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What is the Real State of Financial Management in Companies in the Republic of Serbia?

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Abstract:

Research Question: This paper focuses on the basic financial decision making practices of domestic companies and their knowledge of the operational risk management concept. Motivation: Chief Financial Officers (CFOs) play a significant role in the company's development and achieving the company's objectives (Van Horne & Wachowicz, 2007). Different authors carry out research based on one of the fields of finances-related decision making, such as Graham & Harvey, 2001. The goal of this research is to show that the difference in the decision making process concerning companies' finances and risk management depends on the company's ownership structure. Idea: The paper is aimed at the recognition of differences found in corporate decision making, relating both to capital budgeting and capital structure, dividend payout policy and risk management concept, depending on the ownership structure. Data: During the first half of 2016, a research consisting of 392-companies sample operating in the Republic of Serbia was conducted, including all four listed fields concerning their economic operations. Nevertheless, only a total of 54 CFOs completed and handed back the distributed questionnaires. Tools: Some basic descriptive statistics techniques, one-way analysis of variance (ANOVA) and Kruskal-Wallis test were applied throughout the entire data analysis, while data processing involved the use of standard statistical package IBM SPSS 20.0. Findings: As shown by research findings, there is a notable difference in decision making, both as regards dividend payout and as regards risk management concept, depending on the types of ownership, with companies operating in our domestic market. The future research will concentrate on practice of companies merging both domestic and foreign entities, in order to determine whether a similar pattern might be found. Contribution: Furthermore, the research is intended to be complemented by the data contained in the official financial reports of those companies, with a view to ascertaining whether the statements made by their CFOs are actually applied in the corporate practice.

Keywords: CFO, capital budgeting, capital structure, dividend payout policy, risk management

JEL Classification: G30, G31, G32, G35

1. Introduction

The contemporary work environment demands not only companies' adjustment to it but the introduction of new functions and ways in the business operations as well. Consequently, this paper focuses on the practices in the basic decision-making within the business finances framework, as well as the knowledge of the risk management (RM) concept in company operations in the Republic of Serbia (RS).

Chief Financial Officers (CFOs) play a significant and dynamic role in the company's development and contribute to achieving all the company's objectives (Van Horne & Wachowicz, 2007). Also, the contemporary business prerequisites require that a CFO should gain new skills and knowledge in order to successfully live up to the challenges relating to business risk management (D'Arcy, 2011), and lately, to the special issues of data security and protection (Majdalawieh, 2014). The key responsibilities of the CFO are linked to the financial policy and corporate planning, that is, treasury management and controlling (Brealey et al., 2007). Financial management deals with procurement, placement and management of the financial means of the company with a view to reaching a higher goal of the company's operations. Three crucial fields of financial management are financing, investment and asset management (Van Horne & Wachowicz, 2007). Therefore, the basic groups of decisions in business finances are the following: the investment decisions, the financing decisions and the dividend payout decisions (Barjaktarovic et al., 2013). On the other hand, the

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world market trends induce a more institutionalized approach to risk management in the company's operations and it is quite common for this group of activities to be placed under CFO's jurisdiction. Enterprise Risk Management (ERM), initiated by the Committee of Sponsoring Organizations (COSO), is defined as the process (initiated by the board of directors, management and other employees) which represents an integral part of the company's strategy aimed at the identification of the potential events affecting the very business operations for the sake of better RM within the existing level of the willingness to accept a certain risk (Liebenberg & Hoyt, 2003). What matters is the discipline of control assessment, financing and monitoring all the company's risks with a view to increasing the value for its owners (COSO, 2004). Thus, all the risks are examined simultaneously and managed holistically (Society of Actuaries, 2001) within the coordinated and strategic framework. The contemporary business environment deems a holistic approach to RM as highly important. In addition, the results of the conducted research corroborates the fact that a properly established ERM contributes to the making of better decisions within a company (Gates et al., 2012) and to the achieving of better business performances (Pagach & Warr, 2007).

This paper aims to establish whether there are differences in decision making concerning capital budgeting (CB) and capital structure (CS), dividend payout policy (DPP) and RM concept in companies, all depending on the ownership structure.

