INTERDEPENDENCE OF CONTROL ACTIVITIES AND MONITORING AS COMPONENTS OF THE INTERNAL CONTROL SYSTEM OF MANUFACTURING COMPANIES IN THE REPUBLIC OF SERBIA

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ABSTRACT

The subject of research in this paper is control activities and monitoring as components of the internal control system in manufacturing companies in the Republic of Serbia. The aim of this paper is to determine not only interdependence of control activities and monitoring, but also the interdependence of these components of the internal control system with indicators of ROA and ROE of a company. An additional goal of this paper is to examine the existence of differences in the assessment of the importance of control activities and monitoring applicable in manufacturing companies of different sizes. The research included a sample of manufacturing companies operating in the Republic of Serbia. The analysis was performed in the SPSS statistical program, where a correlation analysis was performed using the Pearson Coefficient, as well as the Kruskal-Wallis H test and the Mann-Whitney U test. The obtained results showed the existence of a strong positive link between control activities and monitoring, as well as weak links between control activities and monitoring, on one hand, and ROA and ROE indicators of the company, on the other hand. In addition, the results confirmed that there is no difference in the importance of the application of internal control systems, i.e. control activities and monitoring, in manufacturing companies of different sizes.

1. INTRODUCTION

The rapidly changing business environment puts enormous pressure on company executives to establish effective internal control systems in order to meet defined goals, i.e., adequate internal control systems will significantly affect the achievement of goals (Oppong et al., 2016, p. 110). Regardless of the quality of the designed internal controls, they cannot provide an absolute guarantee, but only a reasonable assurance regarding the achievement of the company's goals (Jovković & Dimitrijević, 2020, 165). The established system of internal control does not guarantee its success, and their consistent application by all employees in the organization is necessary. In order to enable the smooth implementation of planned activities and the achievement of the goals of the established internal control system, it is necessary to adequately establish the components that make up this system. First, it is necessary to create the basis and conditions in which the internal control system will be supported by employees, then identify risks that may hinder the achievement of company goals and accordingly set adequate procedures in order to ensure the achievement of goals. Also, it is necessary to enable uninterrupted flow of information and provide verification and evaluation of everything that has been implemented. The solutions that one company has do not have to be adequate for others, i.e. in accordance with their needs, business characteristics and environmental conditions, each company should design an appropriate system of internal control, define policies and procedures and provide conditions for their implementation. Today, internal control system is one of the most important instruments for ensuring security for all participants in the business arena, which contributes to the achievement of business goals and more reliable financial reporting (Aksoy & Mohammed, 2020, p. 205).

An efficient system of internal control enables the smooth performance of activities in the company and the achievement of set goals. Inadequately established components of the internal control system can jeopardize the results that the company will achieve. Neither the absence of relevant control activities, nor the existence of checks that will affect the elimination of existing deficiencies and prevent future irregularities can lead to losses and jeopardize the survival of the company in economic life. Manufacturing companies, taking into account their course of activity, from procurement, through production, to sales, need to establish a large number of policies and procedures that will accompany this process. In order to confirm the success of the established procedures, there is a need for monitoring. The market of the Republic of Serbia is developing, in connection with which the question of the importance of establishing an internal control system in companies in this market has been raised. In fact, the question is how in such conditions the application of the internal control system affects

the financial results of the company. The conclusion of a study conducted in Nigeria is that there is an impact of the internal control system on the financial results of small businesses (Olamide & Anastasia, 2018).

The subject of research in this paper is the system of internal control, i.e. control activities and monitoring, as components of the system of internal control in manufacturing companies in the Republic of Serbia. The internal control system is of great importance for the smooth implementation of company's business activities and the achievement of defined goals. The aim of the research is to present not only interdependence of control activities and monitoring, but also the interdependence of these components of the internal control system with the achieved financial performance indicators of manufacturing companies (ROA and ROE). Companies strive to achieve the best possible business results, which can be measured by the abovementioned financial indicators. These business indicators are used to assess the profitability of the company (Mitrović et al., 2021). As the internal control system helps to achieve the defined goals of the company, the goal is to determine the connection of its components with the previously mentioned financial indicators. An additional goal of the research is to determine the existence of differences in assessing the importance of applied control activities and monitoring in manufacturing companies of different sizes, i.e., to find out whether there are statistically significant differences in assessing the importance of research components of internal control systems in large, medium, small and micro companies.

