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OWNERSHIP STRUCTURE AND CORPORATE FINANCIAL PERFORMANCE IN SERBIA: EMPIRICAL EVIDENCE

The key hypothesis in the corporate governance literature is that ownership concentration is positively influencing company profitability. However, the results of empirical studies are often ambiguous and contradictory. This issue is particularly important for transition economies, because the process of privatization caused significant changes in the ownership structure. Due to empirical evidence dichotomy, we discuss the effect of ownership structure on corporate financial performance in Serbia. Using the data on 146 companies in Serbia, the study provides arguments that there is no significant difference in return on investment for different types of ownership.

Keywords: ownership structure, concentration, insider ownership, financial performance, privatization.

JEL code: M20, M10.

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СТРУКТУРА ВЛАСНОСТІ ТА ФІНАНСОВІ ПОКАЗНИКИ КОРПОРАЦІЙ: ЗА ДАНИМИ СЕРБІЇ

У статті показано, що провідні дослідження з корпоративного управління розглядають концентрацію власності як позитивний фактор у прибутковості компанії. Однак результати емпіричних досліджень часто неоднозначні і суперечливі. Це питання особливо важливе в країнах із перехідною економікою, тому що процес приватизації викликав значні зміни в структурі власності. Обговорено вплив структури власності на фінансові показники корпорацій Сербії. З використанням даних по 146 сербських компаніях доведено, що немає ніякої істотної різниці в рентабельності інвестицій для різних форм власності.

Ключові слова: структура власності, концентрація, інсайдерська власність, фінансові показники, приватизація.

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СТРУКТУРА СОБСТВЕННОСТИ И ФИНАНСОВЫЕ ПОКАЗАТЕЛИ КОРПОРАЦИИ: ПО ДАННЫМ СЕРБИИ

В статье показано, что ведущие исследования по корпоративному управлению рассматривают концентрацию собственности как позитивный фактор прибыльности компании. Тем не менее, результаты эмпирических исследований часто неоднозначны и противоречивы. Этот вопрос особенно важен в странах с переходной экономикой, потому что процесс приватизации вызвал значительные изменения в структуре собственности. Обсуждено влияние структуры собственности на корпоративные финансовые показатели в Сербии. С использованием данных по 146 сербским компаниям доказано, что нет никакого существенного различия в рентабельности инвестиций для различных форм собственности.

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Ключевые слова: структура собственности, концентрация, инсайдерская собственность, финансовые показатели, приватизация.

Introduction. Ownership structure represents an important internal mechanism of corporate governance and understanding the affects concentrated vs. dispersed ownership have on management behavior and control, as well as financial success of corporations represents one of the mainstreams of research in economic theory. Empirical studies results referring to the ownership structure effects on corporate performances are often vague and contradictory. Ambiguity of conclusions confirms that further investigation of ownership structure influences on corporate control effectiveness, strategic decisions and performances is one of the most relevant research issues. The research topic in this paper is to investigate the correlation between ownership structure and financial performance.

The issue of ownership concentration was actualized in transition economies due to significant changes in ownership structure as a result of privatization processes. Depending on the model of privatization, in ownership structure various types of owners can be identified (state, managers, employees, external owners), having either positive or negative influence on corporate performance. Assuming that majority shareholders have the monitoring role, positively influencing corporate performance, the research goal is to examine concentration and type of ownership influence on financial performances of Serbian corporations. The study is based on the analysis of the random sample of 146 shareholders owning stocks in the companies registered at Belgrade stock exchange market, Republic of Serbia.

Making relevant conclusions, resulting from the sample analysis based on implementation of quantitative methodology and relevant statistical methods, should contribute to improvement of corporate governance reforms in transition economies. Financial performance of a corporation could be improved with the implementation of adequate ownership structure mitigating agency costs and decreasing conflict of interests between owners (principal) — managers (agent).

1. Theoretical background. Theoretical studies on the correlation between ownership structure and financial performance are based primarily on the agency theory. This theory suggests that the interests of principals and agents will not coincide (Babic, Nikolic & Eric, 2011). In the absence of either appropriate incentives, or sufficient monitoring, agents will be able to exercise their discretion to the detriment of principals (Jensen & Meckling, 1976). The argument is that owners wish to maximize profits, but that their agents (managers) may have neither interest, nor incentive to do so. As such, corporate performance depends on the ability of owners to effectively monitor and control managers (Gedajlovic & Shapiro, 1998).

