ORIGINAL SCIENTIFIC PAPER

The Role of Balanced Scorecard Models in the Assessment of Board of Directors Performance

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ABSTRACT

There are a number of performance management systems that are used as mechanisms to control corporate operations, and one of the well-known is the Balanced Scorecard. Business control is a fundamental issue, and the Board of Directors is an important internal control mechanism for improving the performance and competitiveness of corporations. The Board of Directors represents the link between the owner and the manager and his task is to constantly monitor the manager and to make sure that they carry out their activities in a way that will maximize profits for the owners of the capital. For the board to perform its role, its members need to have the appropriate competencies. The specific knowledge, skills, abilities and experiences of board members represent human capital. The subject of the research is to examine the possibility of applying the Balanced Scorecard model in the performance evaluation of the members of the Board of Directors and to examine the impact of the compensations of the board members, which are viewed as a factor of motivation and investment in human capital (HCE), on the financial performance of the company, namely the rate of return on the total invested capital and the total invested assets (ROE and ROA). The results of the research showed that the Balanced Scorecard is an applicable model for evaluating the performance of the members of the Board of Directors, and that the level of compensation of the board members is positively correlated with the financial performance of the company.

Key words: Balanced Scorecard, Board of Directors, human capital, compensation of board members, financial performance

JEL Classification: 021, M41, E24

INTRODUCTION

Modern business conditions are characterized by a turbulent business environment, increasing pressure from competition, a high degree of risk and uncertainty, and incomplete awareness of economic actors. An effective corporate governance system is essential for companies to achieve good business performance. It is necessary for certain control mechanisms to determine whether managers carry out their business activities in order to maximize profits for owners of capital. Board members represent an important internal control mechanism.

Kaplan & Norton (1992) have designed one of the most famous performance management systems, the Balanced Scorecard (BSC). The model includes financial and non-financial benchmarks. The BSC model starts from a defined mission, vision, goals and strategy of the company and defines specific goals, tasks, benchmarks and initiatives from four basic causal

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relationships: financial perspective, customer perspective, internal business process perspective and learning and growth perspective. The paper particularly emphasizes the application of the BSC model in the performance evaluation of board members, with particular reference to the learning and growth perspective, which encompasses the knowledge, competencies, abilities and compensations of board members, which can also be seen as human capital of the company (HCE), and to the financial perspective, where the most significant financial criteria are the return on invested capital (ROE) and the return on total invested assets (ROA).

Previous research has used a qualitative approach when examining the impact of board members' compensation on a company's financial performance (Higgs, 2003; Edlin, 2005; Parker, 2007). The contribution of this research is reflected in the implementation of the quantitative approach, where the compensation of board members is viewed as an element of the human capital of the enterprise and their impact on financial performance is examined. This determines whether board members have a significant impact on business results, or whether companies should allocate significant cash to board members.

Human capital can be defined as a set of knowledge, skills, experiences, attitudes, dedication, innovation and competence of employees (Wang, Wang, & Liang, 2014). The main carriers of the so-called human capital is the members of the board of directors and other employees, who, by implementing specific competencies, enable them to create value for the company and achieve sustainable competitive advantage (Ghorbanhosseini, 2013). By building unique human capital, companies enhance their business performance (Alnacher & Alhajjar, 2017). The financial perspective encompasses a variety of benchmarks, the most significant of which are ROA and ROE, which simultaneously measure asset efficiency and the earning capacity of an enterprise.

The subject of the research is to examine the possibility of applying the Balanced Scorecard model in the performance evaluation of the members of the board of directors and to examine the impact of compensation of the board members, considered as an element of human capital (HCE), on the financial performance of the company, namely the rate of return on invested capital (ROE) and total invested assets (ROA). The aim of the study is to determine the validity of the Balanced Scorecard model for evaluating the performance of board members, and to determine whether board members' compensation, as an element of human capital (HCE), has a positive or negative impact on a company's financial performance (ROE and ROA).