2. LITERATURE REVIEW

Internal control is a very important part of the overall control mechanism of the company (Kewo, 2017, p. 294) and it consists of activities, processes, policies and control points that the company has designed and implemented. In order for internal controls to function smoothly and achieve defined goals, the full presence and coherence of the five components of this system is required (Vu et al., 2020, p. 1087). The Committee of Sponsoring Organizations of the Treadway Commission (COSO) describes how companies can design their internal control to best suit their specific characteristics and to influence the achievement of their set goals (Vu & Nga, 2021, p. 2). Management is responsible for establishing the internal control system, while all employees within the company are responsible for its implementation. Implementing internal control system will help companies reduce costs and improve performance (Tuan, 2020, p. 781), while establishing an effective internal control system helps companies gain a competitive advantage over others (Mamand & Alagoz, 2021, p. 265). Hence it

can be said that internal controls are of great importance for the very survival, but also for the development of the company (Li, 2020, p. 1). In addition, an efficient system of internal control in a company reduces the likelihood of criminal acts (Kulina, 2011, p. 153). The internal control system consists of five basic components, namely, control environment, risk assessment, control activities, information and communication, and monitoring (Jovković, 2021, p. 190). Control activities can be defined as necessary measures to identify risks, and policies and procedures that help achieve the defined goals of the company (Takahiro & Jia, 2012, p. 66). Control activities have been established to ensure that management directives are effectively implemented (Geiger et al. 2004, p. 28). In fact, control activities are the actions established through policies and procedures that help ensure that management's directives to mitigate risks to the achievement of objectives are carried out (COSO, 2013, p. 4). Monitoring, as the last component of the internal control system, involves assessing the effectiveness of the internal control system and making recommendations in order to improve its functioning (Kalmetova & Zhussupova, 2021, p. 98), and through assessing the design and functioning of controls, they confirm whether internal controls function as planned and whether they are tailored to changed business conditions (Ljubisavljević & Jovković, 2016, p. 136). Monitoring activities enable the efficient functioning of defined control activities (Rae et al., 2017, p. 38). Ongoing evaluations, separate evaluations, or a combination of the two are used to ascertain whether each of the five components of internal control is present and functioning (COSO, 2013, p. 5). Policies and procedures of internal control are a powerful instrument, and they were established to ensure the security of the defined goals. In fact, internal control is an indispensable form of supervision because it allows daily monitoring of all activities in the company, thus providing the opportunity to quickly eliminate all identified irregularities and avoid harmful consequences (Jovković, 2019, p. 140).

One of the previously conducted research (Pall, 2021) shows, among other things, the relationship between control activities and monitoring, i.e., the relationship between these components of the internal control system and ROA business indicators. This research refers to banks, and the obtained results show that there is a positive relationship between control activities and monitoring, i.e., relationship between these components of the internal control system and the return on total assets. A positive strong link between control activities and monitoring was also shown in a case study of an Egyptian company (Elshawarby, 2017, 56). On the other hand, there is a moderately positive, statistically significant relationship between the two components of the internal control system in the example of Vietnamese companies (Vu et al. 2020, 1093). A strong positive link between

monitoring and control activities was also shown in a study conducted in Finland (Agbejule & Jokipii, 2009, 509).

Wu & Nga (2021) conclude in their research, conducted on the case of small and medium-sized manufacturing companies in Vietnam, that there is a positive link between the system of internal control and profitability. After reviewing several studies, the authors Rapani & Malim (2020, p. 963) conclude that internal control as a system is significantly related to the achieved financial performance. Koutoupis & Malisiovas (2021) show a statistically significant positive relationship between control activities and profitability and a statistically significant negative relationship between monitoring and profitability of banks. Ndiaye et al. (2019) presented the existence of a link and the impact of the internal control system as a whole on profitability measured by ROA and ROE indicators. These authors observed the relationship between the internal control system, taking into account its components, and the profitability of the company.

Magu & Kibati (2016) monitored the impact of the internal control system on financial performance, observed through the variables control environment and control activities. This research revealed that there is a positive relationship between the internal control system and the financial performance of the company.

