

## AUDITOR TENURE AND FINANCIAL REPORTING DISCLOSURE: EVIDENCE FROM THE BUCHAREST STOCK EXCHANGE

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**ABSTRACT:** The aim of this research is to investigate the association between the audit quality and financial reporting disclosure in Romania for the companies which adopted the International Financial Reporting Standards for the first time. Due to the fact that the year 2012 represents the year in which Romanian entities listed on the regulated market had to prepare their individual financial statements in accordance with the International Financial Reporting Standards (IFRS), the research methodology investigates the financial statements for the year 2012 for 61 companies listed on the Bucharest Stock Exchange. After conducting univariate and multivariate tests, the results indicate that in the case of Romanian listed companies, there are significant differences in terms of disclosure exposure and disclosure quality between the companies audited by a Big 4 audit firm and those audited by a non-Big 4 external auditor.

**KEYWORDS:** International Financial Reporting Standards (IFRS), Disclosure, Audit, External Auditor, Romania.

### 1 INTRODUCTION

The complexity of users' decision-making process has anchored the nature of financial reporting into enhancing the continuously changing needs of users; therefore, the disclosure of financial reporting represents a stringent issue in the actual context.

In light of these trends, financial reporting disclosure requirements and practices had to enlarge their basically breakdowns of line items provided in financial statements and to emphasise more detailed aspects related to financial reporting, namely to provide disclosure on a more comprehensive manner. The aim of this shifting is to enable the users' of financial statements to gain a broader picture in terms of financial complexity which supports their decisions.

A key objective of the IASB's Conceptual Framework reads as follows - '*The objective of general purpose financial statements is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Relevant financial information is capable of making a difference in the decisions made by users*'. Taking the credibility, reliability and usefulness of information disclosed in financial statements into account, it can be stated that disclosures have become the balancing item in the calculus on how to provide credible, decision-useful information (IAASB, 2011).

Disclosure requirements have in many instances been introduced in new or revised standards over the last ten years without any review of their overall impact on the length or usefulness of the resulting financial statements. According to Deloitte Financial Reporting (2013), a 'top-down lens' approach should be applied to consider the balance across the disclosures and their relative importance to users, with regard to both stewardship and decision-making. This final aspect has been taken into consideration by IASB through its demarche on emphasizing the relevant aspects that should be disclosed in order to capture a more comprehensive picture of financial reporting process across entities.

The present study investigates the linkage between the quality of external auditor and the quality of disclosure exposed by entities audited by Big 4 companies, respectively non-Big 4. From this optic, this research broadens the impact of auditing on the quality of financial reporting, capturing the issue of disclosure from its two *per se* aspects: quantity and quality.

In the relevant academic literature, it is assumed that Big 4 companies provide a higher quality audits in contrast to non-Big 4 auditors, which do not possess the expertise, knowledge and other relevant resources in order to compete with the "giants" in this domain. Thus, this study aims to investigate whether companies audited by Big 4 disclose more qualitative information in their financial reports and whether their disclosure is enhanced in terms of quality compared to companies audited by non-Big 4 auditors.

The transition to IFRS provides a tremendous prospect to engage into an analysis of the impact that the external auditor has on financial reporting quality. IFRS 1 *First Time Adoption of International Financial Reporting Standards* sets out new areas of disclosure that were not requirements under the previous GAAP (for example segment information, earnings per share, discontinuing operations, contingencies and fair values of all financial instruments) and disclosures that had been required under previous GAAP will be broadened (perhaps related party disclosures).

In Romania, one of the emerging economies across the European Union, the adoption of International Financial Reporting Standards (IFRS) represents quite a novelty process in comparison with the other member states. Namely, prior becoming a member of the European Union in 2008, Romania started its demarche into the adoption of IFRS.

The first step into IFRS convergence was represented by the regulations applied to the companies traded on a financial regulated market which stipulated that from 2007, entities preparing consolidated financial statements and listed on the Bucharest Stock Exchange have to prepare their financial statements in accordance with IFRS. Recently, by issuing the law OMFP 881/2012, the Romanian regulator enlarged the area of IFRS application in Romania. Under this light, companies which are traded on a regulated market are obliged to prepare their individual financial statements in accordance with IFRS starting with their 2012 financial exercise.

