

CORRELATION BETWEEN CORPORATE GOVERNANCE CHARACTERISTICS AND FINANCIAL PERFORMANCE OF THE COMPANIES

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Abstract: Being considered an important instrument in ensuring prosperity of the companies, the corporate governance represents a topic which has aroused interest of numerous disciplines.

The aim of this work is to study the relationship between governance characteristics and the financial performance Exchange (Return On Assets (ROA) and the Return On Equity (ROE)) of the entities listed on Bucharest Stock (BVB). The research is carried out on a sample of 31 companies, during 3 years (2016-2018).

The results of this analysis indicate a positive relationship existence between the variable represented by the dimension of the Management, and the performance of the companies expressed through ROA and ROE. A positive relationship has been obtained between the compliance rank with the Corporate Governance Code (CGC) and the financial performance of the entities listed.

JEL classification: G34, M41,C30

Key words: corporate governance, performance, return on equity, return on assets, companies listed

1. INTRODUCTION

In the context of a dynamic economic environment, characterized by a fierce competition, in the last two decades, the interest of the researchers is remarked, in order to discover a new way of approaching the problems of governance and control, issues that have implications on the organizational performance. Thus, corporate governance becomes a topic of interest due to the valuable contribution that it makes to the prosperity of a company. This can be considered a vital component, because " Good governance decreases risks, increases performance, opens the way to financial markets, increases the ability to market goods and services, improves leadership style, shows transparency and social responsibility" (Morariu A., 2008, 189).

Listed companies have the obligation to make a Declaration of compliance or non-compliance with principles of corporate governance, Declaration called "Apply or Explain", which will explain the reason that prevented their non-compliance.

Given the benefits it can bring to companies, this topic has been studied by many researchers and academics who have discovered the existence of a relationship

between governance and company performance. This topic is also a challenge for our research, in which we aim to analyze the influence that the characteristics of corporate governance have on financial performance.

2. LITERATURE REVIEW

Following the huge failures suffered at the beginning of the 21st century by large companies such as: Enron, Parmalat, WorldCom, investor confidence in managers' ability to manage and manage large corporations has diminished, which marks the need for corporate governance implementation.

The question "What is corporate governance?" Is a question that various disciplines (finance, management, accounting, economics, philosophy, and politics) have tried to answer. Analyzing the specialized literature I observed many interpretations of this notion, but I did not find a unitary vision regarding it. According to the OECD (OECD, OECD Principles on Corporate Governance, 1999), it can be defined as "the system by which companies are run and controlled".

Pintea M.O. (2015, 24) regards this concept both under general and restricted aspect. In the first case, corporate governance describes "the combination of laws, regulations, listing rules and voluntary practices from the private economic model", whereby the company manages to attract investments, fulfill its objectives and obligations, performing an efficient activity. In the second case, reference is made to "the whole of the relationships between managers, directors and investors, as well as the relationship of the company with the interest holders".

Another approach is that of Feleagă et al (2011, 8), who states that this represents "a strategy for prosperity" and appeared in Romania around the year 2000, the author motivating the delay by "the laborious steps taken along the lines of reforms, political, legal, economic and social".

Based on the information found in the specialized framework we can say that, by corporate governance is meant that system that ensures harmonious relations between the company and shareholders, by protecting the interests of all those involved in the life of the company; attracting investments, by increasing investor confidence, an aspect determined by responsible ethical behavior and transparency; and lowering the cost of capital, due to the state of stability it offers.

The way of meeting the objectives of a company is an important feature of the economic activity and can be studied through indicators that will be compared with other recorded results.

In order to be able to talk about performance within a company, it is necessary to achieve or exceed the chosen benchmark, which can be both the proposed objective and the result obtained by other companies operating in the same sector. (Siminică M., 2010) According to the aforementioned author, the indicators used to measure the performance of a company can be classified according to several criteria, as follows: by character (quantitative and qualitative indicators), by content (results, efficiency and effectiveness indicators), according to the frequency of use (traditional and modern indicators), by the way of expression (indicators in absolute and relative size).

