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THE LEVEL OF CORPORATE GOVERNANCE IN BOSNIA AND HERZEGOVINA

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Abstract

A developed system of corporate governance is a fundamental prerequisite for sustainable economic growth, increase in economic system efficiency and a guarantee for easier access to the foreign sources of capital. The specificity of Bosnia and Herzegovina is two separate legal corporate governance systems, which is a consequence of the entity-based structure of the state. Corporate governance quality level is defined as the degree of compliance with set corporate governance standards defined at the international and national institutional levels. Guided by previous theoretical and empirical findings, Bosnia and Herzegovina has characteristics of a closed corporate governance system in both entities. Corporate governance in Bosnia and Herzegovina is measured by the level of the corporate governance (abbreviated LCG) index, which is created from six categories containing 46 criteria by which corporate governance is analyzed and assessed. Its value can range from 0 to 100%. The measurement of corporate governance provides a clear picture of strengths and weaknesses of the corporate governance system in corporations in Bosnia and Herzegovina. Also it is the

foundation of long-term sustainable and socially responsible growth and development of the entire economic system in Bosnia and Herzegovina.

Keywords: *corporate governance, corporate governance system in entities of Bosnia and Herzegovina, quality of corporate governance in Bosnia and Herzegovina*

1. INTRODUCTION

Corporate governance is defined as a set of processes and procedures for management and control of corporations. Corporate governance shows how rights and responsibilities are distributed among different stakeholders in corporations. Corporate governance provides the answer to the question who controls corporation and how (Monks & Minow, 2003., p. 2.).

The first step in this study was to determine the characteristics of the corporate governance system in Bosnia and Herzegovina, and subsequently to define the criteria and to measure the quality of corporate governance in B&H.

Corporate governance in Bosnia and Herzegovina will be measured by the Level of Corporate Governance (abbreviated LCG) index, which is created from six categories containing 46 criteria. Its value can range from 0 to 100%, or, the higher the quality of corporate governance a particular corporation has, the closer to 100% the rating is, and vice versa.

The subject of the study is to present possible models for measuring the quality of corporate governance in B&H, as well as to select one that is most appropriate for B&H system properties and to measure the level of quality according to the selected model.

The objective of the paper is to analyze the possibilities of measuring the level of corporate governance and to present and explain the level of corporate governance in corporations in Bosnia and Herzegovina.

2. CORPORATE GOVERNANCE IN BOSNIA AND HERZEGOVINA

In the sum of definitions of corporate governance, we will single out the definition of the OECD (Organization for Economic Cooperation and Development) which says that "*corporate governance involves ... a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders...*"

(OECD Principles of Corporate Governance, 2004, p. 12) Through its acts, and particularly through the document Principles of Corporate Governance, the OECD organization has greatly contributed to the development and standardization of corporate governance concepts and standards at the global level.

In order to determine the characteristics of the corporate governance system in Bosnia and Herzegovina, data on ownership concentration for non-financial corporations, banks and insurance companies (Table 1) and data on relationships of these corporations with stakeholders (Tables 2 and 3) will be integrated and compared. Eighty-seven non-financial corporations, 28 banks and 23 insurance companies were analyzed, where their ownership concentration, business transparency and relationship with key stakeholders were analyzed. Based on that, characteristics of corporate governance systems in corporations in B&H were defined.

Table 1
Ownership concentration in Bosnia and Herzegovina as of 31 December 2016

	Non-financial corporations (n=87)	Banks (n=28)	Insurances (n=23)	Total BiH (n=128)
Owner 1	51.47	66.69	74.03	58.44
Owner 2	13.24	9.76	10.39	12.03
Owner 3	7.27	4.72	5.27	6.40
Owner 4	4.63	2.48	1.82	3.71
Owner 5	3.27	1.80	1.00	2.58
Owner 6	2.29	1.56	0.87	1.90
Owner 7	1.77	1.37	0.74	1.52
Owner 8	1.36	1.17	0.58	1.19
Owner 9	0.97	0.97	0.52	0.90
Owner 10	0.72	0.67	0.49	0.67
<i>Total concentration of 10 largest owners</i>	86.99	91.19	95.71	89.34

Source: Analysis of authors according to the data from securities registries of FB&H and RS.