The reminder of this paper is organized as it follows: section 2 captures the literature review focused on the relation between audit quality and financial reporting disclosure in developed countries, as well as in emerging economies. After presenting the status of this topic in the academic environment, section 3 will clarify the research design in terms of methodology and hypothesis settlement. Section 4 will enlighten the findings of this research and the final section will comprehend the conclusions, the drawbacks of the study and will draw the areas for further researches.

## **2 LITERATURE REVIEW**

Information disclosure gains a vital consideration in the international accounting environment, not only due to its utility for its producers, but also due to its value for its users. Hence, companies which present a higher level of disclosure in their financial statements are perceived as trustworthy, reliable and serious in terms of stakeholders' concern.

According to Hossain (Hossain, 2008), the disclosure process can be regarded as a strong fundament for any type of decision, as an influencing factor for the economic agents and last, but not least, the disclosure process can be characterized as being economically efficient.

The magnitude of corporate disclosure arises from being an effective approach of communication between management and company's stakeholders, notably investors. According to Healy and Palepu (2001), the demand for corporate disclosure arises from the information asymmetry issue and the existing agency conflicts between management and investors. Thus, BarzegariKHaneghah (2013) explain that the increase in information asymmetry between managers and firms' shareholders has direct association with reduction of the securities' liquidity and the number of shares and transaction volume. In accordance, higher disclosure quality will determine enrichment of liquidity and transaction volume through reduction of information asymmetry. This ultimate aspect is supported in the academic environment by a series of authors, for example Graham, Harvey and Rajgopal (2005), Lambert, Leuz and Verrecchia (2007).

Hans Hoogervorst, Chairman of the International Accounting Standards Board (IASB), has indicated that standards body plans to develop a new disclosure framework to cut down on the use of boilerplate text in financial reporting. "The risk is that annual reports become simply compliance documents, rather than instruments of communication", argues Hoogervorst, adding that it is necessary to create tangible improvements to disclosures in financial reporting by encouraging companies to be proactive in reducing clutter (Hoogervorst, 2013).

In the academic environment, a series of researches has been conducted in relation to the disclosure of financial statements. For example, Ball et al. (2012) revealed that because audited financial reporting and private information

disclosure are complements, their economic roles cannot be evaluated separately by researchers, regulators or standard-setters. Moreover, Horton et al. (2012) find that analysts following IFRS firms have superior trustfulness in their forecasts compared to analysts following non-IFRS firms, concluding that IFRS have improved the information setting by increasing both information quality and comparability.

On the empirical area, there are diverse ways to measure disclosure quality. Various authors exploit market-based measures depicted on accruals quality (for example Francis, LaFond, Olsson and Schipper (2005)) and other characteristics of earnings (for example Barth, Konchitchki and Landsman, 2013). Francis, LaFond, Olsson and Schipper (2005) interpret their findings as documenting support for a negative relationship between the proxy of information quality and cost of capital.

Several studies document positive associations between capital market benefits and financial reporting and disclosure quality (for instance, Francis, Nanda, and Olsson, 2008). Francis, Nanda and Olsson (2008) find, in a cross-sectional study, that their measure of voluntary disclosure quality constructed from annual reports is not significantly negatively correlated with cost of equity when they control for variables regularly interpreted as hazard factors (for instance firm size and book-to-market) or earnings quality.

A study conducted by Setayesh and Kazeminejad (2012) (apud BarzegariKHaneghah, 2013) on the Tehran Stock Exchange revealed that the disclosure quality has direct and significant relationship with liquidity, background, profitability and the size of auditor; moreover, there is an indirect and meaningful relationship between financial leverage and family ownership of firm listed on the Tehran Stock Exchange. Another research conducted in an emerging economy, precisely Egypt, focuses on the relationship between voluntary disclosure and firm value. In this study, Hassan and Romilly (2009) found a positive relationship between these two elements; however, there is little relationship between voluntary disclosure and firm value.