Based on the review of works in the existing literature, the qualitative methodology will determine whether the Balanced Scorecard model is applicable for evaluating the performance of the members of the board of directors, while the quantitative methodology will determine whether the human capital of the members of the board of directors has a positive impact on the financial performance of the company. The empirical survey includes a sample of 35 companies that, according to the Agency for Business Registers, earns high net profit during 2017. In these companies significant funds are earmarked for the remuneration of the members of the board of directors, which makes them suitable for analyzing the impact of the board members' compensation on the financial performance of the company.

LITERATURE REVIEW

Balanced scorecard as a performance management model

Kaplan & Norton (1996) developed the Balanced Scorecard concept and suggested that the vision and strategy of a company be more specifically defined from four basic, interconnected perspectives:

1. Financial Perspective – how to see shareholders, the primary goal is to implement a strategy that will maximize profits for equity owners;

- 2. Customer Perspective how customers see us, the primary goal is to achieve some degree of customer satisfaction and loyalty, thus ensuring the company has a long-term profitable business;
- 3. Perspective on internal business processes what processes help us to achieve a sustainable competitive advantage, how effective they are;
- 4. Learning and Growth Perspective what kind of human capital we need to gain competitive advantage.

Kaplan & Nagel (2004) propose a three-part BSC program that includes:

- 1. Enterprise Scorecard harmonized list of results at company level;
- 2. Board Scorecard harmonized list of Board results;
- 3. Executive Scorecards harmonized list of executors' scores.

Harmonized list at the company level implies that top managers, starting from a defined company strategy, develop goals, tasks, benchmarks and initiatives through the four outlined perspectives. This ensures that the strategy is translated into operational terms. Figure 1 shows the Balanced Scorecard model.

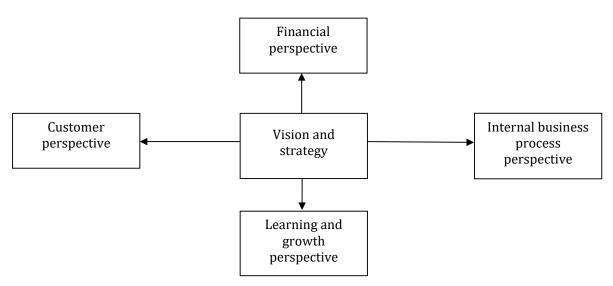
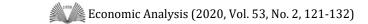


Figure 1. Conceptual framework for Balanced Scorecard

Source: Kaplan, R.S., and Norton, D.P. 1992. "The Balanced Scorecard measures that drive performance". Harvard Business Review, 70(1): 71-79

- After building the harmonized list at the company level, it is necessary to build the harmonized list at the board level. That is, the board of directors should evaluate and approve the corporate strategy map and the corporate level harmonized list. A harmonized list at this level also contains four perspectives: (Kaplan & Nagel, 2004)
- 1. Financial Perspective identical to that in the harmonized list of results at the enterprise level, the goal is to maximize value for equity owners;
- 2. Stakeholder perspective this is a broader perspective than at the company level, because it is now important to respect the interests of all stakeholders;
- 3. Perspective on internal business processes explains how the board contributes to the achievement of shareholder goals and relates to performance monitoring, reward systems etc.;
- 4. Learning and Growth Perspective captures human capital as a source of competitive advantage, related to the specific skills, knowledge and capabilities of board members.



This research examines whether the Balanced Scorecard model is applicable to assessing the performance of board members, with particular reference to linking the learning and growth perspective with the financial perspective. That is, it examines how board members with their competencies, knowledge and skills, generally viewed as human capital (HCE), affect the financial performance of a company (ROA and ROE). Epstein & Roy (2004) propose that the harmonized list be used to evaluate the performance of board members. The model is presented in Table 1.

Perspective	Goals	Measures	
Financial perspective	Long-term and short-term earnings	ROA,ROE, EVA, share price	
Interest group (stakeholders) perspective	Ethical behavior and respecting the law, high level of corporate management and responsibility, identifying interest group needs	Employee satisfaction. customer satisfaction, number of meetings with stakeholders	
Intern business process perspective	Efficient crisis management, company plans evaluation, compensation systems	Business performance during crisis, clear goals for board members, number of hours spent in defining corporate strategy	
Learning and growth perspective	Improving board of directors structure, skills and knowledge of board members	VAIC, HCE, training for board members	

Table 1. Balanced Scorecard model at the board level

Source: Epstein, M. J. and Roy, M. J. 2004. "How does your board rate". Strategic Finance, 28-29.