Muraleetharan (2011) came up with results showing that internal control has a significant impact on the financial performance of the company, and in terms of control activities and monitoring, it was concluded that they have positive effects on financial performance. Also, this research showed that internal control and achieved financial performance are positively related. The authors Kalmetova & Zhussupova (2021) examined the connection between the internal control system and the achieved performance on the example of US banks. The research also shows the correlation between ROA and ROE indicators of a company with the components of the internal control system. The link between the company's ROA and ROE indicators with control activities and monitoring is weak.

Based on the observed problem area, and in accordance with the defined subject and goal of the research, the baseline hypotheses and hypotheses tested in the paper are the following:

H1: There is a statistically significant positive relation between the assessment of applied control activities and monitoring, as a component of the internal control system.

H2: There is a weak link between the evaluation of applied control activities and monitoring, on one hand, and the ROA and ROE indicators of a company, on the other hand.

H3: There are no significant differences in the assessment of applied control activities and monitoring in manufacturing companies of different sizes.

3. MATERIALS AND METHODS

In order to determine the degree of significance of control activities and monitoring, as components of the internal control system, empirical research was conducted in manufacturing companies in the Republic of Serbia using the survey method. The research included 38 manufacturing companies from the Republic of Serbia. The questionnaire was sent to the e-mail addresses of 150 different manufacturing companies in the Republic of Serbia (response rate is 25.33%). The units in the sample were selected by the random sampling method. The sample units selected in this way are the basis for obtaining relevant research results. In addition, Pallant (2009, p. 225) states that in a situation where the sample has more than 30 cases, the SPSS also calculates the correction due to the interrelationships between the data. Based on the stated statement, it is considered adequate to use the previously mentioned sample. The questionnaire used to collect primary data contains 37 statements (questions) divided into three groups. The first group of questions refers to attitudes about the internal control system as a whole and the importance of this system for companies. The second group of questions refers to control activities as one of the components of the internal control system, and the third group of questions is related to monitoring, as the fifth component of the internal control system. Respondents stated the degree of their agreement with the statements in the questionnaire using the Likert five-point scale, where a score of 1 represents "absolutely disagree" and a score of 5 indicates "strongly agree". The survey was conducted in August and September 2021.

For the purposes of the research, publicly available secondary data from the financial statements of manufacturing companies included in the research were used, from the Balance Sheet and Income Statement for 2020. These official financial reports were downloaded from the website of the Business Registers Agency.

Systemic thinking was applied in the research. In accordance with the problems in the field subject to research, both quantitative and qualitative methodology was used. Based on the theoretical foundations of the research field, conclusions

were drawn about the importance of internal control systems in companies. Quantitative analysis was supplemented by the method of descriptive statistics. In order to determine the connection between the examined positions, namely control activities and monitoring, as components of the internal control system and ROA and ROE of the company, as financial indicators of the company's operations, a correlation analysis was performed. Using the Pearson correlation coefficient, the degree of linear dependence between the observed variables is shown.

The observed sample is divided into four groups, the first group consists of large companies, the second group consists of medium ones, the third group consists of small and the fourth group consists of micro manufacturing companies. The sample includes nineteen large manufacturing companies, nine medium-sized companies, four small manufacturing companies and six micro-sized companies. According to their size, companies can be divided into micro, small, medium and large according to the criteria defined by law (The Accounting Law, Article 6). These criteria refer to the average number of employees, operating income in the business year and the value of total assets. Data on the size of companies in the sample, on the basis of which they are classified into one of these four categories, are downloaded from the website of the Serbian Business Registers Agency (n.d.), for 2020. The purpose of this division is to determine possible differences in the assessment of the importance of the internal control system, i.e. control activities and monitoring in the manufacturing companies of the Republic of Serbia, which differ in size. In order to verify if there is a statistically significant difference between the observed groups, defined variables were assessed using the Kruskal-Wallis H test. As this test only shows whether there are statistically significant differences between the observed groups, but it does not show between which groups, Mann-Whitney U tests were used to supplement the knowledge.

Relevant methods of induction and deductions were also applied. Starting from individual companies, and based on the answers of respondents from the sample of manufacturing companies from the Republic of Serbia, a conclusion relating to the entire sector was made, while on the other hand we started from generally accepted theoretical basis to achieve individual characteristics.

Collected data from the questionnaire, as well as publicly available financial statements were prepared for analysis in Microsoft Excel. The data sorted in this way were imported into the SPSS statistical program, version 26, where further analysis was conducted.