Four major auditing companies (Deloitte, 2017; PwC, 2015; EY, 2016; KPMG, 2017) conduct research among CFOs worldwide and regionally, every year focusing on the macroeconomic trends in the country and abroad and their impact on the company's (present and future) operations, potential mergers and takeovers, the availability of financing source, an annual growth potential of the companies themselves and the role of CFOs (including different operations performed by them and the future growth and development prospects). On the other hand, different authors carry out research based on one of the fields of finances-related decision making (capital budgeting practice in the research of: Andor et al., 2011; Dedi & Orsag, 2007; Danielson & Scott, 2006; Brounen et al., 2004; Graham & Harvey, 2001; Vijay & Ashwani, 1995; Gitman & Forrester, 1977; capital structure in the research of: Atiyet, 2012; Andor et al., 2011; Hashi & Toci, 2010; Beck et al., 2004; dividend pay-out policy in the research of Servaes & Tufano, 2006) in different regions and continents (the USA- in the research of Gitman & Forrester, 1977, and Danielson & Scott, 2006; Canada- in the research of Vijay & Ashwani, 1995; Europe - /western - in the research of Brounen et al., 2004;/ central and eastern- in the research of Andor et al., 2011; Dedi & Orsag, 2007; Haas & Peeters, 2006/, and RM in company's operations /in terms of the significance, components, application, impact on the business performances and company value, the impact of the financial crisis on the future development of RM, the occurrence of new risks, etc./ (Baxter et al., 2013; Beasley et al., 2010; Beasley et al., 2008; Pagach & Warr, 2011). This research will simultaneously encompass all four elements and be based on the practices in the RS, along with the application of the previous-research employed methodology.

The main hypothesis is that the difference in the decision making process on companies' finances and risk management depends on the company's ownership structure. As a result, the paper consists of four parts. The introductory part concentrates on the definition of the subject, goal and hypothesis of the research. The second part features the research methodology. The research findings will be presented in part three. Finally, the concluding considerations will pinpoint the future directions of the research.

2. Methodology

For the sake of this research, the authors have devised a questionnaire/survey of 53 questions which are subsumed under the following five categories: I – Personal data, II – CB, III – CS, IV – DPP and V – RM with the company. All the questions in the questionnaire apart from the personal data questions have used the same ordinal five-level scale (1- No, 2- Little, 3- Partially, 4 – Much, 5 – Very much). The subjects of the research are the CFOs of the companies operating in the RS. The questionnaire is modelled after the questionnaire created by Graham and Harvey in 2001 (consisting of 15 questions) for the research carried out among 4,400 companies. The questionnaire draft had initially been distributed to numerous financial analysts for the revision before it was distributed to the subjects of this research. The questionnaires were emailed to the CFOs, with the authors' possibility to contact the subjects over the telephone in case of some unclear issues, for the purpose of clarifying them.

The questionnaire was completed by 54 CFOs out of 392 CFOs who had been sent the questionnaire in the first part of 2016, so the response rate amounted to 13.77 per cent, which can be defined as "reasonable" (Sivo et al., 2006). Furthermore, it can be defined as acceptable due to the announced results in the research of Kilic et al. (2011), Graca et al. (2015) and Homburg et al. (2015) where response rates were 11%, 13.22%, and 18%, respectively. The basic criterion for forming the sample was the ownership of companies

grouped under 8 sectors (25% belonging to the manufacturing industry, 20% to the financial sector, 20% to the retail and wholesale sector, 15% to the tourism sector, 5% to the telecommunications, 5% of the IT sector and 10% to the consulting sector of the overall sample). As a result, the sample comprised 7.41% of the state-owned (SO) enterprises, 33.33% of the foreign-owned (FO) companies, 48.15% of the privately-owned (PO) companies and 11.11% of the companies which do not belong to any of the above listed ownership structures, therefore, they are subsumed under the category of "other" (O).

A total of 54 subjects responded to nine questions relating to the CB concept (questions from 1 to 9) as well as to nine questions relating to the company's CS concept (questions from 10 to 18). The questionnaire contains 15 questions relating to the DPP (questions from 19 to 33) and 12 questions referring to the RM system (questions from 34 to 45). A total of 50 CFOs responded to these questions. A part of the data processing and a part of the questionnaire was presented in Barjaktarovic et al. (2016) with the authors indicating that PO tend to primarily use traditional CB techniques in comparison with the modern ones.

The data analysis employed the use of descriptive statistics, one-way variance analysis and Kruskal-Wallis test. The data processing included the application of a statistics package IBM SPSS 20.0

3. Research Findings

Since the survey contains five question groups, the next part presents the results of four question groups, excluding the *Personal data* question group. It was vital to investigate the (non)existence of difference in CB techniques, CS, DPP and RM systems in the companies with different ownership structures. In relation to the ownership structure, SO, FO, PO companies were under examination, including the companies classified under the category O.