There is no unitary theory regarding the concept of performance, this being defined as: "the whole of the elementary logical stages of the action, from the intention to the result" (Lebas M., 1995, 67-68), "the unstable equilibrium result of the evolution of the

concepts of efficiency and effectiveness" (Niculescu M., Lavette G., 1999, 225), "the mirror of the governance process of the company" (Lucan AN, 2019).

In the study of the link between governance and firm performance, the most common indicators are ROA and ROE, considered as key indicators (Gupta P., Sharma A. M., 2014).

The relationship between the governance and the performance of the companies has aroused the interest of many researchers; there are numerous studies, which have resulted in different results, being obtained positive (Kiel G.C. și Nicolson G.J. (2003); Rechner P. L. și Dalton D. R. (1991); Dahya J. și McConnell J. (2007)), negative correlations (Guest P. (2009); Coles J.L, Daniel N.D., și Naveen L. (2008)) or even the lack of a connection (Wessels R.E. și Wansbeek T. (2014)). There are opinions according to which these differences are determined by the influence of the environmental factor and the legal regulations (Perpelea M., Mihalcea A., Perpelea O.M., 2016). An example in this regard could be companies operating in developed countries, such as Germany, the United States, France, where the Corporate Governance Code is very well defined and shows little differences in good governance practices.

In developing countries (Romania and the other countries of Eastern Europe), where there is no regulation adopted by all companies, many differences regarding corporate practices are observed. Other authors believe that the various results obtained are the effect of the different measures used for quantification, analysis techniques, data limitation (small samples, old data) and characteristics of the sampled companies (size, area of activity). Cristea M., Sichigea M., Noja GC and Anghel I., 2019).

Regarding the measurement of corporate governance, one of the variables used in the specialized literature is the structure of the Board of Directors, whose basic competences are: "establishing the main directions of activity and development of the company, establishing the accounting policies and the control system financial, as well as approval of the financial planning; appointing and dismissing the directors and establishing their remuneration; supervising the activity of the directors; preparing the annual report, organizing the general meeting of the shareholders and implementing its decisions; the introduction of the application for the opening of the insolvency of the company" (Law no. 31/1990 on commercial companies, art. 142, paragraph 2, letter a-f). Guest P. (2009) analyzed the influence of this variable on the performance of the entities, based on a sample of 2746 entities listed on the London Stock Exchange, for a period of 21 years (1981-2002), where it obtained a relationship negative.

Othman R., Ponirin H. and Ghani E. (2009) investigated the effect that the structure of the Board of Directors determines on the shareholders wealth, in small companies. The results of the study underline that the increased number of directors and the proportion of executive directors ensure better decisions. Regarding their remuneration and financial performance, no significant relationship was obtained. Kiel G. C. and Nicolson G. J. (2003) also made a positive connection between the size of the Council and the value of companies in Austria.

Another variable used is the duality of the CEO. This refers to the distinction of the position of CEO from that of the Chairman of the Board of Directors, in the absence

of which, according to the agent theory, the efficient monitoring of the Board of Directors would be reduced.

The study conducted by Rechner PL and Dalton DR (1991), over a 5-year period (1978-1983), with the help of a sample comprising 141 companies from the Fortune 500 ranks, showed that the companies whose general manager differed from the president of the Council they achieved higher performances than the other companies. Similarly, Jermias J., and Gani L. (2013), in the analysis carried out over a period of 7 years (1997-2004), for the companies that belong to the S & P500 index, identified that in the absence of independent structures there are performances weaker.

The compliance or non-compliance with the Corporate Governance Code may be another aspect that determines the influence.

According to a study by Ionescu I. and his colleagues (2015), the observance of the principles of the Governance Code constitutes an advantage for the society due to the transparency, the efficient internal control and the high quality of the financial reports offered.

