companies.

2. METHODOLOGY

To examine the relationship between the ownership structure of the company and the relationship with business results, it is considered nine companies that make the SASX10 index of the Sarajevo Stock Exchange. SASX-10 is a benchmark index of the Sarajevo Stock Exchange that monitors the price movements of the top 10 companies in the market (excluding investment funds) measured by market capitalization and trading frequency. SASX10 consists of ten companies from different sectors. Nine companies were included in the analysis because one company from the index (ASA bank) had several status changes and it is not possible to identify comparable business results.

In the first step, segmentation was made according to the type of ownership (state / private), and in the next step, it is tested if there is a statistically significant difference between the ownership of the corporation and the results achieved in business.

The financial performance included in this analysis covers the period from 2012 to 2020. As previously said, the indicators are considered the return on equity (ROE), return on assets (ROA), Net profit and Indebtedness. The research model can be shown in Figure 1:

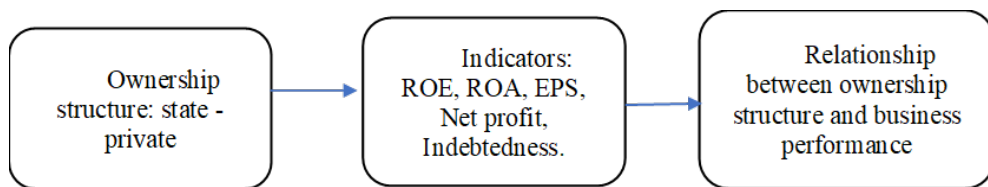


Figure 1: Research model

In the first step, the sample of observed companies was separated according to the ownership structure. In the second step, the analyzed indicator was calculated for each company. The hypotheses were tested using the t-test, which examined if there was a statistically significant difference in the average performance indicators of the analyzed companies.

3. RESULTS

Table 1 shows the average scores for each analyzed indicator from 2012 to 2020.

Table 1. Descriptive analysis

Company	Type of ownership	ROE	ROA	EPS	Net profit	Indebtness
BH Telecom	Državno	7,50	0,07	1,26	79.926.386,89	0,91
Bosnalijek	Privatno	4,88	0,04	1,02	9.177.116,00	0,64
Badeco Adria	Privatno	3,34	0,02	7,34	7.357.701,78	0,94
Elektroprivreda BIH	Državno	0,40	0,00	0,47	16.026.283,33	0,87
Rudnik soli Tuzla	Državno	0,65	0,01	0,60	883.992,04	0,93
Sarajevo osiguranje	Državno	0,02	0,01	0,13	620.817,94	0,29
Trgovina Borac	Privatno	-	-0,05	-	- 935.532,89	0,90
Tvornica cementa Kakanj	Privatno	10,14	0,10	1,65	15.648.023,11	1,07
GP ŽGP dd	Privatno	0,35	0,00	0,05	28.370,01	0,63

Table 2 shows the results of the t-test which examined the existence of a statistically significant difference in the business results of the analyzed companies.

Table 2: Statistical significance between achieved business results to company ownership

Pokazatelj	Compny type	One Simple Statistics		One-Sample Test			
		N	Mean	t	df	Sig. (2-tailed)	Mean Difference
ROE	State owned	9	2,1416	0,000	8	1,000	0,00000
	Private	9	3,7408	2,779	8	0,024	1,59919
ROA	State owned	9	0,0208	0,000	8	1,000	0,00000
	Private	9	0,0235	0,414	8	0,690	0,00268
EPS	State owned	9	0,6161	0,000	8	1,000	0,00000
	Private	9	2,0115	1,276	8	0,023	1,39540
Net Profit	State owned	9	24.364.370	0,000	8	1,000	0,00222
	Private	9	6.255.135	-11,926	8	0,000	-18.109.234
Indebtness	State owned	9	0,7497	0,000	8	1,000	0,00000
	Private	9	0,8349	11,175	8	0,000	0,08519

If we look at the data on ROE, we can see that the average rating of this data for state-owned companies is 2.1416 and for private companies 3.7408, which leads to the conclusion that privately-owned companies were more profitable. The analysis shows that $t = 2,779$, $df = 8$, $Sig = 0,024 < 0,05$, and it is concluded that there is a

statistically significant difference in the achieved business results measured by return on capital, with better results achieved by privately-owned companies.

The ROA rate of return is slightly better for private companies compared to state-owned ones, but this difference is not statistically significant. The average ROA for state-owned companies is 0.00 and for private 0.414, with this difference not statistically significant. Analysis shows that $t = 0.00$; $df = 8$; $Sig = 0.690 > 0.05$, and it is concluded that there is no statistically significant difference in the achieved business results measured by the return on assets.