In the corporative governance literature dominates the hypothesis that ownership concentration and profitability are in positive correlation. Ownership concentration has the advantages due to better control of management actions, since major owners have the power and initiative to supervise managers. Owners with higher share of stocks (blockholders) are motivated to perform monitoring and dismiss unsuccessful managers, therefore reducing conflicts between owners as principals and managers as agents (Babic, 2006). However, ownership concentration provokes principal-principal conflict between blockholders and minority shareholders. Its major deficiency,

as the control mechanism, is manifested through expropriation of the minority shareholders' rights (Lin & Chuang, 2011). The principal-principal agency conflict affects the cost of governance and results in significant differences in the existence and effectiveness of corporate governance (Renders & Gaeremynck, 2012).

Nevertheless, even though ownership concentration leads to the principal-principal conflict, the majority of empirical studies confirm the assumption that ownership concentration positively affects performance. Dominant shareholders active monitoring is contributing to higher quality of management decisions and likelihood that they will result in maximization of new value creation for owners (Babic & Nikolic, 2011). However, high level of ownership concentration could become ineffective because of decisions made with the main goal to maximize new value (Sanchez-Ballesta & Garcia-Meca, 2007). This position is confirmed by ambiguous and contradictory results of the empirical studies analyzing the ownership structure effects on corporate performance (Demsetz & Villalonga, 2001; Thomsen & Pedersen, 2000; Thomsen, Pedersen & Kvist, 2006; Cheunga & Weib, 2006; Sanchez-Ballesta & Garcia-Meca, 2007; Perrini, Rossi & Rovetta, 2008; Fan, Wei & Xinzhong, 2011).

Aside from ownership concentration, the type of ownership has significant influence on company performance (insider ownership, banks, financial institutions, institutional owners, family ownership), too. According to the agency theory, when the insider ownership share is increased, the convergence of interests between owners and managers emerge (Jensen & Meckling, 1976). However, due to natural inclination of managers to deploy resources in their own best interests, which can be opposite to external shareholders interests, managers can make the decisions damaging for the value of the company in order to gain personal benefit. These arguments prove that too high percentage of insider ownership could have negative effect on corporate performance (Itturalde, 2011).

Various studies offered arguments in favor of positive correlation between the ratio of shares held by banks and financial institutions, on one side, and value of firm, on the other side. Gorton and Schmid (2000) established a positive correlation between ownership concentration and company value in Germany, when banks are the majority shareholders. Likewise, in the study on Chinese companies conducted by Xu and Wang (1999) positive correlation between ownership concentration and profitability is established, when blockholders are financial institutions. Demsetz and Villalonga (2001) are the first to consider 2 ownership level variables: the level of institutional shareholding and the level of insider shareholding. The results suggest that higher proportions of institutional shareholding are associated with stronger firm performance (Perrini et al., 2008). With respect to Western European corporations, Maury and Pjute (2005) provided evidence that the benefits from family control occur in non-majority held firms. Also, Barontini and Caprio (2005) showed that family control is positive for firm value in Continental European firms.

The issue of ownership structure is particularly important in transition economies. Mass privatization gives birth to numerous owners who are not active participants in ownership because they do not recognize their roles, rights and responsibilities (Babic, 2010). Ownership of post-socialist enterprises was often shared between state, public corporate bodies, banks, managers, employees, other state or

private companies, private individuals and foreign individuals and corporations. The absence of “real owners” leads to neglected interests of capital itself and thus to degradation of the capital quality (Babic, 2001). The studies related to effects of conversion of state into private ownership in most cases confirm the conclusion that privatization positively affects companies’ profitability (La Porta and Lopez-de-Silanes, 1997; Megginson and Netter, 2001; Fan et al., 2011). Starting from different variations of post-privatization effects depending on context and conditions of privatization, we can conclude that the best effects are achieved when there is moderate concentration of ownership.

Important area of research refers to the studies of how various types of owners affect performance. The study of Makhija and Shapiro (2000) in 988 Czech companies demonstrated that share price is positively correlated with ownership share held by foreign investors, as well as when owners are insiders. The opposite results were inferred by Frydman et al. (1999) in the study performed on 506 privatized and state-owned industrial companies in Czech Republic, Hungary and Poland. According to their study, company performance is in negative correlation with insider ownership.

The results of one of the major studies, based on the sample of more than 200 privatized and state-owned companies in Czech Republic, Hungary and Poland, indicate that effects of ownership transformation on performances significantly differ, depending on the ownership type. Further studies have reached similar results confirming the assumption that ownership concentration, with dominant external owner, has the strongest correlation with superior performance (Douma, Rejie, & Kabir, 2006).