A series of studies has been conducted on the effects of IFRS adoption on the quality of financial reporting. For example, Barth et al. (2006) documented that companies adopting IFRS present a lower earnings management and higher earnings relevance, these aspects being interpreted as signaling a higher quality of information disclosed in financial statements. Another relevant study conducted by Barth et al. (2012) suggested that "efforts to converge accounting standards, the increasing mandatory use of IFRS throughout the world, the development of international auditing standards, and efforts to increase coordination of international securities market regulators have increased comparability of accounting amounts".

A wide range of studies have investigated the process of IFRS adoption in developed market, on the one hand, and in emerging economies, on the other hand. For example, Albu and Albu (2012) present the intricate nature of the IFRS adoption process in Romania, while Jaruga et al. (2007) illustrate the complications of conversion to IFRS and collision of adoption on financial statements in Poland.

A wide stream of literature focuses on the relationship between audit firm size and audit quality. Francis (2004) states that financial statements evidence the argument that audits of large accounting firms (Big 4) are of higher quality. The author suggests that due to the fact that these "audit giants" have established brand name reputation, they consider further incentive to protect their status by providing high-quality audits.

According to Lee et al. (2006), the quality of financial statements is a "joint function of management representation and the audit process". Taking this aspect into account, it can be stated that the external auditor plays a vital role not only in the certification of the audit process, but also in the influencing practice derived from their notoriety. Thus, the use of larger external auditors indicates higher quality audits and enhanced financial disclosures and credibility (Bushman et al., 2004).

However, Lawrence et al. (2011) provide suggestive evidence that results in prior literature need to be reconsidered, namely because these previous results could be explained by client-specific characteristics, such as firm size, that lead to a selection bias in the analyses. They conclude that these arguments may be leading to an erroneous inference that Big 4 auditors conduct higher quality audits.

### 3 RESEARCH DESIGN

This section presents the empirical demarche of this study. After introducing the sample selection criterion, the following part presents and describes the logistic model implemented in order to test the research's hypotheses. The ultimate part of this section is dedicated to the presentation of the univariate tests which will be used in order to test the emphasized hypotheses.

The research hypotheses are constructed on the expectation that there will be a positive association between auditor size and the extent and quality of disclosure. Thus, the following two research hypotheses were developed:

*H1:* Companies audited by a Big 4 audit firm disclose more IFRS adoption information than companies audited by non-Big 4 external auditors.

*H2:* Companies audited by a Big 4 audit firm have improved quality disclosure of IFRS adoption information than companies audited by non-Big 4 external auditors.

### **3.1 SAMPLE SELECTION**

The aim of this research is to investigate the association between the audit quality and financial reporting disclosure in Romania. Due to the fact that the year 2012 represents the year in which Romanian entities listed on the regulated market had to prepare their individual financial statements in accordance with International Financial Reporting Standards, the analyzed financial statements are those corresponding to year 2012.

The sample consists of companies listed on the Bucharest Stock Exchange which publish their financial statements in accordance to IFRS. Thus, a few restrictions are required for this study, as it follows:

- Companies present their financial statements for the year 2012 according to the International Financial Reporting Standards – IFRS 1;
- Companies operating in the financial sector are eliminated from the study due to homogeneity considerations- these financial institutions have specific regulations considering their activity.

After implementing the above-mentioned restrictions, the final sample consists of 61 companies listed on the Bucharest Stock Exchange. In order to collect the data for this research, the annual reports of the companies were consulted, as well as official publication from the Bucharest Stock Exchange and entities' sites. In which concerns the disclosure, all the leaks made to comply with IFRS 1 are presented in narrative form in the notes associated to companies' financial reports. The previous means of communication with stakeholders served as a basis for the creation of the database used in order to test the research's hypothesis.

### **3.2 LOGISTIC REGRESSION MODEL**

The disclosure index captures both quantity and qualitative aspects disclosed by companies in their notes to the financial statements. This index was developed following Palmer's (2008) model, namely:

- The measure of the extent of disclosure concerning the adoption of IFRS by each company is represented by the total number of sentences disclosed (quantity) and
- For each sentence disclosed, it was given a *qualitative* score, ranked from 0 to 5, where 0 applies for non-specific information and 5 rewards the explicit statement of the impact that the adoption might have on that company.