Finally, a harmonized list of results also needs to be built at the executive level. The CEO builts harmonized list to ensure that the executive team performs activities and tasks in accordance with a strategy approved by the board.

Application of balanced scorecard model at board level

There are numerous studies in the literature, which have examined whether the Balanced Scorecard model is applicable to the performance evaluation of board members.

Northcott & Smith (2011) conducted a survey in New Zealand with a view to reviewing the experiences of board members in applying the Balanced Scorecard model. Large companies were selected for the sample to ensure that the effectiveness of the board of directors of some of the most influential companies in the country was examined. Through a semi-structured interview, 35 board members expressed their views and experiences on the Balanced Scorecard approach. In addition to experience in applying the Balanced Scorecard model, additional criteria for selecting board members participating in the survey were that respondents were board members of at least two companies and spent at least three years in that position. In this way, it is ensured that the respondents can draw on the experiences of different companies as well as having spent sufficient time in the company. The contribution of the paper is reflected in the fact that their perceptions of the Balanced Scorecard model were expressed by the members of the board, who had experience in the practical application of the model. Based on the processed interview results, the study concluded that the Balanced Scorecard is applicable at the board level and is a useful tool for evaluating the performance of board members. Members of the board of directors indicated through interviews that the Balanced Scorecard model can be a very effective performance management system, and that by combining different goals and benchmarks from four basic perspectives, the performance of board members can be evaluated.

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The study conducted in the territory of Egypt (Hussein & Mansour, 2017), aimed to identify opportunities for the implementation of the Balanced Scorecard model in evaluating the performance of board members in the case of production companies. Data were collected through questionnaires and in-person interviews, from three different samples: board members, manufacturing company managers, and financial analysts at brokerage firms. The results of statistical analyzes have shown that the Balanced Scorecard is an effective tool for evaluating the work of board members. The Balanced Scorecard model provides a comprehensive analysis and evaluation of the work of board members. Based on the four model perspectives, it is possible to examine by appropriate benchmarks how members of the board of directors influence shareholder value creation, profit maximization, interest group satisfaction, internal business process efficiency, etc. The contribution of the paper is to provide empirical evidence on the feasibility of applying the Balanced Scorecard model, where by combining different indicators from four basic perspectives the performance of the board members can be evaluated.

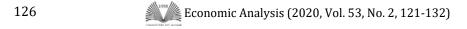
Hoque (2014) provides an account of research on the Balanced Scorecard model as a mechanism for evaluating the performance of board members over the past 20 years. The research includes an overview of 114 papers published in accounting journals and 67 papers in management area. Among other things, in the aforementioned papers, members of the board of directors spoke about their experiences in applying the Balanced Scorecard model in interviews, and there is empirical evidence that the model can be used to look at the impact of board members on shareholder returns, profit maximization, stakeholder satisfaction and more. Based on the above, it can be concluded that the Balanced Scorecard model is applicable for performance evaluation of the members of the board of directors. However, the author suggests that it may be desirable that there be studies in the literature that will address the difficulties as well as potential failures in the implementation of the Balanced Scorecard model. Such examples would be of benefit to companies planning to introduce a Balanced Scorecard model in their operations.

Chavan (2009) looks at the implementation of the Balanced Scorecard model in Australian corporations. The growing importance of the model is discussed and the problems that companies face during implementation are explored. The case study method has been applied, the Balanced Scorecard model is being considered in two multinational corporations in Australia. The first company did not achieve an appropriate level of profit, so it introduced a Balanced Scorecard model in its operations to analyze the impact of employees, including board members, on the profits made. The other company had extremely high operating costs, so with the introduction of the Balanced Scorecard model it improved the cost analysis and control. The results showed that it is possible to implement the model, but the limitation states that the outcomes may differ for SMEs.