4. RESULTS AND DISCUSSIONS

The results of the conducted analysis are presented according to descriptive statistical analysis, where in Table 1, Table 2 and Table 3 arithmetic means and standard deviations were presented for each of the statements (questions) contained in the questionnaire. Table 4 shows descriptive statistics for ROA and ROE indicators. The degree of linear dependence of the examined variables is shown in Table 5, as well as Kruskal-Wallis H test results in Table 6, which compares the variables of control activity, monitoring and internal control system according to different sizes of production companies.

Table 1: Descriptive Statistics – internal control system

Questions in the questionnaire	$\bar{X}$	Standard deviation
Internal control is extremely important for the company.	4.74	0.554
Internal control contributes to more reliable financial statements.	4.63	0.675
Internal control makes it easier to comply with regulations.	4.53	0.603
Internal control helps improve a company's business reputation.	4.32	0.933
Internal control influences better decision-making.	4.61	0.638
Internal control prevents errors.	4.21	0.963
Internal control detects errors.	4.55	0.555
The costs of conducting internal control are lower than benefits.	4.11	1.290

Source: Authors' calculation

Analyzing the sample, regarding the first group of questions from the questionnaire, based on the answers received from the respondents, it can be concluded that employees in manufacturing companies understand the importance of internal control. The most favorable attitude is present in the claim that internal control is extremely important for the company. The highest level of agreement in manufacturing companies, measured by the amount of standard deviation, is related to the above statement, while the lowest level of agreement is present in the statement that the costs of internal control are lower than the benefits it brings.

Establishing internal controls entails costs, which should be lower than the benefits that these controls will bring. Certainly, when considering costs and benefits, companies should consider the possible costs that would arise if internal controls were not implemented.

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Table 2: Descriptive Statistics – control activities

Questions in the questionnaire	X̄	Standard deviation
There is an adequate division of duties in the company.	4.18	0.834
The division of the duty between keeping assets/property and records of assets/property has been applied.	3.92	1.050
There is a division of the authority to authorize transactions from custody of assets.	4.16	1.053
There is a distinction between business responsibility and record keeping responsibility.	4.03	1.000
There is a distinction between the duties of IT and user staff.	4.21	0.935
Appropriate approvals of transactions and activities are present.	4.61	0.755
The transaction must not be performed unless it has been previously approved.	4.63	0.751
For routine transactions (often repeated) there are established procedures that are followed.	4.74	0.503
Approval is required for non-routine activities each time.	4.50	0.688
There is adequate physical protection of assets and records.	4.13	1.143
Protection from physical access to property is provided by the use of security locks, alarm systems, etc.	4.16	1.027
Protection against access to accounting records is provided by using passwords.	4.71	0.768
The control of documents enabling the use of property is performed.	4.53	0.647
Documents and records are appropriate.	4.66	0.481
The documents are adequately numbered.	4.74	0.503
Documents are compiled in a timely manner.	4.39	0.755
Documents are designed to be easily understood.	4.37	0.786
Transactions are recorded in a timely manner.	4.63	0.714
An independent assessment of business performance is conducted.	4.13	0.991
The assessor is independent and objective.	4.00	1.115
Business performance is adequately assessed.	4.16	1.027

Source: Authors' calculation

Analyzing the second group of questions from the questionnaire, the highest average score is present with the claim that for routine transactions, there are procedures established and followed, and that the documents are adequately numbered. The highest level of agreement, measured by the amount of standard deviation, is evident when the documents and records are appropriate. The lowest mean value of the received answers is present in relation to the claim that division of duty regarding keeping property and keeping records of such property has been applied, while the lowest level of agreement, measured by the standard deviation, is present in the claim that there is an adequate physical

protection of assets and records. In their research, Magu & Kibati (2016, p. 795), among other things, showed the existence of a clear division of duties in the observed companies. This agrees with the results of this research, namely the division of duties in both studies was assessed as very good.