The regression model used in this research is the model tested by Palmer (2008) – the only difference is that in this research, the model is modified by adding a fifth independent variable, namely AC (audit committee) - and is composed of two representations, namely the extent of IFRS adoption (DISCE) and the quality score (DISCQ).

$$DISCE = \alpha + \beta_1 AQ + \beta_2 SIZE + \beta_3 PROF + \beta_4 LEV + \beta_5 AC + \varepsilon$$

$$DISCQ = \alpha + \beta_1 AQ + \beta_2 SIZE + \beta_3 PROF + \beta_4 LEV + \beta_5 AC + \varepsilon,$$

Where:

- DISCE (Disclosure Exposure) is measured by the number of sentences disclosed;
- DISCQ (Disclosure Quality) is measured using the index discussed in the previous section (see Appendix A for the rating scheme employed in the research);
- AQ (Audit Quality) is a dummy variable, which equals 1 if the external auditor is Big 4 and 0 otherwise;

The control variables used in this study are the following four:

- SIZE (the company's size) is measured by the company's total assets,
- PROF (profitability of the company) is measured by dividing the profit to total assets,
- LEV (financial leverage) is measured as total liabilities divided to total assets,
- AC (audit committee) is a dummy variable, which equals 1 if the company has established an audit committee and 0 otherwise.

The variables engaged in this study can be classified as:

- DISCE and DISCQ are the dependent variables of the study,
- AQ is the categorical independent variable and
- SIZE, PROF, LEV and AC are the non-categorical independent variables.

In order to test the hypothesis developed above, both univariate and multivariate methods are used. Spearman's Rank Order correlation coefficients are used to investigate the relationship between the explanatory variables, as well as the Kendall Correlation test. The Mann-Whitney test is used to examine the relationships between auditor quality and the dependent variables – Disclosure Exposure and Disclosure Quality and the Kruskal-Wallis test is conducted to analyse the differences in the ranks of the auditors. Ultimately, the multivariate test used in this research is standard multiple regression.

## 4 RESULTS

### 4.1 DESCRIPTIVE STATISTICS

The descriptive statistics for the dependent variables of this study, namely Disclosure Exposure and Disclosure Quality is presented in Table 1, as it can be seen below:

*Table 1. Descriptive Statistics for the Dependent Variables*

	DISCE	DISCQ
<b>Number of Observations</b>	61	61
<b>Mean</b>	39.0483	2.9193
<b>Median</b>	33.5	3
<b>Standard Deviation</b>	31.1076	1.2841
<b>Range</b>	143	4
<b>Minimum</b>	2	1
<b>Maximum</b>	145	5

The same approach was conducted for the non-categorical independent variables engaged in this study (see Table 2) and for the categorical independent variable (see Table 3), as they were presented in the previous section.

*Table 2. Descriptive Statistics for the Non-categorical Independent Variables*

	SIZE	PROF	LEV	AC
<b>Number of Observations</b>	61	61	61	61
<b>Mean</b>	1135336761	-0.0075	0.2928	0.4918
<b>Median</b>	156442671	0.0132	0.2072	0
<b>Standard Deviation</b>	4971629086	0.1046	0.2748	0.504
<b>Range</b>	38130242823	0.6777	1.4418	1
<b>Minimum</b>	14757177	-0.4108	0.0078	0
<b>Maximum</b>	38145000000	0.2664	1.4496	1

Table 3 below presents the descriptive statistics for the categorical independent variable of this study, namely Audit Quality, which is investigated in terms of frequency of Big 4 auditors and other audit firms.