Domanović (2017) points out that in the Republic of Serbia consistent application of the Balanced Scorecard model is achieved by those companies which are under the influence of foreign capital and are compelled to submit to the foreign owners business reports in accordance with the latest trends in measuring and managing the efficiency of companies. Managers who have implemented the Balanced Scorecard are generally satisfied with the effects of applying the model on company performance. The best-rated performance is that the model provides a better understanding of stakeholders, clarifies and ensures that employees have a better understanding of the company strategy, increases owner satisfaction and provides an expanded customer base. Also, the model is suitable for evaluating the performance of board members and considering their impact on the financial performance of the company.

Based on the above papers, which examined the possibility of applying the Balanced Scorecard model in the performance evaluation of the members of the board of directors, and in accordance with the subject and objectives of this research, the following research hypothesis can be formulated:

H₁: The Balanced Scorecard model can be used to evaluate the performance of board members.



This research links the learning and growth perspective with the financial perspective from the Balanced Scorecard model. The objective is to determine how board members, through their compensation, viewed as human capital (HCE), affect the financial performance of the company (ROA and ROE). If the members of the board of directors have an influence on the business results of the company, then it is justified to allocate significant funds to the board members.

Human capital and financial performance

Intellectual capital is defined as a kind of combination of intangible resources, which enables one company to survive in the market. One of the most well-known classifications implies that the components of intellectual capital are human, structural, and relational capital (MERITUM, 2002). Human capital can be defined as a set of knowledge, skills, experience, attitudes, commitment, innovation and competence of employees (Wang, Wang & Liang, 2014). Human capital is considered to have four components (Fitz-Enz, 2000): elements that each employee brings to the work process (intelligence, energy, enthusiasm, experience, skills, emotional intelligence, and the like), ability to learn (promotion, imagination and creativity), ability to act (conversion of data into information for action) and motivation (information and knowledge sharing, development of team spirit and goal orientation, compensation of board members and other employees).

Modern business conditions require the construction of unique human capital, and it's important to know that there is a difference between general and specific human capital. General human capital is acquired through education and may in some ways be accessible to all, but it will not lead to sustainable competitive advantage as it can be easily copied. That is why it is crucial to build specific human capital, which is unique to a given company and its employees. Building specific human capital can be achieved by providing training, fostering creativity and innovation, respecting employees' ideas, involving employees in the decision-making process (Luthans & Youssef, 2004). The resource-based approach assumes that resources are a source of sustainable competitive advantage if they are rare, valuable, difficult to imitate, and unsuitable for substitution (Barney, 1991). Human capital is a critical resource for differentiating financial performance between different businesses and also a key source of competitive advantage for businesses. Intangible resources enable the company to achieve sustainable competitive advantage and significantly affect its financial performance. The members of the board of directors can significantly contribute to the achievement of positive financial performance with their competencies, which are considered as human capital of the company. There are numerous studies in the literature on how board members, with their knowledge, skills, competences, which can generally be seen as human capital, affect a company's financial performance.

Previous research (Babić & Slavković, 2016) examines how board members influence organizational innovation with their competencies and dynamic capabilities. The paper applies a qualitative methodology based on the description, comparison and interpretation of scientific results in a defined problem area. An integrative model of interdependence of the board of directors and top management structure in the development of organizational innovation is defined. The study points out that the intellectual capital (human, structural, social and cultural capital) of boards of directors is the basis of the transformation processes through which the board of directors adds value to the organization.

Yadav & Chakraborty (2017) examined how board members, with their competencies, skills and abilities, which are viewed as human capital (HCE), influence the rate of return on total invested assets (ROA). The sample contains 74 companies from different industries. The independent variable - human capital - is part of intellectual capital, so the methodology of VAIC (Value Added Intellectual Coefficient), developed by Professor Ante Pulic, was used to measure its impact. VAIC represents the added value of intellectual capital, which is calculated when total costs are deducted from total revenues (excluding compensation for board members who are viewed as an investment in human capital). Subsequently, human capital (HCE) is calculated when the previously determined VAIC value is divided by the total earnings paid to board members in one year (HC). A financial indicator of ROA is obtained when the net profit after tax is divided by the total invested assets or assets of the company. The results of correlation analysis (Pearson coefficient) and regression analysis (β coefficient) show that human capital has a positive statistically significant influence on the financial performance of the company. In other words, members of the board of directors influence their asset efficiency (ROA) through their competencies, which are viewed as human capital (HCE).