3.1 Capital Budgeting

The second part of the survey/questionnaire contained questions referring to the CB. The CB covers decisions on the allocation of the investments in new but also in the existing projects, as well as in M&A and similar processes (Gervais, 2011). It was important to investigate whether there was a significant difference in the company's CB concept compared to the type of their ownership. Bearing this in mind, it was necessary to introduce a new variable, in such a manner that each subject was awarded an average value of all his/her responses relating to the company's CB concept. The obtained variable had a regular distribution, which is indicated by the Skewness/Std.Error = -1.43 ratio, as well as Kurtosis/Std.Error = -0.83. Therefore, in the process of determining the difference existence in the company's CB concept in comparison with ownership structure, it was convenient to apply the one-way variance analysis, as a parameter technique. More precisely, by applying variance analysis, efforts were made to ascertain if companies of different ownership structure exhibited significant differences in CB techniques, according to different features used for describing the CB concept, which were evaluated in this research.

Table 1: The Results of One-Way Variance Analysis of Different Ownership Structure Companies

State-owned	Foreign- owned	Privately- owned	Other	F	p-value
Average	Average	Average	Average		
3.8785	4.1034	3.4842	3.0748	2.551	0.066

Source: Authors' calculations

By this procedure, the nonexistence of a significant difference in the CB concept of different ownershipstructure companies was determined. However, it does not mean that there are no differences in the practice of appliance. According to the research results of Andor et al. (2011), this is influenced by the firm size and multinational management culture.

The CB concept was analysed based on the following: investment and development policy, business plan application, cash flow projections, investment criteria for project selection, capital cost calculation for investment decision making, discount rate correction for investment decision, cash flow for the stated differences, the difference between company risk and a specific investment risk on determining the discount rate and the most common investment type. The next part exhibits the overall findings of each component observed within the CB.

The obtained questionnaire results for the companies observed regardless of the ownership structure do not show any significant differences in attaching importance to the clearly defined investment and development policy. The FO companies attach the highest importance to the clearly defined investment and dividend policy, in comparison with the SO, PO and O companies.

The business plan, as one of the planning instruments with a detailed plan of future investments, as well as cash flow projections before the investment decision making, are without difference frequently used in all the analysed companies, regardless of their ownership structure.

During the project selection, the analysed companies predominantly use the investment criteria in the following order: return period, profitability index, net present value, internal rate of return, sensitivity analysis, accounting rate of return, discounted return period, and other. It is evident, regardless of the ownership structure, that each criterion is used within a *never-to-always* range. It is important to emphasize that retrieved results regarding the predominantly used investment criteria return period, are in line with the results of Brounen et al. (2004), which stressed that European firms (located in Western Europe) were keeners of return period, in comparison to discounted cash flow techniques such as net present value and internal rate of return. Moreover, it is in line with research results of Andor et al. (2011) for 10 Central-Eastern European (CEE) countries (a sample of 10 countries: Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia), where the return period is preferable by companies. Finally, Dedi & Orsag (2007) did a similar survey in Croatia, which is the most similar to Serbia (geographically, historically and culturally connected). The obtained results were as follows: 24% of analyzed companies often use internal rate of return and the return period, while 22% of monitored companies most frequently use the net present value and internal rate of return. This is similar to CEE results.

During the investment decision making, the investigated companies predominantly calculate the capital cost by applying the following methods: "other", average historical return on previous investments, CAPM model, the rate assigned by the state, average historical return on common stocks of the company, dividend discounting model. This can be explained by a low level of development of the Serbian financial market. According to Dedi & Orsag (2007), the analysed companies stated that: 76% of them estimated the cost of capital using some formal technique, 40% of them calculated the cost of capital according to the investors' required return and 9% used the CAPM. The usage of CAPM was very low (which is in line with the CEE region). Furthermore, testing on Croatian companies profitability indicators in the period of 2007 to 2010, confirmed that there was a high level of connection between cost of capital and profitability ratios of the company (Orsag & Mitar, 2014). Moreover, it was in line with credit analysts' opinion in Romania (Dragota et al., 2011). Finally, it was in correlation with Markovics (2016) (1) a considerable amount of European and US corporations calculated the indicator of the payback period; (2) the net present value and the internal rate of return were the two most frequently used discounted cash-flow methods; (3) companies in France and Hungary used the profitability index more often than companies in other surveyed countries.

During the investment decision making process, the risk adjusted discount rates are predominantly corrected by the following: inflation, foreign-exchange risk, raw material price change, business risk and the change of market interest rates. The obtained results are in line with the Croatian market. According to Dedi & Orsag (2007), 81% of the companies regularly did project cash flows' estimations, and 73% of the companies assessed the project risk; 42% of the companies used a risk adjusted discount rate.

The companies under examination point out that there is a difference of *sometimes-to-frequently range* between the company-related risk and the investment-related risk when determining the discount rate.

Companies predominantly invest in production, new factories/plants, procurement of latest equipment, new product launch and market expansion. On the other hand, they are reluctant to make an investment in design changing, the changing of the existing product packaging as well as the employees.