In each of the three observed corporation groups, the first and largest owner has a share greater than 50% on average, and also there are significantly more corporations where the first and largest owner has a controlling block of shares. The highest ownership concentration is in insurance companies, where the largest owner on average holds almost 3/4 of the total capital, while in banks s/he holds 2/3 of the capital.

In the analysis of relations with stakeholders in Bosnia and Herzegovina, the policy of management's relations with all stakeholders was observed in terms of transparency of business operations (Table 2) and only non-financial corporations were analyzed.

Table 2

The policy of relations with stakeholders in non-financial corporations in B&H

Criteria	Federation of B&H (n=49)	Republic of Srpska (n=38)	Bosnia and Herzegovina (n=87)
Website	80.61%	94.74%	86.78%
Company's general acts	22.45%	68.42%	42.53%
Report on overall business operations for the previous year	61.22%	80.26%	69.54%
Reports in foreign languages	20.41%	10.53%	16.09%
Sending reports to the entity stock exchange	94.90%	98.68%	96.55%

Source: authors

The analysis shows that most corporations have websites (80.61% in FB&H and 94.74% in RS), but regarding publishing of general acts, corporations in RS are considerably more active and responsible (22.45% in FB&H and 68.42% in RS), while the availability of reports in foreign languages is at a very low level in both entities. With respect to submission of reports to entity stock exchanges, this is where corporations are very responsible and almost all submit some reports to the entity stock exchange. When analyzing the transparency of business operations of the observed corporations in Bosnia and Herzegovina (Table 3), key business transparency standards, which are defined by the EU transparency directive, were observed, and these are:¹

- a) uniform publication deadlines - four months after the end of the reporting period for annual financial reports and two months for interim financial reports;
- b) annual reports should include audited financial statements and management report;
- c) publications must be publicly available for at least five years, and semi-annual financial statements in accordance with IAS 34² must include an additional management report;
- d) publication of interim management reports for issuers of shares in the first and third quarter;
- e) Mandatory publication on the Internet.

Compliance with transparency standards for the observed corporations is shown in Table 3.

¹ European Parliament and Council: Directive 2004/109/EC, 2004, pp. 40-49.

² IAS 34 Interim Financial Reporting. IAS 34 was issued in June 1998 and is operative for periods beginning on or after 1 January 1999.

Table 3

Transparency of business operations of non-financial corporations in Bosnia and Herzegovina

Criteria	Federation of B&H (n=49)	Republic of Srpska (n=38)	Bosnia and Herzegovina (n=87)
Business objectives	62.24%	68.42%	64.94%
Reports from shareholders' meetings	50.00%	78.95%	62.64%
Reports on events of particular influence on financial operations	40.82%	47.37%	43.68%
Information on potential business risks	30.61%	36.84%	33.33%
Auditor's report and opinion	38.78%	60.53%	48.28%
Publishing of semi-annual or quarterly reports	56.12%	68.42%	61.49%
Number of years for which reports are published	4.00	5.66	4.72
Published reports for five or more years	79.59%	92.11%	85.06%
Not having any published annual reports	0.00%	0.00%	0.00%

Source: authors

From all the observations, it can be concluded that the level of transparency of business operations in corporations in the Republic of Srpska is higher than in the Federation of Bosnia and Herzegovina; this especially applies to the period for which the reports are published, as well as the number of corporations that have published reports for 5 years or more. With regard to transparency of business operations, the Republic of Srpska currently has a significant advantage over the Federation of B&H, and it can be assumed that the main reason is the earlier adoption and continued development of the institutional framework for corporate governance.

3. MEASURING THE LEVELS OF CORPORATE GOVERNANCE IN THE WORLD

The biggest challenge, but also one of the main objectives of this study is to develop an adequate model (or index) for measuring corporate governance that should reflect the quality of corporate governance practices at the level of corporations in Bosnia and Herzegovina.

The selected and observed indexes based on which the index for this study is created have set scopes of application, and measure the level of corporate governance by the degree of fulfillment of the set criteria distributed into particular categories (Table 4).