Nguyen, Nguyen, Locke & Reddy (2017) examined the impact of human capital on the financial performance of listed companies in Vietnam. The research starts from a resource-based approach, according to which intangible resources are a key source of competitive advantage for companies. The research methodology includes a panel analysis of 315 companies, the results of which are observed over a four-year period. The results showed that human capital has a positive impact on the rate of return on total invested capital (ROE) and the rate of return on total invested assets (ROA). The study's recommendation is that companies in Vietnam should invest cash in improving the competencies of board members because they have a significant impact on the financial performance of the company.

A previous study (Berezinets, Garanina & Ilina, 2016) points out that human capital is a set of knowledge, experience and skills of board members. The research was conducted to explain the relationship between human capital and financial performance of a company. The research applied qualitative methodology, that is, by reviewing already existing papers in the literature, it was found that the members of the board of directors influence their financial performance on the companies. The authors suggest that companies should pay great attention to the selection of candidates to be appointed to the board of directors, as they can significantly contribute to the achievement of positive financial performance.

Saravanan & Mayur (2017) examined how human capital and board composition (external and internal members) affect the financial performance of banks. The methodology of the survey included a panel analysis for a period of five years within which the operations of 40 banks in India were analyzed. The results of the study showed that the board members competence influence the rate of return on invested assets (ROA). Also, the study's recommendation is that the board of directors is dominated by externally elected members to ensure independence from managers. The results show that banks dominated by external board members have improved financial performance.

Makkonen, Wiliams & Habersetzer (2018) examined how national diversity and personal innovation of board members affect a company's financial performance. The sample included a large number of firms within the European Union, and the data collected related to the number of patents, research projects, innovation of companies, as well as the national diversity of board members. The practical implications of the study show that greater national diversity can increase innovation, and ultimately that board members improve their efficiency and effectiveness of internal company processes with their innovation, creative suggestions, and ideas, and thus contribute to better financial performance.

The paper analyzes how members of the board of directors, through their compensations, which are a factor of motivation and investment in human capital, affect the financial performance of the company. The Balanced Scorecard approach is applied and emphasis is placed on linking the learning and growth perspective with the financial perspective. That is, board members' compensation is viewed as human capital (HCE), and the impact on the return on invested capital (ROE) and the return on invested property (ROA) is examined. Based on the aforementioned papers, which examined among other things how members of the board of directors through their competences, knowledge, skills, abilities, which can generally be viewed as human capital, influence the financial performance of the company, and in accordance with

the subject and objectives of this research, formulate research hypotheses and present a conceptual model:

 H_{2a} : Board members with their compensations, which are viewed as an investment in human capital (HCE), have a positive statistically significant impact on the rate of return on total invested capital of the company (ROE).

 H_{2b} : Board members with their compensations, which are viewed as an investment in human capital (HCE), have a positive statistically significant impact on the rate of return on total invested assets of the company (ROA).

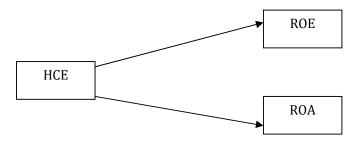


Figure 1. Research model Source: Authors

RESEARCH METHODOLOGY

Based on the review of works in the existing literature, the qualitative methodology will determine whether the Balanced Scorecard model is applicable to the performance evaluation of the members of the board of directors, while the quantitative methodology will determine whether human capital has a positive impact on the financial performance of the company.

The empirical research includes a sample of 35 companies that operate in the Republic of Serbia and which, according to the data of the Agency for Business Registers, stand out in 2017 according to the realized net profit. When to comes to the criterion of enterprise size, the sample contains 32 large, 2 small and 1 medium enterprises. The structure of the sample from the aspect of the enterprise sector criteria is as follows: manufacturing industry 14, mining 2, electricity supply 5, information and communication 4, wholesale and retail 4, professional, scientific and innovation activities 1, traffic and storage 3, arts, entertainment and recreation 1, administrative and support service activities 1. Data on total assets and capital are taken from the balance sheets of companies, while data on operating income, total costs and net profit are taken from the income statement of companies. Information on the costs of remuneration to the members of the Management and Supervisory Boards is available in the audit report with the financial report that is the subject of the audit. All the above reports for the selected 35 companies are available on the website of the Agency for Business Registers. In these companies significant funds are allocated for the remuneration of the members of the board of directors, and therefore such companies are suitable for analyzing the impact of the compensations of the board members, seen as an investment in human capital (HCE), on the financial performance of the company (ROE and ROA).