Analyzing the results of the previous researches, we observe the existence of a relationship between the characteristics of governance and the performance of the companies most often studied through ROA and ROE, thus we propose the following hypotheses:

H1: There is a negative correlation between Board size and performance; (Guest P., 2009)

H2: There is a positive correlation between CEO duality and performance; (Rechner P.C. and Dalton D.R., 1999; Jermias J. and Gani L., 2013)

H3: There is a positive correlation between CGC and ROA; (Ionescu I., Damoc C., Rusu R., 2015)

H4: There is a positive correlation between compliance with CGC and ROE. (Ionescu I., Damoc C., Rusu R., 2015)

3. METHODOLOGY

The purpose of this study is to observe whether certain characteristics of corporate governance influence the financial performance of companies expressed through ROA and ROE.

In order to carry out the present research, we used a sample of 31 companies listed on the BVB as they provide the interested public with transparency regarding the financial statements, the administration of the company and the corporate governance. All 31 companies belong to the processing industry, and the analysis period is for 3 years (2016-2018). The selection of the companies and the analyzed period was influenced by the availability of information necessary for the study.

In collecting the information, we used several sources, namely: the annual financial statements, the Administrators Reports, the Applicable or Explanatory Statement, all of which were published on the website of the BVB, as well as on company websites.

The data obtained were processed using the SPSS statistical program, using as a quantitative method the multiple linear regressions.

Table 1 highlights the variables that will be used in the analysis.

Table no.1 Presentation of the variables used

Variables	Symbol	Explanations	Data source
Economic profitability	ROA	$ROA = \frac{Rezultat\ net}{Active\ totale}$	Annual financial statements
Financial profitability	ROE	$ROE = \frac{Rezultat\ net}{Capitaluri\ proprii}$	Annual financial statements
Dimension of the Council	Board_size	It represents the total number of the members of the Board of Directors.	Annual reports published on the BVB website
Duality of CEO	CEO_duality	We used the dummy variable, which has the value 1 if the Chairman of the Board is the same as the General Manager and the value 0 otherwise.	Annual reports published on the BVB website
Compliance with the Corporate Governance Code	CGC	The variable was determined by relating the number of principles respected to the totality of the principles.	"Apply or Explain" Statement

Source: own processing

Using the variables described above, we established the equations of the econometric model of corporate governance, as follows:

$$ROA = \alpha + \beta_1 Board_size + \beta_2 CEO_duality + \beta_3 CGC + \varepsilon$$

$$ROE = \alpha + \beta_1 Board_size + \beta_2 CEO_duality + \beta_3 CGC + \varepsilon$$

Where:

- ROA and ROE are dependent variables;
- Board_size, CEO_duality, CGC are the independent variables;
- $\beta_1, \beta_2, \beta_3$ represent the beta coefficients of the independent variables;
- α is the constant of the regression model;
- ε signifies the error.

4. ANALYSES

Referring to ROA and ROE, the 31 companies subjected to our analysis evolved differently. In *Figures 1 and 2* we find an overview of them.

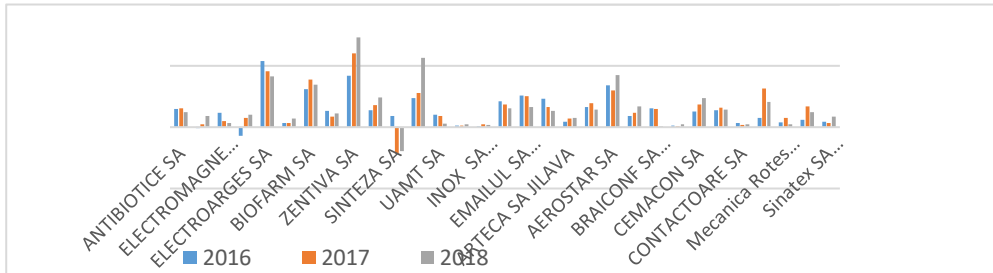


Figure no. 1 The evaluation of ROA

Source: own processing

According to the figure presented above, in 2016, the ROA recorded values between: 0 and 5%, for 15 of the companies subjected to the analysis (which means 48.38% of the sample studied); 5 and 10%, for 9 of them (29.03%), over 10%, for 5 of them (16.12%). There were 2 companies for which this rate presented negative values (-0.39% and 3%).