The EPS earnings per share indicator show that higher earnings per share are borne by private sector companies compared to state sector companies. The average EPS data for state-owned companies is 0.6161 and for private 2.0115, this difference is statistically significant. Analysis shows that $t = 1,276$; $df = 8$; $Sig = 0.023 < 0.05$, and it is concluded that there is a statistically significant difference in the achieved business results measured by the return on assets.

The next indicator that is analyzed is the net profit of the company. The results show that state-owned companies, on average, achieved a higher level of net profit compared to private ones. The average net profit of state-owned companies is 24 million KM, while the average net profit of private companies was around 6 million KM. Analysis shows that $t = -11,926$; $df = 8$; $Sig = 0.000 < 0.05$, and it is concluded that there is a statistically significant difference in the achieved business results measured by the realized net profit.

One of the factors of business success is the analysis of the degree of indebtedness. The indicator shows the extent to which the company is financed with its sources, and this figure should be higher. The average data for state-owned companies is 0.7497 and for private companies 0.8349, which leads to the conclusion that private sector companies are less indebted than state-owned ones. Analysis shows that $t = 11,175$; $df = 8$; $Sig = 0.000 < 0.05$, and it is concluded that there is a statistically significant difference in the achieved business results measured by the indebtedness indicator.

The obtained results are summarized in Table 3.

Table 3. Overview of hypothesis test results

Indicator	The ownership structure of the corporation affect business results	Private companies are more profitable than state-owned corporations
ROE	Yes, significant	Correct
ROA	Yes, not significant	Correct
EPS	Yes, significant	Correct
Net Profit	Yes, significant	Not correct
Indebted	Yes, significant	Correct
	Hypothesis is correct	A hypothesis is not fully correct

The obtained results show that private companies generally have better business results compared to state-owned ones, but this cannot be confirmed for each indicator that was analyzed on this occasion. For example, the results show that state-owned companies achieve higher levels of net profit, but overall business is more efficient with private companies. Therefore, it can be concluded that the ownership structure of the company affects the achieved business results, while private companies record more efficient operations, ie more efficient management of available resources.

CONCLUSION

Empirical research was conducted on a sample of companies that make index SASX10. The ownership structure was determined for each company. In the next step, we calculated business performance for each company: ROE, ROA, EPS, Net profit and Indebtedness.

Considering the results of this research we find that company owners usually have a significant effect on company performance. The results show that private companies perform more efficiently than the state-owned company. The private company usually have better performance considering ROE, ROA or EPS but the state-owned company usually realize the higher net profit.

The research that was conducted, as well as the results that were obtained, are mostly in line with the results of other research that generally shows that state-owned companies are less profitable than private ones. One of the reasons for the lower profitability of these companies may be the fact that the state is the key owner and does not have the same interests as other villagers who are extremely profit-oriented. Such findings call on the management of state-owned companies to review their business, way of working and other activities to focus on more efficient business operations and achieving better business results.

The present study contributes to the existing literature on ownership structure and corporate financial performance in an emerging market like Bosnia and Herzegovina. It is important to emphasise that the government structure in Bosnia and Herzegovina is still in evolving phase. The state-owned company is characterized by global governance structures and a large number of employees. Usually, it is a complex structure which is an obstacle to a more efficient business.

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APPENDIX

Table 4. ROE indicator

	2012	2013	2014	2015	2016	2017	2018	2019	2020
BH Telecom d.d. Sarajevo	11,920	10,738	7,362	7,493	8,694	5,978	5,622	5,036	4,645
Bosnalijek d.d. Sarajevo	5,023	0,083	7,367	7,644	6,199	5,727	0,073	7,097	4,700
BADECO ADRIA d.d. Sarajevo	2,642	1,690	1,220	0,004	0,007	23,432	-	-	1,044
JP Elektroprivreda BIH dd Sarajevo	0,245	0,013	0,108	0,122	0,429	0,021	1,764	0,674	0,242
Rudnik soli Tuzla dd Tuzla	0,002	0,001	0,015	0,433	0,256	1,500	1,844	1,352	0,412
Sarajevo osiguranje dd Sarajevo	0,052	0,038	0,012	0,012	0,003	0,011	0,015	0,018	0,017
Trgovina BORAC d.d. Travnik	-	-	-	-	-	-	-	-	-
Tvornica cementa Kakanj dd Kakanj	6,064	9,028	7,634	9,480	11,869	10,780	11,341	9,824	15,201
GP ŽGP dd Sarajevo	0,251	0,252	0,182	0,188	0,170	-	0,179	1,668	0,275