3.2 Capital Structure

The survey questionnaire contains the usual questions relating to CS. It was important to investigate if there was a significant difference in the companies' CS concept in comparison to the type of their ownership. Bearing this in mind, it was necessary to introduce a new variable, in such a manner that each subject was awarded an average value of all his/her responses relating to the company's CS concept. The obtained variable has a regular distribution, which is indicated by the ratios Skewness/Std.Error = 1.85, as well as Kurtosis/Std.Error = -0.02. Therefore, in the process of determining the difference existence in the company's CS concept in comparison to ownership structure, it was convenient to apply the one-way variance analy-

sis, as a parameter technique. More precisely, by applying the variance analysis, efforts were to determine if companies having different ownership structure exhibited significant differences in CS concepts, according to different features used for describing the CS concept, which were evaluated in this research.

Table 2: The Findings of One-Way Variance Analysis for Companies of Different Ownership Structure

State-owned	Foreign- owned	Privately- owned	Other	F	p-value
Average	Average	Average	Average		
2.5396	3.3246	3.0631	3.5018	1.445	0.241

Source: Authors' calculations

By this procedure, the nonexistence of the significant difference in the CS concept of different ownership structure companies was ascertained.

The CS concept was analysed in the following terms: the use of internal and external financing sources, reasons for non-application of external financing sources, the most common forms of external financing sources, debt financing decisions, natural hedging application, obstacles for external capital procurement. The following part presents the overall results of each component which was examined within the CS framework.

Regardless of the company's ownership structure, there are no significant differences in the use of internal and external finance sources: companies chiefly use internal funds, whereas the external sources are used to a smaller extent. This is in accordance with Atiyet's results (2012) regarding listed companies on the French Stock Exchange, in the period from 1999 to 2005. Furthermore, it is in line with the survey of Andor et al. (2011) who found that the most preferred source of funds were retained earnings (internal source of funds) followed by straight debt, i.e., companies' preferences suggested by the pecking order theory. Companies which *never* or *very rarely* use external sources indicated the following primary reasons for doing so: the bank offering unfavourable loan terms and conditions, the lack of adequate financing forms, precarious markets and lack of new investment opportunities. This is in line with the results obtained by Hashi & Toci (2010) and Beck et al. (2004), in terms of interest rates, collaterals, paperwork and bureaucracies, and obtained credits' terms and conditions by commercial banks.

Namely, SO, PO and O, in comparison to FO companies, are keen on using bank loans, and not so keen on using leasing and factoring. The issuing of bonds and common stocks is on a low level in the analysed companies. More accurately, bond and stock issuing is practically nonexistent in SO, PO and O companies, whereas in the FO companies a low level was recorded. We should have in mind that the Serbian financial market is banco centric, and this has a direct impact on financing possibilities of companies' business. Furthermore, it is in relation with results of Haas & Peeters (2006) who found a relation between the banking system development and the companies' capital structure targets in Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. The results obtained revealed that the development of the financial systems within this region enabled companies to reach higher levels of debt and to bring their actual capital structure closer to their own target structures.

When determining the CS and making decisions on debt financing, the following parameters are important: interest rate, company's credit rating, financial flexibility, cash flow volatility, transactional costs, bankruptcy possibility, tax shield and rival companies' indebtedness levels.

The CFOs of PO companies have stated that, during the company's borrowing process, they very rarely tend to synchronize the income currency with the companies' liabilities to their creditors. Unlike them, SO, FO and O companies attach more importance to natural hedging.

The CFOs have also maintained that, during the external capital procuring, regardless of the ownership structure, companies face average obstacles.

During the capital procuring, the stated problems are in total deemed by the analysed companies as *average* with a tendency to *high*. Problems ranging from the least to the biggest are the following: CFOs knowledge and their insight into alternative financing sources, transactional costs, low use of hedging instruments, capital market underdevelopment, poor approach to long-term funding sources, and demand for high collateral and restrictive loaning policy of banks.

In addition, the CFOs have also claimed that a company undergoing a financing process primarily takes into account the internal sources, then the debt, and finally uses the capital. The analysed companies assess the above mentioned statement on the range from *partially* to *a lot*.

Ultimately, the analysed companies' CFOs partially agree that during the financing process they first take into account the internal sources, then the capital and finally the use of the debt.

3.3 Dividend Payout Policy

In order to determine a potential significant difference in the DPP of the companies with different ownership structure, a new variable is introduced, that is, every subject is given the arithmetic mean value of his/her fifteen responses referring to it. The formed variable exhibits no regular distribution, according to the conclusion made by applying Shapiro-Wilk Test (p-value=0.000), so for that reason we used the non-parameter

Kruskal-Wallis Test (χ^2 (3)=5.897, *p-value*=0.011) in the process of determining the significant difference. The above mentioned test ascertained the statistically significant difference in the DPP with regard to the company's ownership structure. In order to ascertain the origin of the manifested difference, we used *Mann-Whitney U Test* for each pair of the different ownership structure.