The following year brought the increase with one unit of the number of companies for which the ROA level is between 0 and 5% and with two units of those exceeding the 10% threshold. The decrease by one unit of the number of companies for which the indicator has values between 0 and 5% is observed. This year there was only one company for which there was a negative value (-8.76%).

In 2018, the situation evolved as follows: for 17 companies (which means 54.83% of the analyzed sample), the ROA level was between 0 and 5%, for 9 of the 31 analyzed (29.03%) values were registered between 5 and 10%, and for 5 of them (16.12%) over 10%. And this year there was only one company for which there was a negative value (7.86%).

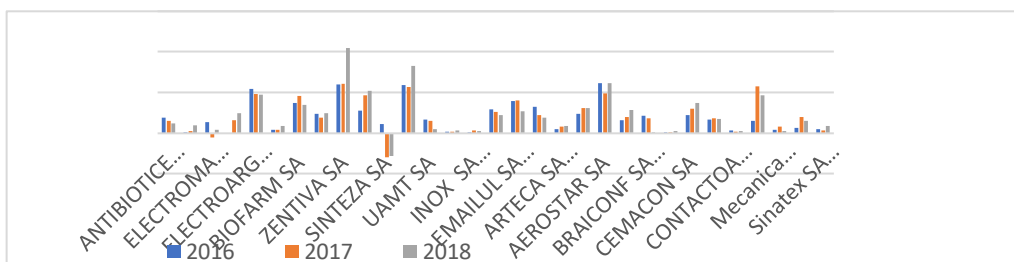


Figure no. 2 The evaluation of ROE

Source: own processing

In 2016, ROE registered values between: 0 and 5%, for 11 of the companies subjected to the analysis (which means 35.48% of the sample studied); 5 and 10%, for

10 of them; over 10%, for 9 of them (29.03%). There was a company for which the rate presented a negative value (-0.05%).

The year 2017 marks the decrease with two units of the number of companies, for which the ROE level is between 0 and 5%, and with a unit of those for which the indicator is between 5 and 10%. We can see the increase with two units of the number of companies for which the indicator has values between 0 and 5% and with a unit of those that have negative values (-2.32%, -11.95%).

In 2018, the situation evolved as follows: for 13 companies (which means 41.93% of the sample studied), the ROE level was between 0 and 5%, for 6 of the 31 analyzed (19.35%) values were recorded between 5 and 10%, and for 11 of them (35.48%) over 10%. This year there was only one company for which the rate of return on capital presented a negative value (-11.45%).

In *Table 2* we find the descriptive statistics for the variables of the multiple linear regression model tested.

Table no.2 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	93	-,0876	,2924	,058027	,0624987
ROE	93	-,1195	,4164	,085517	,0888234
Board_size	93	3	9	4,14	1,265
CEO_duality	93	0	1	,54	,501
CGC	93	,142	1,000	,54041	,228662
Valid N	93				

Source: SPSS processing

As we can see in the table presented above, during the 3 years studied, the rate of economic return of assets has a minimum value of -8.76% and a maximum of 29.24%. The analyzed companies have an average ROA rate of 5.8027%, which indicates a good financial performance, because it falls within the average of developed countries (5-15%). The standard deviation of ROA from the average is 6.24987%.

Regarding the ROE, the minimum value recorded is - 11.95%, the maximum value reaching 41.64%. The average ROE rate is 8.5517%, reflecting an inefficient equity management, considering the minimum recommended value of 15%. The standard deviation of the ROE from the average is 8.88234%.