2. Ownership structure and financial performance in Serbia. Economic system and doing business in Serbia are primarily determined by privatization, which resulted in emerging of large number of corporations and high level of ownership concentration. Privatization in Serbia was neither consistent, nor one-way. The analysis of privatization process shows that in Serbia 3 different models of privatization were implemented. The first model (1991-1997) was based on creating workers’ internal shareholding; the second model (since 1997) was free distribution of shares (with or without) discount sale model, leading to relatively few shareholders holding the majority of shares. The third model was introduced in 2001 — selling of capital of a company to a strategic partner holding a majority block of shares, which is why many companies in Serbia are under control of one shareholder or few related parties (insiders) (Labus, 2007).

This process has been controversial — initially favoring creation of large number of small shareholders, and finally supporting the sale of companies to small number of strategic investors, which is why ownership concentration emerged and as well as large number of small shareholders. Ownership concentration resolved the issues related to company control, but created a problem with the minority shareholders’ rights’ protection. Problems occurred in the relationship between majority owners and minority shareholders, where minority shareholders are in considerably disadvantage, having in mind weak institutional protection of their rights. Minority shareholders have very limited stake in capital and do not have the possibility to influence the most important strategic decisions, which is main cause of conflicts. Changes created as the result of privatization were not encompassed by corresponding development of legislative, institutions and financial markets, creating space for numerous

embezzlement and corruption, since the major owners enjoy almost unlimited influence.

Research methodology and sample selection. The database named TIPO146 was created according to the information received from Belgrade Stock Exchange and Central Depository Securities and Clearing House. From 1287 companies registered at the exchange market 200 corporations were randomly selected. Due to inconsistent and often incomplete information, the initially created database was reduced to 146 randomly selected corporations. The data on 10 major shareholders were extracted, relating to the number of shares, number of votes, share price and its ratio in total capital of corporation. The analysis of gathered data was performed using Excel and Statistic program for social sciences (SPSS). 3 abovementioned models of privatization created wide range of ownership types in corporations: state-owned company, shares in public funds, socially-owned capital, natural persons, legal entities, consortiums. Only 3 corporations out of 146, according to the number and values of shares owned by shareholders belong to the category of dispersed ownership, which proves the argument that ownership structure in corporations in Serbia is extremely concentrated.

Table 1. Types of ownership

Type of ownership	Frequency	%	Valid, %	Cumulative, %
Agency AGE (8)	10	7	7	7
Socially owned capital SOC (7)	7	5	5	1,2
State owned company StOC (6)	10	7	7	1,9
Natural persons – male NPM (1)	613	43,9	43,9	45,8
Natural persons – female NPW (0)	205	14,7	14,7	60,5
Fund FD (10)	71	5,1	5,1	65,6
Custody account CA (9)	5	4	4	66,0
Public company and institutions PCI (11)	4	3	3	66,3
Legal entity – domestic company LEDC (2)	265	19,0	19,0	85,2
Legal entity – bank LEB (4)	120	8,6	8,6	93,8
Legal entity – insurance company LEIC (5)	10	7	7	94,6
Legal entity – foreign company LEFC (3)	76	5,4	5,4	100,0
Total	1396	100,0	100,0	

Table 1 depicts the frequency and % of ownership types. The data show that natural persons are the most frequent shareholders in Serbia, with the ratio of 58,6%. Ownership stake of natural persons is published in yearly reports of companies available on the web sites of the Belgrade Stock Exchange and Central Depository Securities and Clearing House. It enabled the analysis of demographic aspect, i.e. the gender ratio of shareholders in Serbia: natural persons male are the dominant type of owners (43,9%) and Natural persons female are only 14,7% out of the total 58,6% in

the category “Natural persons”. According to the frequency of occurrence, the subsequent category is legal entity (33,8%): domestic companies (19%), banks (8,6%), foreign companies (5,4%), insurance companies (0,7%). Other categories of owners are represented in statistically insignificant percentage of the sample.

Hypotheses Setting. Starting from the identified categories of owners, in the research on implications of the relationship between ownership structure and financial performance in Serbian companies, the following hypothesis is defined:

H1: There is a significant difference in ROE depending on the type of ownership.

$$H_1 = \theta_j \neq \theta_j. \quad (1)$$

Descriptive statistics. Analyzing the ownership structure in the sample it can be argued that 30% of the shareholders hold less than 1% of the shares. The histogram of normality distribution for variable percentage of ownership types shows that participation in ownership (in the interval 10-70%) has the uniform frequency. With the increase of the percentage of participation in the ownership over 70% frequencies are rising. The final peak occurs at the 95% equity ownership. These results indicate that the majority of shareholders hold smaller ownership stakes. According to the test significance levels (Kolgomorov-Smirnov) $p = 0,00 < 0,05$, the assumption of normal distribution is not confirmed, therefore, the majority of shareholders in Serbia have very small ownership stake — as the percentage of ownership stake is increasing, the number of shareholders is decreasing, confirming that in Serbia the ownership structure is concentrated.