Table 3: The Results of Mann-Whitney U Test for the Companies of Different Ownership Structure

Ownership	Mean Rank	p-value
(state-owned, foreign-owned)	(8.83; 8.42)	0.893
(state-owned, privately-owned)	(13; 7.46)	0.045
(state-owned, other)	(4.33; 3.79)	0.724
(foreign-owned, privately-owned)	(16.42; 10.58)	0.048
(foreign-owned, other)	9.42; 7.63)	0.532
(privately-owned, other)	(8.04; 12.13)	0.152

Source: Authors' calculations

The results of the non-parameter *Mann-Whitney U Test* indicate the existence of the difference in SO and PO companies (p-value=0.045), as well as between FO and PO companies. Thus, PO companies pay the least attention to DPP. It is logical due to the fact that the Serbian financial market is not developed and companies do not provide financing on the stock market. The majority of established companies in Serbia are limited liability companies, not joint stock companies. However, relevant factors for DPP are the anticipated level of future earnings and the pattern of past dividends, accounting implications, tax efficiency of alternatives and attractiveness to different investors (Servaes & Tufano, 2006).

The obtained results support the set hypothesis that there is a difference in decision making on DPP between companies depending on the ownership structure. PO companies are less prone to dealing with DPP than SO and FO companies, which requires a more profound understanding of PO company owners' interests which, based on the obtained findings, are not related to dividends.

3.4. Risk Management Concept in Company

One of the aims was to investigate whether there was a significant difference in the companies' RM system regarding the type of their ownership. Thus, a new variable was introduced in such a manner that each subject was awarded an average value of all his/her responses relating to the company's RM system. The obtained variable has a regular distribution, which is indicated by the ratios Skewness/Std.Error = -1.05, as well as Kurtosis/Std.Error = -0.79. Therefore, in the process of determining the difference existence in a company's RM concept regarding the ownership structure, it was convenient to apply the one-way variance analysis, as a parameter technique. More precisely, by applying variance analysis we tried to determine if companies having different ownership structure exhibited significant differences in RM systems, according to different features used for describing the RM system.

One-way variance analysis compares variances of the values relating to the RM between companies with a different ownership structure with variances within each group, which is made up of companies with the same ownership structure. The initial stage of this method involves the use of *Levene's test*, which is used

with one-way variance analysis to determine the homogenity of variances. The test has shown that the variances of the risk-related values are homogenous, that they are equated, in each of the four groups which are formed compared to the ownership structure.

Table 4: The Results of Levene's Test for the Companies with Different Ownership Structure

Levene's Statistics	df1	df2	Sig.
2.755	3	46	0.053

Source: Authors' calculations

The results of the one-way variance analysis are the following: *arithmetic mean* and *standard deviation* for each of the observed groups, *F-quotient*, statistically significant index of *F-quotient's p-value* as well as the amount of *Eta coefficient* are presented in the following table. The high value of *F-quotient* shows a greater variability between companies with different ownership structure than within every single group of companies belonging to a certain ownership structure, which is corroborated by the obtained *p-value* with the significance level of 0.05. The obtained value of *Eta coefficient*, which measures the scope of impact, indicates that the ascertained difference is significant enough, so it can have a practical importance. Thus, the scope and significance of *F-quotient* as well as the scope of *Eta coefficient* of the one-way variance analysis confirm that there are statistically significant differences in the RM values between companies with different ownership structures.

Table 5: The Results of One-Way Variance Analysis on Companies of Different Ownership Structure Risk Management

State- owned	Foreign- owned	Privately- owned	Other	F	p-value	Eta
Average	Average	Average	Average		·	
3.0031	3.6600	2.8531	2.7512	3.363	0.027	0.17986

Source: Authors' calculations

Since the differences were ascertained, but not the differences between the types of ownership structures, it was necessary to apply a *post hoc test*. At this point *Tukey Test* was applied, with a view to determining whether the RM concepts were different in all companies with different ownership structure or whether it was a matter of differences between two or three groups of companies. The findings of this test are presented in Table 6.