5. RESULTS AND DISCUSSIONS

5.1 Studying the link between return on assets and corporate governance

The rate of economic profitability of assets is an important indicator for companies, reflecting their economic performance, namely how it uses all the assets it has. Using the SPSS program, we obtained the correlation between ROA and the variables set for corporate governance.

Table no. 3 Correlation matrix of the ROA dependent variable

		ROA	Board_size	CEO_duality	CGC
ROA	Pearson Correlation	1	,294(*)	-,087	,194

		ROA	Board_size	CEO_duality	CGC
Board_size	Sig. (2-tailed)		,004	,406	,063
	Pearson Correlation	,294(*)	1	,017	,186
CEO_duality	Sig. (2-tailed)	,004		,869	,074
	Pearson Correlation	-,087	,017	1	-,102
CGC	Sig. (2-tailed)	,406	,869		,329
	Pearson Correlation	,194	,186	-,102	1
		,063	,074	,329	

* Correlation is significant at the 0.01 level.

Source: SPSS processing

As can be seen in Table 3, the independent variable Board Size is the only significant, because the significance level (Sig.) is less than 0.01.

This variable has a weak direct influence on the ROA dependent variable, the correlation coefficient being included in the range [0.2-0.4].

In Table 4 we find the estimated values for the ROA regression model, obtained using the Enter method, by which we established the way of introducing the independent variables in the analysis.

Table no. 4 Estimation of the values of the multiple linear regression model for ROA

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-,012	,025		-,477	,634
Board_size	,013	,005	,270	2,658	,009
CEO_duality	-,010	,013	-,078	-,776	,440
CGC	,037	,028	,135	1,325	,189

Source: SPSS processing

According to Table 4, only the Board_Size variable is significant (Sig = 0.009). Thus, we can determine the estimated equation of the ROA econometric model:

$$ROA = -0,012 + 0,013Board_size + \varepsilon$$

These values reflect:

$\alpha = -0,012$ which means that the ROA is -0,012 when Board_Size is equal to zero.

$\beta_1 = 0,013$ which means that the ROA increases by 1,3% when the size of the Board of Directors increases by 2 (having one of the values 3, 5, 7 or 9). The positive impact is due to the fact that , a Board of Directors consisting of a larger number of members provides the companies with the necessary experience to increase the performance.

Table no. 5 Testing the parameters of the regression model

Test Value = 0				
t	df	Sig. (2-tailed)	Mean Differen	95% Confidence Interval of the

				ce	Difference	
Board_size	31,563	92	,000	4,140	3,88	4,40

Source: SPSS processing

Since the regression coefficient has a significance level (Sig.) lower than the significance threshold 0.05, the coefficient considered is significant.

By comparison, t_{computer} with t_{table} can be remarked that $t_{\text{computer}} > t_{\text{table}}$ ($t_{\alpha/2;n-5} = 1.984$), hence the H1 hypothesis is rejected, the correlation coefficient being different from 0.

5.2 Studying the link between return on equity and corporate governance

The rate of financial return is an indicator of particular importance, by means of which it is reflected the ability of a company to achieve a net positive result, as a result of using the capital, and having as its purpose the reward.

Using the SPSS program, we obtained the correlation between ROE and the variables set for corporate governance.

Table no. 6 The correlation matrix of the ROE dependent variable

		ROE	Board_size	CEO_duality	CGC
ROE	Pearson Correlation	1	,297(*)	-,035	,280(*)
	Sig. (2-tailed)		,004	,737	,006
Board_size	Pearson Correlation	,297(*)	1	,017	,186
	Sig. (2-tailed)	,004		,869	,074
CEO_duality	Pearson Correlation	-,035	,017	1	-,102
	Sig. (2-tailed)	,737	,869		,329
CGC	Pearson Correlation	,280(*)	,186	-,102	1
	Sig. (2-tailed)	,006	,074	,329	

* Correlation is significant at the 0.01 level.