Table 3: Descriptive Statistics – monitoring

Questions in the questionnaire	X̄	Standard deviation
Performance quality assessments are included in day-to-day activities.	3.92	1.075
These assessments are performed by employees as part of their regular duties.	3.95	1.114
Corrective measures are taken in a timely manner.	4.03	1.078
Monitoring enables the adjustment of the internal control system to changes in business conditions.	4.26	0.950
Employees in charge of monitoring have adequate knowledge and skills.	4.03	1.000
The internal control system is also monitored by internal auditors.	3.47	1.484
Internal auditors make recommendations for improving the internal control system.	3.50	1.484
Information from external sources is used for monitoring purposes.	3.89	1.085

Source: Authors' calculation

Observing the answers provided to the third group of questions from the questionnaire, it is concluded that the answers given by the respondents were lower than the answers given to questions related to control activities, i.e., there are slightly lower mean values for questions related to monitoring. The lowest mean value is recorded for the statement that the internal control system is also supervised by internal auditors (3.47), while the highest mean value is for the statement that monitoring enables the adjustment of the internal control system to changes in business conditions. Measured by the amount of standard deviation, the aforementioned statement has the highest level of agreement between the respondents, i.e., manufacturing companies in the Republic of Serbia.

Oussii & Boulila Taktak (2018, p. 464) showed that internal audit activities are significantly related to the quality of internal control in the company. On the other hand, looking at manufacturing companies in the Republic of Serbia, it is concluded that the lowest average scores obtained from respondents are precisely related to the statements regarding relations between internal control and the work of internal auditors.

Table 4: Descriptive Statistics – ROA, ROE

Variable name	X̄	Minimum	Maximum	Standard deviation
ROA	0.05	-0,234	0.277	0.086
ROE	-0.18	-16.135	2.757	2.722
Large manufacturing enterprises				
ROA	0.05	-0.234	0.277	0.110
ROE	-0.61	-16.135	2.421	3.802
Medium manufacturing enterprises				
ROA	0.04	0.004	0.1132	0.039
ROE	0.37	0.018	2.757	0.895
Small manufacturing enterprises				
ROA	0.07	0.039	0.075	0.033
ROE	0.15	0.075	0.255	0.078
Micro manufacturing enterprises				
ROA	0.02	-0.113	0.118	0.078
ROE	0.15	0.000	0.409	0.160

Source: Authors' calculation

In the analyzed sample, the mean value of the ROA indicator is positive (0.05), while the mean value of the ROE indicator is negative (-0.18). The lowest mean value of the ROA indicator occurs in micro-sized enterprises, while it is the highest in small enterprises. The mean value of the ROE indicator is the highest in medium-sized enterprises, and the lowest in large manufacturing enterprises.

Table 5: Peason's Correlation Matrix

	SIK	KA	M	ROA	ROE
Internal control system (SIK)	1				
Control activities (KA)	0.370*	1			
Monitoring (M)	0.414**	0.580**	1		
ROA	-0.019	0.109	0.108	1	
ROE	-0.032	-0.184	-0.159	0.330*	1

Note: Statistically significant correlation of the level 0.01(**)
Statistically significant correlation of the level 0.05(*)

Source: Authors' calculation

Pearson coefficient values show the level of linear dependence between model variables. The obtained results of correlation analysis, which are shown in Table 5, show a positive strong and statistically significant relation between control

activities and monitoring, as components of the internal control system. If the relation between control activities as a component and the internal control system as a whole is observed, the results show a statistically significant positive moderate relation. On the other hand, looking at the internal control system as a whole and monitoring as one of the components of this system, there is a positive moderate statistically significant relation. The obtained results in terms of the direction of the relations between control activities and monitoring, coincide with some of the previously conducted research (Elshawarby, 2017; Vu et al., 2020; Agbejule & Jokipii, 2009).

Looking at the relationship between control activities and monitoring, as components of the internal control system, and the financial performance of ROA and ROE, it can be concluded that the relations are poor, ranging from positive to negative. In fact, the ROA indicator is positively and weakly related to control activities and monitoring, i.e., the ROE indicator is negatively and poorly related to the observed two components of the internal control system.

One of the previous studies (Chowdhury, 2021) showed a moderate positive statistically significant relation between control activities and monitoring, i.e. a moderate relation between control activities and ROA indicators and a strong positive relation between monitoring and ROA indicators. The differences that occur in relation to the mentioned research are evident in the strength of the relation between control activities and monitoring, i.e. in the strength of the relation between control activities and monitoring, on the one hand, and ROA indicators, on the other hand. The reasons for this can be found in the different sectors in which the surveyed companies operate, as well as in the different economies in which the research was conducted.