Table 4

The structure of corporate governance measurement indexes

Index name	Scope of application	Number of criteria	Number of categories	Rating scale
Corporate Governance Quotient (CGQ)	S&P 500, S&P 400, S&P 600, Russell 3000	63 criteria	4 categories	from 1 to 100%
S&P Corporate governance score ili GAMMA score	USA and UK (only at the invitation of the corporation)	80 to 100	4 categories	from 1 to 100% (from 1 to 10)
GMI rating	Russell 1000, S&P 500, S&P 400, TSX 60, Nikkei	450 criteria	14 categories	from 1 to 100% (from 1 to 10)
DR rating – Deminor Rating	USA and UK	20 complex criteria	4 categories	from DR-1 (lowest) to DR-10 (highest) => scale values in 1/2 increments
Indeks DVFA – Scorecard for German Corporate Governance	German and other countries of continental Europe	47 criteria	7 categories	from 1 to 100% (from 1 to 8)
Indeks PFCG – Polish Forum for Corporate Governance	Poland - the highest OECD ratings for the development of corporate governance	60 criteria	9 categories	from 1 to 100% (from A to E - e.g. A, A-, B+, B, B-,...)
TRIS rating	East Asian stock markets	45 criteria	4 categories	from 1 to 100% (from 1 to 10)
Brunswick UBS Warbuk	Moscow stock market	20 subcategories (complex criteria)	8 main categories	from 1 for the best rated companies to 72 for the poorest
SEECGAN index	Corporate governance in Croatia	98 subcategories - questions	7 main categories	from 1 to 10 (ratings A, B, C, D)

Source: authors

Each of the observed indices measures corporate governance by analyzing the criteria fulfillment rate. Criteria are divided into specific groups or categories and each of the given categories has a different statistical significance (weight) in the overall rating. Based on these experiences, a framework for the development of a B&H corporate governance quality measurement index was defined.

The basis for formation of the index for measuring the level of corporate governance quality in Bosnia and Herzegovina is the index for measuring the level of corporate governance quality in Germany called DVFA (Scorecard for

German Corporate Governance)³. The specificity of this index is that it can basically be adapted to B&H because of the similarities in characteristics of the corporate governance systems, but its full implementation requires adjustment of the criteria to entities' corporate governance laws and codes.

5. MEASURING THE QUALITY OF CORPORATE GOVERNANCE IN BOSNIA AND HERZEGOVINA

The quality of corporate governance will be evaluated with six categories of set criteria. The corporate governance quality evaluation categories are:⁴

- I. Commitment to the principles of corporate governance and social responsibility,
- II. Shareholders' meeting,
- III. Supervisory board/non-executive directors,
- IV. Board of Directors – Management,
- V. Audit and internal control mechanisms,
- VI. Transparency of business operations.

The index developed for the analysis of corporate governance in Bosnia and Herzegovina is called LCG (*abbrev. Level of Corporate Governance*).⁵ It is

³ DVFA (2000.), SCORECARD FOR GERMAN CORPORATE GOVERNANCE - Standard DVFA Evaluation Method for CG, Deutsche Vereinigung für Finanzanalyse und Asset Management, Dreieich, more details on (<http://www.dvfa.de/>)

⁴ The number and types of categories and their weights in the overall assessment are adjusted to the 2004 OECD Principles of Corporate Governance, then the Corporate Governance Standards of RS from 2011 and the Corporate Governance Code for companies listed on the market of the Sarajevo Stock Exchange 2009. The measurement model and analysis of the obtained results were formed on the model of the Scorecard for German Corporate Governance and experiences related to indexes created on the basis of the Sarbanes - Oxley Act in the United States, Combined Code in Great Britain, as well as other attempts to measure the quality of corporate governance. The weight value was defined based on the existing experiences and results of studies of the importance of individual evaluation components for socio-interest groups and of their influence on the overall corporate governance quality.

⁵ The LCG index (the first version was called BHCoG) was developed and tested as part of the author's research for the purposes of scientific master's thesis of the author Nikola Papac on banks in BiH, and was subsequently revised and adapted to changes in the institutional framework (the second version of the index was named the LCG Index). The LCG index was developed on the model of the BHCoG index developed by the author for the purposes of analyzing the quality of corporate governance in banks in BiH in 2009, and for the purposes of the scientific master's thesis defense. The BHCoG index, as well as the LCG index, was developed on the model of the DVFA Index - Scorecard for German Corporate Governance, which was created for the needs of corporate governance analysis on German capital markets. The BHCoG index was created entirely on the model of the DVFA index, while the LCG index took into account the policies and rules of the DVFA and BHCOG indices, but for creating the criteria, the corporate governance codes of the Sarajevo and Banja Luka stock exchanges were precisely taken into account.