Table 6: The Results of Tukey Test for Companies with Different Ownership Structure

(I) Ownership	(J) Ownership	Mean Difference (I-J)	Std. Error	Sig.
	Foreign-owned	65692	.47947	.524
State-owned	Privately-owned	.14997	.46990	.989
	Other	.25193	.58187	.972
	State-owned	.65692	.47947	.524
Foreign-owned	Privately-owned	.80689*	.27297	.024
	Other	.90885	.43849	.177
	State-owned	14997	.46990	.989
Privately-owned	Foreign-owned	80689*	.27297	.024
	Other	.10195	.42801	.995
	State-owned	25193	.58187	.972
Other	Foreign-owned	90885	.43849	.177
	Privately-owned	10195	.42801	.995

Source: Authors' calculations

In the previous table the RM concept in companies with different ownership structure was evaluated. The first two columns (I, J) represent the ownership type, with column (I) listing all ownership types and column (J) listing all their combinations possible. Thus, the interpretation requires the awareness of the pairs' double repetition. Column 3 contains the arithmetic mean differences relating to the risk management concept evaluation of certain pairs of different ownership structure companies. Column 4 features standard errors regarding the previously mentioned arithmetic means. Finally, the last column contains the p-value, that is, the probability that there is/ is not a difference in risk management between the companies of a certain pair with a different ownership structure. Based on the obtained values, a difference in the RM system between PO and FO companies is recorded. By this procedure, the existence of a significant difference in the RM concept with companies of different ownership structure is determined, with the difference originating from the significantly different RM concepts in PO and FO companies. Thus, the proposed hypothesis of this paper is confirmed.It is logical due to the fact that FO are led by foreign head-offices and they implement the best sharing practice in risk management practice, as well as in implementing international financial reporting standards.

The obtained results are in accordance with the research results of Barjaktarovic et al. (2017) with the size-able percentage of FO companies being familiar with the *ERM system*. In addition, this is in line with the presented results published in the annual reports of the top 100 companies operating in the RS which indicate that there is a better RM practice in FO companies than in PO and SO companies (Barjaktarovic, 2017). Also, the presented results are in line with the results obtained by Jelenkovic & Barjaktarovic (2016) who argue that an institutionalised approach to RM motivates economic entities to assert the RM function. Eventually, the presented results coincide with the research results made by Pagach & Warr (2011), who support the claim that FO companies and large enterprises, in principle, are more successful in implementing the ERM concept. It is interesting to note that there are no recorded differences in the RM between SO and FO companies that could have been anticipated, and thus, can be the focus of some future investigations.

Conclusion

The CB research findings were that a nonexistence of the significant difference in the CB concept of different ownership structure companies was determined. The FO companies attach the highest importance to the clearly defined investment and dividend policy, in comparison with the SO, PO and O companies. During the project selection, the analysed companies predominantly use the investment criteria in the following order: return period, profitability index, net present value, internal rate of return, sensitivity analysis, accounting rate of return, discounted return period, and other. Companies predominantly invest in production, new factories/plants, provision of latest equipment, new product launch and market expansion. On the other hand, they are reluctant to make an investment in design changing, the changing of the existing product packaging as well as the employees.

The CS research results revealed that a nonexistence of the significant difference in the CS concept of different ownership structure companies was ascertained. Regardless of the company's ownership structure, there are no significant differences in the use of internal and external finance sources: companies chiefly use internal funds, whereas the external sources are used to a smaller extent. Namely, SO, PO and O, in comparison to FO companies, are keen on using bank loans, and not so keen on using leasing and factoring. The issuing of bonds and common stocks is on a low level in the analysed companies. More accurately, bond and stock issuing is practically non-existent in SO, PO and O companies, whereas in the FO companies a low level was recorded. When determining the CS and making decisions on debt financing, the following parameters are important: interest rate, company's credit rating, financial flexibility, cash flow volatility, transactional costs, bankruptcy possibility, tax shield and rival companies' indebtedness level. The CFOs have also maintained that, during the external capital procuring, regardless of the ownership structure, companies face average obstacles. Problems ranging from the least to the most serious are the following: CFOs knowledge and their insight into alternative financing sources, transactional costs, low use of hedging instruments, capital market underdevelopment, poor approach to long-term funding sources, and demand for high collateral and restrictive loaning policy of banks.

DPP research findings confirmed that there were significant differences in the DPP practice between companies with different ownership structures. It is logical due to the fact that the Serbian financial market is not developed and companies do not provide financing on the stock market. A majority of established companies in Serbia are limited liability companies, not joint stock companies. The obtained results support the proposed hypothesis that there is a difference in decision making on DPP between companies depending on the ownership structure. PO companies are less prone to dealing with DPP that SO and FO companies, which requires a more profound understanding of PO company owners' interests which, based on the obtained findings, are not related to dividends.

The RM research findings were that there were differences in the RM concepts between companies with different ownership structures. Based on the obtained values, a difference between the RM systems between PO and FO companies is recorded. This is logical due to the fact that FO are led by foreign head-offices and they implement the best sharing practice in risk management practice, as well as in implementing international financial reporting standards.