In a study examining, among other things, the relations between internal control system components and ROA and ROE indicators of company (Kalmetova & Zhussupova, 2021), the authors showed a poor negative relation between ROA indicators and control activities, as well as ROA and monitoring. Also, a poor positive relation between ROE indicators and control activities was presented, i.e. a poor negative relation between ROE and monitoring. In connection with the above, the results obtained on the example of manufacturing companies in the Republic of Serbia show agreement in the form of weak links between these components of the internal control system and ROA indicators, but there is disagreement in the direction of the relations. On the other hand, there is a compliance in the results related to the relations between ROE indicators and monitoring, but also the strength of the relations between ROE indicators and control activities.

Table 6: Results of Kruskal-Wallis H test – enterprise size and control activities; enterprise size and monitoring; enterprise size and internal control system

	Chi-Square	df	Sig.	Median for large manufacturing enterprises	Median for medium manufacturing enterprises	Median for small manufacturing enterprises	Median for micro manufacturing enterprises
Control activities	8.891	3	0.031	4.6667	4.3810	3.8810	4.1190
Monitoring	4.47	3	0.215	4.2500	3.8750	3.3750	3.4375
Internal control system	0.086	3	0.994	4.6250	4.5000	4.5625	4.5625

Source: Authors' calculation

Table 6 shows the results of the Kruskal-Wallis H test. The obtained results present that there is a statistically significant difference in the assessment of applied control activities in manufacturing companies of different sizes. The median for large manufacturing companies is the highest, while it is the lowest for companies that are small in size. If we observe monitoring as a component of the internal control system, results show that there is no statistically significant difference in the assessment of monitoring in manufacturing companies of different sizes. In this case, the median is highest in large manufacturing companies, while the lowest value of the median is in small companies. If we look at the test results of the internal control system as a whole, it can be said that there is no statistically significant difference in the assessment of the importance of the internal control system of manufacturing companies of different sizes.

The Kruskal-Wallis H test only indicates whether there is a statistically significant difference, but not in which groups such difference is present (Jovković et al. 2021, 211). In order to determine in which groups of manufacturing companies this difference exists, Mann-Whitney U tests are applied between micro and small manufacturing companies, micro and medium manufacturing companies, micro and large manufacturing companies, small and medium manufacturing companies, small and large manufacturing companies, and medium and large manufacturing companies. According to Pallant (2009, 231), in order to avoid type I errors when interpreting the results, the Bonferoni correction of the alpha value was applied, $\alpha = 0.05 / 6 = 0.008$.

Table 7: Results of Mann-Whitney U test – enterprise size and control activities

Mann-Whitney U	Z	Sig.	r
Micro and small			
7.000	-1.066	0.286	0.337
Micro and medium			
23.000	-0.472	0.637	0.122
Micro and large			
33.000	-1.530	0.126	0.306
Small and medium			
11.500	-1.011	0.312	0.280
Small and large			
9.500	-2.316	0.021	0.483
Medium and large			
42.000	-2.147	0.032	0.406

Source: Authors' calculation

Based on the Mann-Whithey U test, results were obtained indicating that between manufacturing companies of different sizes, i.e. between micro and small manufacturing companies, micro and medium manufacturing companies, micro and large manufacturing companies, small and medium manufacturing companies, small and large production enterprises, medium and large production enterprises, there is no statistically significant difference in the assessment of the importance of control activities as a component of the internal control system. That is, the distribution of variable control activity does not differ in manufacturing companies of different sizes in the Republic of Serbia, at a stricter level $\alpha = 0.008$. If we take into account the theoretical foundations, i.e. the views of various authors who have dealt with the issue of internal control, it can be said that the absence of statistically significant differences in the assessment of control activities and monitoring of companies of different sizes is the expected result.

5. CONCLUSIONS

The internal control system in companies, if properly set up and applied consistently, can bring numerous benefits and help achieve the set goals. Based on the conducted research, which included manufacturing companies in the Republic of Serbia, it can be concluded that hypothesis one (H1) is confirmed, i.e., there is a statistically significant positive relation between the evaluation

of applied control activities and monitoring, as a component of the internal control system. This further confirms the view that only adequately harmonized components of the internal control system contribute to the successful functioning of the internal control system as a whole.

The results of the correlation analysis show that there is a weak link between the assessment of applied control activities and monitoring, on the one hand, and the ROA and ROE indicators of the company, on the other hand. This confirms the second hypothesis (H2) which was the starting point of the paper.