Adapted after: Matić, B. and Papac, N.: *Measuring the quality of corporate governance in the banking sector of Bosnia and Herzegovina*, Economic Research-Ekonomska Istraživanja, Vol. 27, No. 1, 2014, pp. 784–798, Published by Routledge - Taylor & Francis group, link: <http://dx.doi.org/10.1080/1331677X.2014.974338>

developed and tested on the model of the index Scorecard for German Corporate Governance, intended for German corporations whose shares are traded on the German capital market. For the purposes of this study, the first version of the index is completely changed and adjusted to the criteria set out in the 2004 OECD Principles of Corporate Governance, then the Corporate Governance Standards of RS from 2011 and the Corporate Governance Code for companies listed on the market of the Sarajevo Stock Exchange from 2009. The final form of the index structure is given in Table 5.

Table 5
The structure of the level of corporate governance index in B&H - LCG index

Ser. No.	Description and method of criterion evaluation	Number of criteria in category	Share/weight in overall assessment
I.	Commitment to the principles of corporate governance and social responsibility	7 criteria	15%
II.	Shareholders' meeting	9 criteria	15%
III.	Supervisory board/non-executive directors	7 criteria	10%
IV.	Board of Directors – Management	9 criteria	20%
V.	Audit and internal control mechanisms	5 criteria	10%
VI	Transparency of business operations	9 criteria	30%
TOTAL		46 criteria	100%

Source: authors

The total and final assessment can be expressed in a number of ways, the first certainly being in the original form and values achieved by the analysis, and the other possibility is through a set of classes of the achieved values (three, five, seven or ten). The achieved ratings will be accompanied by the associated comments on the meanings of ratings, as well as identification of the factors that may affect the evaluation.

The final rating is established by summing the values achieved by each particular category in the overall rating, which could be presented in the form:

$$\sum_{n=1}^6 \text{category}_n = \text{assessment of the corporate governance quality of the company according to the LCG index}$$

Evaluation is conducted once a year and is valid for a period of one business year (12 months), or for a period between two shareholders' meetings. Ratings can be categorized in a number of ways; in most cases they are ten-level or five-level ratings, but they can also be descriptive assessments of the achieved corporate governance level. The structure of rating levels and description are shown in Table 6.

Table 6
Categorization - assessment of corporate governance levels

Degree of fulfillment of the set criteria	Rating mark (1 - 10)	Rating description (10 levels)	Rating description (5 levels)
0 – 15 %	F	Exceptionally poor	E – poor
16 – 25 %	E	very poor	
26 – 35 %	D	poor	D – weak
36 – 45 %	+ D	weak	
46 – 55 %	C	weak to medium	C – medium
56 – 65 %	+ C	medium	
66 – 75 %	B	medium to good	B – good
76 – 85 %	+ B	good	
86 – 93 %	A	very good	A – very good
94 – 100 %	+ A	exceptionally good	

Source: author

As shown in Table 6, the level of corporate governance is presented by the rate of fulfillment of the set criteria, which can be categorized in this case in five or ten levels.

The rating of corporate governance, as an important non-financial indicator of business operations, in any case is not a replacement for financial business indicators, nor will it ever be; it is primarily its supplement aimed at creating and increasing confidence in the observed corporation.

6. LEVEL OF CORPORATE GOVERNANCE MEASURED BY THE “LCG INDEX” IN CORPORATIONS IN BOSNIA AND HERZEGOVINA

The level of corporate governance quality was measured by the LCG index for 87 corporations in BiH, of which 49 from the Federation of BiH and 38 from the Republic of Srpska. For each corporation, measurement was conducted in three time periods, so it can be said that there were a total of 261 measurements or observations. Data for evaluation of corporate governance quality in corporations in BiH were obtained from corporate governance reports that were adjusted to corporate governance regulations and codes at entity levels.⁶

⁶ In the Federation of Bosnia and Herzegovina it is the Corporate Governance Code of the Sarajevo Stock Exchange, which was adopted by the Supervisory Board of the Stock Exchange at the 80th session held on 23 March 2009, after which they have been in use, while corporate governance reports are made in a document called Corporate Governance Questionnaire. In the Republic of

The level of corporate governance quality in B&H was analyzed in 87 corporations, of which 49 from the Federation of BiH and 38 from the Republic of Srpska. For each corporation, measurement was conducted in three time periods, so it can be said that there were a total of 261 measurements or observations.