Source: SPSS processing

As it can be seen in *Table 6*, the independent variables Board_Size and CGC are significant, because the significance level (Sig.) Is lower than 0.01 and has a weak direct influence on the ROE dependent variable, the correlation coefficient being included in the range [0.2-0.4].

In *Table 7* we find the estimated values for the ROE regression model, obtained using the Enter method.

Table no. 7 Estimating the values of the multiple linear regression model for ROE

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-,035	,035		-1,003	,319
Board_size	,018	,007	,254	2,540	,013
CEO_duality	-,003	,018	-,016	-,162	,872
CGC	,090	,039	,231	2,300	,024

Source: SPSS processing

Using the data reflected in this table we can determine the estimated equation of the econometric model for ROE.

$$ROE = -0,035 + 0,018 \text{Board_size} + 0,090 \text{CGC} + \varepsilon$$

These values reflect:

$\alpha = -0,035$ which means that the ROE is $-0,35$ when Board_Size and CGC are equal to zero;

$\beta_1 = 0,018$ which means that the ROE increases by 1,8% when the size of the Board increases by 2, and CGC is constant. We note that the impact determined by the size of the Board of Directors on the management of equity is greater by 38,46% than the influence it manifests on the management of assets.

$\beta_3 = 0,090$ suggests that the ROE dependent variable increases by 9% if the CGC increases by 1%, Board_size being kept constant.

Table no. 8 Testing the parameters of the regression model

	Test Value = 0				
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
Board_size	31,563	92	,000	4,140	3,88 4,40
CGC	22,791	92	,000	,540409	,49332 ,58750

Source: SPSS processing

Since this regression coefficients have a significance level (Sig.) lower than the significance thresholds 0.05, they are significant.

By comparison, t_{computer} with t_{table} can be remarked that $t_{\text{computer}} > t_{\text{table}}$ ($t_{\alpha/2;n-5} = 1,984$), hence the H1 hypothesis is rejected and H3 is accepted, the correlation coefficient being different from 0.

Table no. 9 Result obtained

Hypothesis	Previous studies	Result obtained
H1: There is a negative correlation between Board size and performance	Guest P., 2009	Infirmid
H2: There is a positive correlation between CEO duality and performance	Rechner P.C. and Dalton D.R., 1999; Jermias J. and Gani L., 2013	Insignifiant independent variable
H3: There is a positive correlation between CGC and ROA	Ionescu I., Damoc C., Rusu R., 2015	Insignifiant independent variable
H4: There is a positive correlation between CGC and ROE	Ionescu I., Damoc C., Rusu R., 2015	Validated

Source: own processing

6. CONCLUSIONS

Through this research I studied the implications that the characteristics of the corporate governance had on the performance of the companies listed. The data used in

our analysis were taken from the annual reports published on the BVB website, but also from those published on the official websites of the companies. The sample chosen comprises 31 companies in the field of processing industry, and the analysis period covers 3 years (2016-2018).

Not all results were statistically representative. Following the empirical testing it was determined:

A positive relationship between the size of the Board and the performance of the company expressed through ROA and ROE. We observe a greater impact on equity management compared to the influence it has on asset management. The positive effect is due to the fact that, a Board of Directors consisting of a larger number of members provides the companies with the necessary experience to increase the performance.

Improving financial performance (expressed by ROE) by ensuring compliance with the Corporate Governance Code, following the adoption of practices based on honesty and information transparency, aspects that contribute to increasing investor confidence and attracting investments. It is noted that the positive influence determined on the ROE is greater than that shown on the ROA.

In order to improve this research, we will consider using a larger dimension in terms of the number of years and companies investigated, but also to make a comparison between the impact that the characteristics of governance have on the performance of listed and unlisted companies.

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