A particularly useful measure of intellectual capital is the so-called VAIC model (Value Added Intellectual Coefficient). According to the above model, value added (VA) is obtained when from the total revenue (TR) is deducted from the total cost (TC), except for those costs related to the remuneration of the members of the board of directors, which are not treated as a cost, but as an investment in human capital. The model can be expressed quantitatively as follows (Pulic, 2000):

VA=TR-TC

In order to determine how value is realized, all components of intellectual capital (human, structural and relational) must be considered. However, given the scope of this paper, only human capital (HCE), which can be quantified when the previously determined value added (VA) is divided by the total remuneration paid to board members in one year (HC), will be considered further, which can be quantitatively represented as:

HCE=VA/HC

(2)

Financial indicators (ROA and ROE) are obtained when the total profit after tax is divided by the total invested assets, that is, the assets of the company (ROA) and when the net profit after tax is divided by the total invested capital (ROE) (Janošević & Dženopoljac, 2015)

Descriptive statistical analysis will be applied in the work to determine the mean values, average deviation, maximum and minimum of the achieved financial performance. Also, the paper applies a simple linear regression analysis to determine whether board members, through their compensation, which are viewed as investment in human capital (HCE), affect the rate of return on total invested capital (ROE) and the rate of return on total assets invested (ROA). Based on the results of the regression analysis, a decision will be made to confirm or reject the research hypotheses. Data processing will be done through the statistical software "SPSS v.20".

RESULTS OF THE RESEARCH

The study used descriptive statistical analysis to determine the mean values, average deviation, maximum and minimum of financial performance achieved. The results obtained are shown in Table 2.

	Net earning	Revenue	Total costs	Board members compensations	Total assets	Capital
AM	5934446,2	43959398	36174268	8,150,85	85667263,77	51477942
SD	7971056,9	55239310,2	43382573,4	4,389,42	178506147	12457724
Max	40455606	252112496	166423480	19,544,00	986972352	68451877
Min	1880549	100	327607	1,234,00	482830	194062

Table 2. Results of descriptive statistical analysis (Note: data are expressed in thousands of dinars)

Source: Agency for Business Registers, the data calculation was performed by the authors Note: AM-Arithmetic mean; SD-Standard deviation

Based on the results, it can be concluded that the companies in the sample earn on average 5.9 billion dinars of net profit, 43.9 billion dinars of business income, while the total costs are on average 36.1 billion dinars. The average allocation of funds for the remuneration of the members of the management and supervisory boards is RSD 8.1 million, the average value of assets is RSD 85.6 billion and the share capital is RSD 51.4 billion. The largest discrepancy between the observed enterprises occurs in terms of asset value, where the standard deviation value is highest. The highest net profit in the sample was RSD 40.4 billion and the lowest was RSD 1.8 billion. The largest amount of funds for the remuneration of the members of the management and supervisory board was allocated by the company, which allocates RSD 19.5 million for this purpose, and at least RSD 1.2 million.

Simple regression analysis is used to examine the impact of board members and their compensation, knowledge, skills and abilities, generally viewed as investment in human capital (HCE), on return on invested capital (ROE) and return on invested assets (ROA). The results obtained through the statistical software "SPSS v.20" are shown in Table 3 and Table 4.