Table 3. Descriptive Statistics for the Categorical Independent Variable

External Auditor	Frequency	Percent
Deloitte	4	0.06
Ernst & Young	10	0.16
KPMG	2	0.03
PricewaterhouseCoopers	1	0.02
Other	44	0.72
TOTAL	61	100

As it can be seen in the above table, only 28% of the companies were audited by a Big 4 audit firm, while the majority – 72%- were audited by other audit firms. Moreover, from the Big 4 audit firms, Ernst & Young scores the highest frequency (10), while PricewaterhouseCoopers has the lowest frequency- only one company audited.

The following two tables present the descriptive statistics for both companies engaging a Big 4 auditor and a non-Big 4 audit firm.

Table 4. Descriptive Statistics for Companies engaging Big 4 External Auditor

	MEAN	MEDIAN	MIN	MAX	RANGE
DISCE	57.23	44	10	145	135
DISCQ	3.94	4	2	5	3
SIZE	3658378592	461598136	52330317	38145000000	38092669683
PROF	-0.0008	0.0069	-0.3092	0.1415	0.4507
LEV	0.3007	0.2027	0.0563	0.9783	0.922
AC	0.7647	1	0	1	1

Table 5. Descriptive Statistics for Companies engaging non-Big 4 External Auditor

	MEAN	MEDIAN	MIN	MAX	RANGE
DISCE	32.77	28.5	2	90	88
DISCQ	2.59	2	1	5	4
SIZE	160525144.8	122257027.5	14757177	514027253	499270076
PROF	-0.01	0.0142	-0.4108	0.2664	0.6772
LEV	0.2898	0.2148	0.0078	1.4496	1.4418
AC	0.3863	0	0	1	1

When comparing the data from Table 4 and Table 5, it can be noticed that the mean of extent and quality of disclosure is significantly higher for those companies audited by a Big 4 audit firm. Still, this relationship has to be deeper investigated, reason why, in the following sections, both univariate and multivariate tests were conducted.

#### 4.2 UNIVARIATE TESTS

Due to the fact that the variables employed in this study are either categorical or non-normally distributed, the non-parametric tests are required. In order to perform the univariate tests, the variables were ranked and the results of the four tests performed are presented in the following section.

The Spearman Rank Order correlation is used to test the relationship between the dependent and independent variables engaged in this study. The relevant Spearman's Rank Order correlation coefficients are presented in Table 6, as it follows:

**Table 6. Spearman's Rank Order Correlation Coefficients**

	<i>DISCE</i>	<i>DISCQ</i>	<i>AQ</i>	<i>SIZE</i>	<i>PROF</i>	<i>LEV</i>	<i>AC</i>
<i>DISCE</i>	1						
<i>DISCQ</i>		1					
<i>AQ</i>	0.303274584	0.45980286	1				
<i>SIZE</i>	0.105728393	0.246105	0.50878516	1			
<i>PROF</i>	0.161901565	0.09733413	0.0643769	0.1041777	1		
<i>LEV</i>	-0.022448091	0.00536977	0.06022355	-0.0157589	-0.1838181	1	
<i>AC</i>	0.121534426	0.01726343	0.33930805	0.4488433	0.08939617	0.08380891	1

When analyzing the results from Table 6, the correlation between Audit Quality and Disclosure Exposure (0.303) suggest a medium association, fact that by itself do not entirely support Hypothesis 1, that companies audited by Big 4 auditors disclose more information. Moreover, in terms of correlation between Audit Quality and Disclosure Quality variables, which present a level of correlation of 0.459, Spearman's rank coefficient suggest a medium association between the above mentioned two variables, fact that does not entirely support Hypothesis 2, that companies audited by Big 4 firms disclose information of a higher quality.

According to the results captured in Table 6, there is a large correlation between company's size and audit quality. Another important association revealed by the Spearman's Rank Order Correlation is a medium correlation between the audit committee presence and audit quality, as well as between the audit committee and the size of the company. However, the other variables do not present a significant level of correlation.

The second test performed was the Kendall Correlation Test and the results are captured in Figure 1 below.

According to the Kendall's Correlation results (Figure 1), there is a positive association between the disclosure exposure and audit quality, on the one hand, and a strong positive association between disclosure quality and audit quality, on the other hand, results that support the research's hypotheses.