Table 5. ROA indicator

	2012	2013	2014	2015	2016	2017	2018	2019	2020
BH Telecom d.d. Sarajevo	0,104	0,097	0,064	0,066	0,078	0,054	0,050	0,040	0,046
Bosnalijek d.d. Sarajevo	0,035	0,001	0,049	0,053	0,042	0,039	0,042	0,039	0,026
BADECO ADRIA d.d. Sarajevo	0,024	0,016	0,011	0,004	0,006	0,219	-	-	0,010
JP Elektroprivreda BIH dd Sarajevo	0,002	0,011	0,001	0,001	0,004	0,000	0,016	0,006	0,002
Rudnik soli Tuzla dd Tuzla	0,001	0,001	0,000	0,004	0,000	0,014	0,017	0,013	0,004
Sarajevo osiguranje dd Sarajevo	0,016	0,012	0,004	0,004	0,001	0,003	0,004	0,005	0,004
Trgovina BORAC d.d. Travnik	-	-	-	-	-	-	-	-	-
Tvornica cementa Kakanj dd Kakanj	0,061	0,111	0,076	0,095	0,119	0,108	0,113	0,098	0,152
GP ŽGP dd Sarajevo	0,002	0,000	0,001	0,001	0,001	0,001	0,000	0,000	0,000

Table 6. EPS indicator

	2012	2013	2014	2015	2016	2017	2018	2019	2020
BH Telecom d.d. Sarajevo	2,075	1,870	1,238	1,263	1,462	0,995	0,886	0,802	0,744
Bosnalijek d.d. Sarajevo	0,763	0,013	1,118	1,234	1,049	1,079	1,435	1,463	0,987
BADECO ADRIA d.d. Sarajevo	5,179	3,370	2,413	1,369	0,861	50,909	-	-	1,965
JP Elektroprivreda BIH dd Sarajevo	0,225	0,819	0,103	0,115	0,408	0,020	1,663	0,639	0,230
Rudnik soli Tuzla dd Tuzla	0,137	0,078	0,013	0,372	0,222	1,323	1,663	1,233	0,377
Sarajevo osiguranje dd Sarajevo	0,325	0,250	0,092	0,097	0,020	0,074	0,103	0,124	0,121
Trgovina BORAC d.d. Travnik	-	-	-	-	-	-	-	-	-
Tvornica cementa Kakanj dd Kakanj	0,995	1,919	1,189	1,451	1,866	1,675	1,773	1,510	2,484
GP ŽGP dd Sarajevo	0,039	0,037	0,027	0,028	0,025	0,028	0,024	0,214	0,030

Table 7. Net Profit (in mil BAM)

	2012	2013	2014	2015	2016	2017	2018	2019	2020
BH Telecom d.d. Sarajevo	131,701	118,672	78,588	80,166	92,799	63,112	56,201	50,918	47,179
Bosnalijek d.d. Sarajevo	6,898	0,113	10,101	11,156	9,476	9,747	12,965	13,217	8,921
BADECO ADRIA d.d. Sarajevo	5,855	3,810	2,728	0,936	1,488	65,250	- 4,489	- 11,580	2,222
JP Elektroprivreda BIH dd Sarajevo	7,087	37,044	3,235	3,636	12,858	0,620	52,383	20,124	7,249
Rudnik soli Tuzla dd Tuzla	0,208	0,119	0,020	0,570	0,000	2,027	2,546	1,888	0,577
Sarajevo osiguranje dd Sarajevo	1,506	1,156	0,425	0,452	0,093	0,342	0,478	0,576	0,559
Trgovina BORAC d.d. Travnik	- 3,411	- 1,366	- 0,701	- 0,203	- 0,665	- 0,604	- 0,507	- 0,346	- 0,617
Tvornica cementa Kakanj dd Kakanj	9,424	18,186	11,266	13,751	17,683	15,872	16,798	14,309	23,543
GP ŽGP dd Sarajevo	0,067	0,000	0,047	0,048	0,044	0,049	0,000	0,000	0,000

Table 8. Indebtness

	2012	2013	2014	2015	2016	2017	2018	2019	2020
BH Telecom d.d. Sarajevo	0,871	0,855	0,863	0,883	0,891	0,897	0,889	0,802	1,213
Bosnalijek d.d. Sarajevo	0,694	0,656	0,662	0,689	0,670	0,689	0,580	0,547	0,559
BADECO ADRIA d.d. Sarajevo	0,905	0,926	0,941	0,935	0,945	0,934	0,936	0,966	0,953
JP Elektroprivreda BIH dd Sarajevo	0,848	0,864	0,880	0,881	0,879	0,886	0,880	0,880	0,829
Rudnik soli Tuzla dd Tuzla	0,892	0,919	0,920	0,930	0,942	0,935	0,946	0,957	0,971
Sarajevo osiguranje dd Sarajevo	0,300	0,310	0,314	0,323	0,273	0,270	0,274	0,263	0,259
Trgovina BORAC d.d. Travnik	0,842	0,853	0,860	0,894	0,904	0,912	0,930	0,948	0,953
Tvornica cementa Kakanj dd Kakanj	1,056	1,049	1,050	1,079	1,072	1,090	1,076	1,078	1,095
GP ŽGP dd Sarajevo	0,792	0,672	0,701	0,631	0,654	0,702	0,513	0,479	0,497