Table 7
Level of corporate governance quality measured by the LCG index in Bosnia and Herzegovina

Ser. No.	Index category	Weight value	FB&H (49)	RS (38)	B&H (87)
I.	Commitment to the principles of corporate governance and social responsibility (7 criteria)	15%	5.49%	6.63%	5.99%
II.	Shareholders' meeting (9 criteria)	15%	8.60%	8.26%	8.45%
III.	Supervisory board (8 criteria)	10%	4.35%	3.72%	4.07%
IV.	Board of Directors - Management (9 criteria)	20%	10.62%	10.95%	10.76%
V.	Audit and internal control mechanisms (5 criteria)	10%	5.41%	5.23%	5.33%
VI	Transparency of business operations (9 criteria)	30%	17.18%	18.55%	17.78%
	TOTAL		51.66%	53.33%	52.39%

Source: authors

The overall rating of corporate governance quality in B&H according to the LCG index is a 52.39% fulfillment of the prescribed criteria, so we can say that the overall rating for Bosnia and Herzegovina is **weak to medium (C)**. This shows that only half of the total prescribed criteria are met. The first and third category are significantly below, at almost one third of the set standards for this category, while in all other categories, half of the total prescribed criteria are met.

With regard to comparison of entities, it can be clearly seen in Figure 1 that the level of corporate governance in both entities is almost the same.

Srpska, on 29 December 2005, the Securities Commission of the Republic of Srpska adopted a document titled Joint Stock Company Management Standards and they are nothing else but a version of the Corporate Governance Code for RS. Application of this document started on 1 January 2006. This document was changed in 2011, when the Securities Commission together with the Banja Luka Stock Exchange issued and published new Corporate Governance Standards (Official Gazette of the Republic of Srpska 117/11).

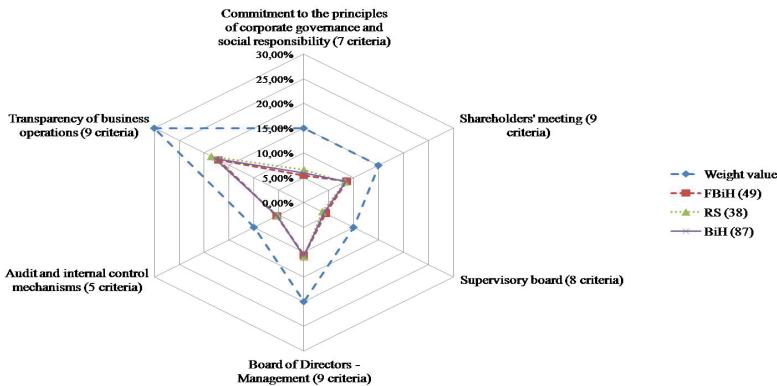


Figure 1 Level of corporate governance quality measured by the LCG index in Bosnia and Herzegovina

Source: authors

When analyzing Figure 1 in more detail, it can be concluded that the level of corporate governance quality by individual categories is very similar in both entities, and the existing differences for individual categories are less than 10%. The only significant difference is related to the first category "*Commitment to the principles of corporate governance and social responsibility*", and the authors believe that the main reason of this difference (the value is greater in RS) is the fact that the Republic of Srpska earlier joined the process of developing an institutional framework for corporate governance (the first index in RS was adopted in 2006, and in FBiH in 2009).

If we observe only the descriptive statistics, we can see that values of the level of corporate governance range from 0 to 100%, and the study was conducted on 87 corporations (49 in FB&H and 38 in RS) in three time periods, so that we can say that 261 project observations were examined. Table 9 shows the descriptive statistics for the LCG variable.

Table 8
Descriptive statistics for LCG

N	LCG	
	Valid	Missing
	261	0
Mean	52.3898	
Median	53.7500	
Std. Deviation	13.26799	
Skewness	.027	
Kurtosis	-.732	
Minimum	25.60	
Maximum	86.20	

Source: author

The LCG indicators range from 25.60 to 86.20 with arithmetic mean of 52.39. The skewness and kurtosis indices indicate that the distribution of the LCG variable frequencies has an approximately normal pattern, which can be seen on the histogram (Figure 2).