The research findings have shown that, depending on the ownership structure, there is a difference in decision making process on DPP and applied RM systems in companies located in the RS.

The respondents in the research have pointed out that the completion of the questionnaire required a significant amount of time. In addition, our research has motivated the CFOs to take into consideration numerous company-related matters as well as the linguistic terminology which they use to define those matters. Having in mind all the stated matters, it can be concluded that a further and permanent education of the employees is necessary. FO companies have a slight advantage over PO companies owing to the possibility of knowledge transfer and the use of cutting edge technologies. PO companies face greater challenges in adapting to the contemporary trends and business operation harmonisation.

The future research will focus on the determination of both the relation (type and quality) and the practice of companies managing both domestic and foreign entities in order to investigate whether a similar pattern might be found. In addition, the research will be complemented by the data contained in the companies' official financial reports in order to verify whether the words and ideas expressed by the CFOs are actually put into the companies' practice.

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REFERENCES

- [1] Andor, G., Mohanty, S., & Toth, T. (2011). Capital budgeting practices: a survey of Central and Eastern European firms. *The* World *Bank*, January, 1 45.
- [2] Atiyet B. (2012). The Pecking Order Theory and the Static Trade Off Theory: Comparison of the Alternative Explanatory Power in French Firms. *Journal of Business Studies Quarterly*, 4(1), 1-12.
- [3] Barjaktarovic, L. (2017). Osvrt na upravljanje rizicima u kompanijama koje posluju u Republici Srbiji. Research presented on VI conference of internal auditors of Serbia held on 05/18/17 in Belgade.
- [4] Barjaktarovic, L., Pindzo, R., Djulic, K., Vjetov, A. (2017). Analiza primene ERM koncepta u Srbiji: uporedna analiza finansijskog i realnog sektora. *Bankarstvo 2/2017*, 51-67. DOI: 10.5937/bankarstvo1702050B
- [5] Barjaktarovic, L., Djulic, K.,Pindzo, R.,& Vjetrov, A. (2016). Analysis of the Capital Budgeting Practices: Serbian Case, *Management* 79/2016, 47-54. DOI: 10.7595/management.fon.2016.0009
- [6] Barjaktarovic, L., Jovic, Z., & Milojevic, M. (2015). Poslovne finansije, Univerzitet Singidunum: Beograd
- [7] Baxter, R., Bedard, J., Hoitash, R., Yezegel, A. (2013). Enterprise Risk Management Program Quality: Determinants, Value Relevance and the Financial Crisis. Contemporary Accounting Research, Vol.30 No.4, 1264-1295. DOI: 10.1111/j.1911-3846.2012.01194.x
- [8] Beasley, M., Branson, B., & Hancock, B. (2010). Developing key risk indicators to strengthen enterprise risk management. Retrieved fromhttp://www.coso.org/documents/COSOKRIPaperFullFINALforWebPostingDec110_000.pdf
- [9] Beasley, M., Pagach, D.,& Warr, R. (2008). Information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing and Finance* 23. 311-332.DOI:10.1177/0148558X0802300303
- [10] Beck, T., Demirguc K., & Maksimovic, V. (2004). Bank Competition and Access to Finance: International Evidence Journal of Money, Credit, and Banking, Volume 36, Issue 3 (Part 2), 627-48. DOI: 10.1353/mcb.2004.0039
- [11] Brealey, R., Mayers, S.,& Marcus, A. (2007). Fundamentals of Corporate Finance. McGraw-Hill/Irwin: New York
- [12] Brounen, D., Jong, A.,& Koedijak, K. (2004). Corporate Finance in Europe: Confronting Theory with Practice. *Financial Management*, 33 (4), 71-101.
- [13] COSO. (2004). Enterprise Risk Management Integrated Framework. Retrieved from http: www.coso.org/documents/COSO ERM ExecutiveSummery.pdf
- [14] D'Arcy, S. (2001). Enterprise Risk Management Forthcoming in the Journal of Risk Management of Korea. 12(1), 207-228.
- [15] Danielson, M., & Scott, J. (2006). The Capital Budgeting Decisions of Small Businesses *Journal of Applied Finance*, 16(2), 45-56.
- [16] Dedi, L., & Orsag, S. (2007). Capital Budgeting Practices: A Survey of Croatian Firms. South East European Journal of Economics and Business, 2(1), 59-67