In order to explore the relationship between auditor size and the explanatory variables- Disclosure Exposure and Disclosure Quality- the Mann-Whitney Test has been conducted.

**Table 7. Mann-Whitney Test Results**

	<b>N1</b>	<b>N2</b>	<b>U-Statistics</b>	<b>Z-Statistics</b>
<b>Dependent Variable= Disclosure Exposure (DISCE)</b>				
<b>Big 4/ Other</b>	17	44	164.5	3.98
<b>Dependent Variable= Disclosure Quality (DISCQ)</b>				
<b>Big 4/ Other</b>	17	44	227	4.67

The results of the Mann-Whitney Test indicate that there is a statistically significant difference in the extent of disclosure between companies audited by Big 4 auditors and those audited by non-Big 4 audit firms (other), fact which supports Hypothesis 1. In terms of Disclosure Quality, the Mann-Whitney Test results show a significant difference in terms of disclosure quality exposed by companies audited by Big 4 and those audited by other audit firms, fact which support Hypothesis 2, namely, there is a significant difference in terms of disclosure quality between companies audited by a Big 4 firm and a non-Big 4 auditor.

Pair	tau	95% CI	p-value
DISCE, DISCQ	0.586	0.454 to 0.719	<0.0001
DISCE, AQ	0.253	0.117 to 0.388	0.0180
DISCE, SIZE	0.075	-0.106 to 0.255	0.3971
DISCE, PROF	0.109	-0.081 to 0.299	0.2177
DISCE, LEV	-0.011	-0.165 to 0.143	0.9009
DISCE, AC	0.099	-0.053 to 0.252	0.3519
DISCQ, AQ	0.419	0.294 to 0.543	0.0003
DISCQ, SIZE	0.200	0.030 to 0.370	0.0371
DISCQ, PROF	0.103	-0.085 to 0.291	0.2841
DISCQ, LEV	0.018	-0.125 to 0.160	0.8524
DISCQ, AC	0.029	-0.121 to 0.180	0.8008
AQ, SIZE	0.419	0.295 to 0.543	<0.0001
AQ, PROF	0.053	-0.092 to 0.198	0.6180
AQ, LEV	0.050	-0.081 to 0.180	0.6409
AQ, AC	0.339	0.224 to 0.455	0.0035
SIZE, PROF	0.068	-0.126 to 0.261	0.4403
SIZE, LEV	-0.001	-0.177 to 0.175	0.9901
SIZE, AC	0.369	0.239 to 0.500	0.0005
PROF, LEV	-0.127	-0.295 to 0.041	0.1488
PROF, AC	0.074	-0.080 to 0.228	0.4886
LEV, AC	0.069	-0.090 to 0.228	0.5162

H0:

The variables are independent.

H1: Tau ≠ 0

The correlation coefficient of the bivariable population is not equal to 0.

**Fig. 1. Kendall Correlation Results**

Moreover, when analyzing the Z-Statistics corresponding to the Mann-Whitney test results (see Table 7 on the above page), the results indicate that there is a significant statistical difference between the means of the two categories- ranks corresponding to Big 4 and ranks attributed to non-Big 4 firms ("Other")- results which emphasize that, on average, companies audited by Big 4 auditors have higher Extent and Quality scores.

The Kruskal-Wallis Test results are presented in Table 8 for both Disclosure Exposure and Disclosure Quality.

**Table 8. Kruskal-Wallis Test Results**

Dependent Variable	External Auditor	n	Mean Rank
Disclosure Exposure (DISCE)	Deloitte	4	43.12
	Ernst & Young	10	48.6
	KPMG	2	18.5
	PricewaterhouseCoopers	1	41
	Other	44	25.03
	TOTAL	61	
<b>Kruskal-Wallis Test Statistics 17.82</b>			
Dependent Variable	External Auditor	n	Mean Rank
Disclosure Quality (DISCQ)	Deloitte	4	32
	Ernst & Young	10	49
	KPMG	2	17
	PricewaterhouseCoopers	1	26
	Other	44	19.32
	TOTAL	61	
<b>Kruskal-Wallis Test Statistics 23.81</b>			