In Figure 1 the average representation is presented for the identified 12 types of owners. It can be noted that the highest percentage of ownership participation have domestic companies (PCI) 50,1%, which means that domestic companies tend to be also the majority shareholders. Afterwards follows Natural person male (18,7%) and legal entity — foreign company (11,5%). Other types of ownership have less than 5%.

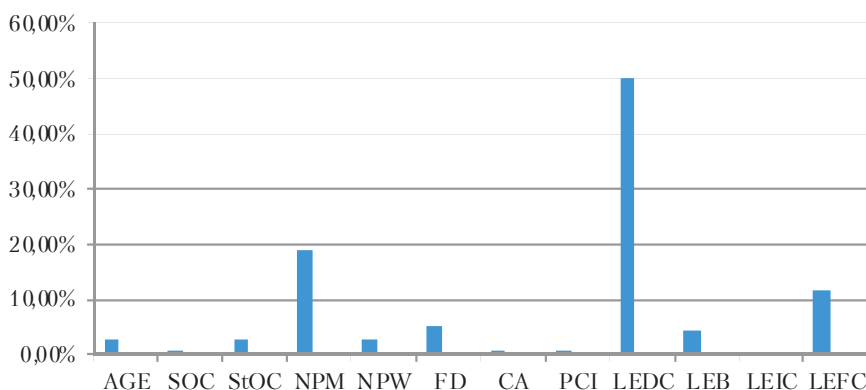


Figure 1. Ownership types representation

After the analysis of ownership structure, in order to test the hypothesis, the measurement of ownership types impact on company financial performances was performed. A financial indicator of performances was return on equity (ROE). ROE represents the financial ratio of net income and capital value. It demonstrates how

many units of equity capital are necessary in order for a company to achieve one unit of net profit (return on equity). It is also named the ratio of management efficiency. It was analyzed whether there is a significant difference of financial indicator ROE for 12 types of ownership using the following formula (Soldic-Aleksic, 2011):

$$H = \left[\frac{12}{N(N-1)} \sum_{j=1}^k \frac{R_j^2}{n_j} \right] - 3(N+1) \quad (2)$$

where k — the size of a sample; N — the total number of observations; N_j — the number of observations in the database j column; R_j — the sum of ranks in the database j group.

The lowest value of ROE was achieved by the company where the majority owner is a domestic company with the ownership participation of 88,50%. The highest value was also achieved by the domestic company with majority ownership participation of 88,84%. 10 companies in the sample have ROE equal to 0. 20% of the companies in the sample have negative ROE values. Under those conditions the level of significance $p = 0,056$, is therefore higher comparing to the alpha level of 0,05. This result demonstrates that there is no difference in ROE values for various shareholders, confirming the null hypothesis, claiming there is no significant difference in ROE for various types of ownership.

3. Discussion and conclusions. The Kruskal-Wallis test shows that various ownership types influence financial performances of corporations in Serbia is disputed, when ROE is used as indicator. Even though this conclusion is colliding with the theoretical foundations and the results of the empirical studies conducted in several transition economies, it is necessary to perform more thorough and comprehensive analysis of the results.

Results ($p = 0,056$) indicate that in future studies, the sample should be expanded, because basic limitation of this research is the insufficient data base. Although the sample is statistically relevant and representative, generalization of the conclusions on the corporate sector level will be possible when analysis incorporate all the companies registered at stock exchange. In future researches, it is necessary to analyze other indicators, as well — the ratios of liquidity, activity, financial structure and profitability. Also, it is necessary to exclude the extreme values which impair the objectivity of reasoning.

It is possible to conclude that privatization in Serbia contributed to solving the problems of ownership control over companies, but high concentration of ownership caused new problems. Large shareholders easily exercise control over a company, because they perform effective monitoring of its management. On the other side, large concentration of ownership leads to the problem of minority shareholders interests' protection. Under those circumstances, more serious problem is the principal-principal conflict. High concentration of ownership and insufficient protection of minority shareholders interests' are the key obstacles to corporate sector development. It has detrimental effect on investments, corresponding with ROE. Also, large number of companies in the sample has negative return on equity, partially explaining the result of the Kruskal Wallis test on acceptance of the null hypothesis.

Because institutions that protect property rights and minority shareholders are still developing in Serbia, we argue that the conflicts is a very severe problem, mean-

ing that high ownership concentration will increase such conflicts. Consequently, the regulatory of regarding corporate governance in transition economies should be aimed at reducing ownership concentration, separating ownership and control, and protecting property rights of all shareholders.

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