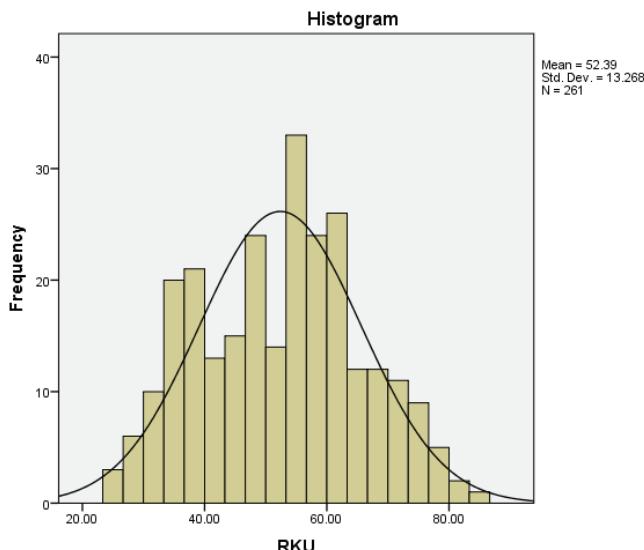


Figure 2 Histogram of LCG index results in Bosnia and Herzegovina

Source: authors

By checking the boxplot graphics, not a single outlier (extreme value) was observed for this variable, which could be assumed based on the presented form of frequency histogram (Figure 2), so it can be concluded that the distribution of frequencies of the LCG index values for both entities in Bosnia and Herzegovina has a normal form.

If we consider all the above, we can outline several recommendations related to the application of the LCG index and the improvement of corporate governance in Bosnia and Herzegovina:

- a. the index may be applied to corporations whose shares are listed on the capital market (stock exchanges in Sarajevo and Banja Luka);
- b. the basis for applying the index is the adoption of the entity and the development of its own corporate governance code by each corporation;
- c. it is necessary to harmonize the regulatory frameworks for corporate governance, between entities and inside entities, with codes of corporate governance;
- d. conduct constant market education on the importance of corporate governance.

All of this shows us that the issues related to corporate governance are very similar in all countries in the region and point us to similar activities which are needed to develop corporate governance. (see: Baldaccino, P.J., Baldaccino, J., Bezzina, F. i Tipurić, D. (2015)).

7. CONCLUDING CONSIDERATIONS

Corporate governance involves establishing a coordination mechanism between different stakeholders in a way that will satisfy the needs of each of the stakeholders, while ensuring the survival of the corporation. Measuring the quality of corporate governance means to define the criteria on which the relationship between key stakeholders in the corporation is based and assessing the degree of fulfillment of these criteria. The criteria are defined by supranational recommendations (primarily by OECD principles) and national legislative and non-legislative acts (national corporate governance codes). Whatever the value of the final grade is higher (closer to 100%), the level of fulfillment of the prescribed criteria is higher, so the quality of corporate governance is higher and vice versa.

The study sample consists of 87 corporations from the entire territory of B&H whose shares were traded on capital markets during the study period. In FB&H sample consists 49 corporations and 38 are in RS. The time scope of the study or the period for which the study was conducted is 2011, 2012 and 2013. Considering that the data on corporate governance and financial performance were measured and collected for three time periods (2011, 2012 and 2013), that resulted in a panel data set of 261 observations (87 corporations x 3 years of observations of developments).

The overall rating of corporate governance quality in B&H according to the LCG index is a 52.39% fulfillment of the prescribed criteria, so we can say that the overall rating for Bosnia and Herzegovina is **weak to medium (C)**. This shows that only half of the total prescribed criteria are met.

Regarding the comparisons of the entity, it can be clearly seen that the level of corporate governance in both entities is almost the same.

All this shows that corporate governance as a theoretical concept and phenomenon is still at the development stage: the institutional framework in both entities is not yet fully adapted to scientifically proven and confirmed standards of good practice or international regulations, while practice still does not fully understand the purpose of this concept and still refuses to adjust to new standards and practices.

Key recommendations for corporate governance development and enhancement are that corporations in both entities need to adopt their own corporate governance codes and align them with entity codes. Also the entities have an obligation to align the regulatory framework between themselves and need to implement ongoing education and awareness about the importance of corporate governance.

Benefits of using the LCG index are the ability to clear inefficient and more efficient corporate governance segments and the ability to actively influence the improvement of individual segments. Such an index application will contribute to raising awareness of corporate governance on the one hand but will contribute to the development of corporate governance significance on the other.

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