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Table 3. Results of sim	ple regression analysis	(dependent variable: ROE)

Independent variable	β	t	sig.
HCE	0.286*	1.712	0.096

Source: Authors

Note: * - *coefficients are significant at level 0,1*

Table 4. Results of simple regression analysis	(dependent variable: ROA)
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Independent variable	β	t	sig.
HCE	0.307*	1.852	0.073

Source: Authors

Note: * - coefficients are significant at level 0,1

As both sig. values are less than 0.1 (0.096; 0.073), it can be concluded with 90% probability that members of the board of directors, through their compensations, which are viewed as investment in human capital (HCE), affect the rate of return on invested capital (ROE) and the rate of return on invested assets (ROA). The values of the β coefficient (0.286 and 0.307) show that the members of the board of directors, with their compensations, which are considered as an investment in human capital, significantly influence the earning capacity of the company and the efficiency of the use of assets. However, the dependent variables in the research model (ROE and ROA) are influenced by many factors other than human capital.

DISCUSSION

The board of directors represents an important internal control mechanism, as it oversees the work of managers and protects the interests of the owners of the capital by advocating for a strategy that will maximize profits. The paper analyzes the Balanced Scorecard model as a mechanism for evaluating the performance of board members. Based on a review of existing literature and analysis of papers examining the possibility of applying the Balanced Scorecard model in the performance evaluation of board members (Northcott & Smith, 2011; Hussein & Mansour, 2017; Hoque, 2014; Chavan, 2009; Domanović, 2017), as and based on the suggestion of the author Epstein & Roy (2004) to use the Balanced Scorecard model to evaluate the performance of the board members, it can be concluded that the model is applicable for evaluating the performance of the board members, so hypothesis H1 is confirmed.

The empirical research involved linking the learning and growth perspective with the financial perspective from the Balanced Scorecard model. That is, it was investigated how the members of the board of directors influence their financial performance with their compensations, knowledge, abilities, competencies, which are generally viewed as an investment in the human capital of the company, where the most important criteria were the rate of return on invested capital and the rate of return on invested assets. The results of the regression analysis showed that human capital (HCE) has a positive impact on the rate of return on total invested capital (ROE) and the rate of return on total invested property (ROA), so H2a and H2b are confirmed.

CONCLUSION

Numerous previous studies have analyzed the Balanced Scorecard as a model for evaluating the performance of board members. The research was predominantly of a qualitative nature. *The contribution and originality* of the work is reflected in the fact that the Balanced Scorecard model has been analyzed with the aim of linking learning and growth perspectives and financial

perspectives, to examine in the empirical research how members of management approve their compensation, which is viewed as an investment in human capital (HCE), affect the financial performance of the company (ROE and ROA). Also, the paper emphasizes the importance of intellectual capital as a very important resource for achieving competitive advantage. Few intellectual capital surveys have been conducted on the territory of the Republic of Serbia, so this fact gives more weight to the research, as it indicates that the owners of Serbian companies should invest significant resources in intangible resources, and that great care should be taken in choosing candidates who will be appointed to the board of directors because they, with their competencies, can have a significant impact on the financial performance of the company.

Theoretical implications are reflected in the extension of scientific knowledge of the Balanced Scorecard model, as well as the impact of human capital on financial performance. The importance of the work is reflected in the fact that it was realized at the moment when the Republic of Serbia is in the process of transition, which creates the basis for research in similar economies, as well as the possibility of comparing the obtained results with the results of the conducted research after the transition process of the Serbian economy is completed. *Managerial implications* are reflected in the presentation of the results obtained to businessmen and experts, who, by building a unique human capital in the company, can achieve high financial performance. Owners need to recognize the importance of intangible resources and invest more substantial funds in building a unique human capital. It is well known that an economy cannot be competitive unless its businesses are competitive. It is necessary to link the microeconomic and macroeconomic aspects, and the results of the research indicate that human capital has an effect on increasing the competitiveness of companies, and on the basis of this, the competitiveness of the Serbian economy is increasing.

There were some *limitations* to the research. First of all, the survey included 35 companies operating on the territory of the Republic of Serbia and this sample could be larger. Also, the VAIC method, as a measure of the added value of intellectual capital, has some limitations (Andriessen, 2011; Starovic & Marr, 2002). *Future research* should increase the sample and examine the impact of human capital on other financial performance. Certainly, there is still plenty of room for research in the field of intellectual capital. It is necessary to continue to expand this knowledge and to point out to the owners of companies the importance of investing in human capital.

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