- [17] Deloitte. (2017). Positive business environment Central Europe CFO Survey 2017.2017 results/5th edition Serbia, The CFO Program
- [18] Dragota, I., Dragota, V., Tatu, L., Pele, D., & Semenescu, A. (2011). Capital Budgeting: The Romanian credit analysists' points of view. *The Review of Finance and Banking*, 3(1), 39-45.
- [19] EY. (2016) The DNA of the CFO 2016 study.
- [20] Graca, S., Barry, J., & Doney, M. (2015). Performance outcomes of behavioral attributes in buyer-supplier relationships. *Journal of Business & Industrial Marketing*, 30(7),805-816. DOI:10.1108/JBIM-04-2014-0072
- [21] Gates, S., Nicolas, J.L., & Walker, P. (2012). Enterprise risk management: A process for enhanced management and improved performance. *Management Accounting Quarterly 2012*, 13(3), 28-38.
- [22] Gervais, S. (2011). Capital Budgeting and Other Investment Decisions. In Baker H.K. & Nofsinger J.R. (Eds.), Behavioral Finance: Investors, Corporations, and Markets (pp.413-434). New York: John Wiley& Sons Inc.
- [23] Haas R., & Peeters M. (2006). The dynamic adjustment towards target capital structures of firms in transition economies. *Economics of Transition*. 14 (1), 133–169
- [24] Hashi I., & Toci, V. (2010). Financing constraints, credit rationing and financing obstacles: evidence from firm level data. *South-Eastern Europe Economic and Business Review*, 12(1), 29-60
- [25] Homburg, C., Vomberg, A., Enke, M., & Philipp H. Grimm (2015). The loss of the marketing department's influence: is it really happening? And why worry?. *Journal of the Academy of Marketing Science*, 43, 1–13. DOI: 10.1007/s11747-014-0416-3
- [26] Graham J., & Harvey C. (2001). The theory and practice of corporate finance: evidence from the field. *Journal of Financial Economics*, 60,187-243. DOI:
- [27] Kilic, K., Ulusoy, G., Gunday, G., & Alpkan, U. (2014). Innovativeness, operations priorities and corporate performance: An analysis based on a taxonomy of innovativeness. *Journal of Engineering and Technology Management*. 35, 115-133 DOI: 10.1016/j.jengtecman.2014.09.001
- [28] Gitman, L.J.,& Forrester Jr. (1977). A survey of capital budgeting techniques used by major US firms. *Financial Management*, 6(3), 66-71.
- [29] Jelenkovic, Z., & Barjaktarovic, L. (2016). The Risk Management Functions in the Conditions of Globalization: Case Study of the Republic of Serbia. *Management*. 79, 37 – 45. DOI: 10.7595/management.fon.2016.0010
- [30] KPMG.(2017). CFO Outlook Survey 2017.
- [31] Markovics, K. (2016). Capital budgeting methods used in some European countries and in the United States. *Universal Journal of Management*. 46, 348-360. DOI: 10.13189/ujm.2016.040604
- [32] Orsag, S., & Mitar, J. (2014). Application of cost of capital for capital structuring in Croatian firms UTMS Journal of Economics. 5(2), 151-158.
- [33] Liebenberg, A. P., & Hoyt, R. E. (2003). The Determinants of Enterprise Risk Management: Evidence from the Appointment of Chief Risk Officers. *Risk Management and Insurance Review, 6,* 37–52. DOI:10.1111/1098-1616.00019
- [34] Majdalawieh, M. (2014). An Integrated Approach to Enterprise Risk Building a Collaborative Risk Strategy Within the Business Processes of the Enterprise. *SACA Journal Volume 1/2014*. Retrieved from https://www.isaca.org/Journal/archives/2014/Volume-1/Pages/JOnline-An-Integrated-Approach-to-Enterprise-Risk.aspx
- [35] Pagach, D., & Warr, R. (2007). An empirical investigation of the characteristics of firms adopting enterprise risk management. *North Carolina State University working paper*. Retrieved from: https://mgt.ncsu.edu/documents/Risk_officer_hazard_JBF.pdf
- [36] Pagach D., & Warr R. (2011). The characteristics of firms that hire chief risk officers. The Journal of Risk and Insurance, 78(1), 185-211.
- [37] Servaes, H., & Tufano, P. (2006). Corporate Dividend Policy. Deutsche Bank AG.
- [38] PwC. (2015). PwC CFO Pulse Survey.
- [39] Sivo, S.A., Saunders, C., Chang, Q.,& Jiang, J.J., (2006). How Low Should You Go? Low Response Rates and the Validity of Inference in IS Questionnaire Research. *Journal of the Association for Information Systems*, 7(6), 351-414.
- [40] Society of Actuaries. (2001). Chicago Annual Meeting October 15-18 2000. Record. 26(3).
- [41] Van Horne, J., & Wachowicz, J.M. (2007). Osnovi finansijskog menadžmenta. Data status, Beograd
- [42] Vijay, J., & Ashwani, K. (1995). Capital Budgeting Practices in Corporate Canada. *Financial Practice and Education*, 5(2), 37-43.

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