The third hypothesis (H3) that was tested in the paper was confirmed on the basis of the conducted analysis, i.e. there are no significant differences in the assessment of applied control activities and monitoring in manufacturing companies of different sizes. The results of the Kruskal-Wallis H test showed that there is no statistically significant difference between production companies of different sizes in terms of assessment of the application of monitoring, while the same test showed a significant difference in the assessment of applied control activities. In order to determine in which enterprise groups this difference exists, the Mann-Whitney U test was applied, using a stricter level to assess the differences and to avoid possible errors. Under this assumption, it was found that there are no differences in the assessment of the application of control activities of companies of different sizes. The obtained results confirm the position on the importance of implementing internal control systems in companies, but it is further emphasized that there is no difference in the importance of implementing internal control systems, especially control activities and monitoring in companies of different sizes, from micro to large.

The scientific contribution of this paper is reflected in the expansion of existing knowledge about the importance of internal control systems, with special emphasis on control activities and monitoring. Numerous studies that have addressed the issue of internal control have shown a link between control activities and monitoring. The contribution of the conducted research is reflected in the extension of this knowledge to the case of manufacturing companies operating in the Republic of Serbia. The weak link between the internal control system and financial indicators of operations is shown, but it is definitely important to emphasize that the benefits brought by internal control system, in the form of preventing losses, may indirectly affect this segment. This knowledge was supplemented by examining the differences between companies of all sizes, which indicates the importance of implementing internal control systems in all companies. Companies of different sizes may have different procedures, policies,

supervision in place in different manners, but the importance of the existence of internal control is not disputed.

The results of the research can serve as an aid to the responsible persons in companies for recognizing the importance of the internal control system and importance of compliance of its components. In addition, the management of smaller companies can point out the importance of this system and the need for its development and continuous improvement. The existence of a successful internal control system allows the company to put greater trust in many market participants, as well as the assessment of lower levels of risk by external auditors, which further improves the reputation of the company itself.

The potential subjective views of the respondents can be mentioned as a limitation of the conducted research. Namely, as one respondent represented one production company, the answers received may be influenced by personal attitudes, satisfaction with the current situation in the company. The size of the sample used can be mentioned as a limitation of the research, i.e., through the examination of a larger number of companies, or a larger number of respondents within one company, a broader insight into the observed problem area could be achieved.

The research conducted could be expanded in future. Future directions of research may include examination of other components of the internal control system, i.e. the assessment of the control environment, risk assessment, information and communication, and their relationship, as well as their position in companies of different sizes and companies from other sectors.

Conflict of interests

The authors declare there is no conflict of interest.

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МЕЂУЗАВИСНОСТ КОНТРОЛНИХ АКТИВНОСТИ И МОНИТОРИНГА КАО КОМПОНЕНТИ СИСТЕМА ИНТЕРНЕ КОНТРОЛЕ ПРОИЗВОДНИХ ПРЕДУЗЕЋА У РЕПУБЛИЦИ СРБИЈИ

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САЖЕТАК

Предмет истраживања у раду јесу контролне активности и мониторинг као компоненте система интерне контроле у производним предузећима у Републици Србији. Циљ рада јесте утврђивање постојања међузависности контролних активности и мониторинга, али и међузависности ових компоненти система интерне контроле са показатељима РОА и РОЕ предузећа. Додатни циљ рада јесте испитивање постојања разлике у оцјени значаја примијењених контролних активности и мониторинга у производним предузећима различите величине. Истраживање је обухватило узорак производних предузећа која послују у Републици Србији. Анализа је извршена у СПСС статистичком програму, гдје је спроведена корелациона

анализа примјеном Пеарсоновог коефицијента, као и Крускал-Валисов X тест и Мен-Витнијев У тест. Добијени резултати показали су постојање јаке позитивне везе између контролних активности и мониторинга, као и слабе везе између контролних активности и мониторинга, с једне стране, и показатеља РОА и РОЕ предузећа, с друге стране. Додатно, резултати су потврдили да не постоји разлика у значају примјене система интерне контроле, односно контролних активности и мониторинга у производним предузећима различите величине. Добијени резултати истраживања потврђују постављене хипотезе X1, X2 и X3. Као закључак спроведеног истраживања наводи се велики значај имплементације система интерне контроле у предузећима без обзира на њихову величину, при чему је од изузетне важности адекватност успостављеног система и његова континуирана примјена.

Кључне ријечи: *систем интерне контроле, контролне активности, мониторинг, финансијске перформансе, производна предузећа.*