The Kruskal-Wallis Test was applied for the five categories presented in the above table, namely Deloitte, Ernst & Young, KPMG, PricewaterhouseCoopers and Other (meaning non-Big 4 audit firms). The null hypothesis states that there is no difference between the groups' means. The critical 5% Chi-Square with 4 degrees of freedom is 9.48 and the Kruskal-Wallis Test Statistics for the Disclosure Exposure is 17.82 and for the Disclosure Quality is 23.81. Since the observed test-value is greater than the critical Chi-Square for both dependent variables, it can be stated that the null hypothesis of equal means is rejected. This fact supports Hypotheses 1 and 2, signifying that the influence of the Big 4 audit firm on the extent and quality of disclosure is supported.

Moreover, when analyzing the mean ranks for each group, it can be noticed that out of the Big 4, Ernst & Young ranks the highest score both in terms of disclosure exposure and disclosure quality. Even though in terms of disclosure extent Deloitte and Ernst & Young have appropriate mean ranks, Ernst & Young scores higher (with a difference of 17 points) than Deloitte under the disclosure quality aspect.

#### 4.3 MULTIVARIATE TESTS – REGRESSION ANALYSIS

In order to test the research hypotheses, multiple regression analysis was used. Namely, each of the two dependent variables- Disclosure Exposure (DE) and Disclosure Quality (DC) was regressed against the independent variables: AQ, SIZE, LEV, PROF and AC. The results of these regressions are reported in Figure 2 and Figure 3.

<i>Regression Statistics</i>	
Multiple R	0.344456427
R Square	0.11865023
Adjusted R Square	0.038527523
Standard Error	17.38735306
Observations	61

  

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	18.94278338	7.619900181	2.48596	0.01599
AQ	0.761701153	0.343661444	2.21643	0.03082
SIZE	-0.09605732	0.156947836	-0.61203	0.54304
PROF	0.142910655	0.129646289	1.10231	0.27513
LEV	-0.02101162	0.129757	-0.16193	0.87195
AC	0.048846915	0.168924604	0.28916	0.77354

**Fig. 2. Summary Output for Regression Model with Dependent Variable DISCE**

The multiple regression model's significance (Significance F = 0.211) does not support the highly statistical significance of the model. The Adjusted R Square (Coefficient of determination) indicates that 3.8 % of the variation in the dependent variable is explained by the variation in the independent variables. The coefficient for Audit Quality (AQ) is statistically significant, this independent variable making the unique contribution to explaining the dependent variable. This fact supports Hypothesis 1, that companies audited by Big 4 audit firms disclose more information.

<i>Regression Statistics</i>				
Multiple R	0.49344587			
R Square	0.24348883			
Adjusted R Square	0.17471509			
Standard Error	15.0885865			
Observations	61			

  

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	9.56832979	6.6124799	1.44701	0.15357
AQ	1.03243034	0.298226267	3.4619	0.00105
SIZE	0.07447133	0.136197901	0.54679	0.58674
PROF	0.0715795	0.112505868	0.63623	0.52727
LEV	0.00718283	0.112601941	0.06379	0.94937
AC	-0.2065278	0.146591231	-1.40887	0.1645

**Fig. 3. Summary Output for Regression Model with Dependent Variable DISCQ**

The multiple regression model's significance (Significance F = 0.0075) indicates a high significance of the regression that has as dependent variable the Disclosure Quality. The Adjusted R Square (Coefficient of determination) indicates that 17.47 % of the variation in the dependent variable is explained by the variation in the independent variables. The coefficient for Audit Quality (AQ) is statistically significant, this independent variable making the unique contribution to explaining the dependent variable. This fact supports Hypothesis 2, that companies audited by Big 4 audit firms disclose information of a higher quality.

## 5 LIMITATIONS OF THIS RESEARCH

This study presents a series of drawbacks. First of all, the sample population is rather small, only 61 companies having been investigated. However, the sample is homogeneous (the restrictive criterion established in the sample selection process took into consideration the heterogeneity aspect, so that the sample would not be affected by heterogeneous characteristics). Second of all, the number of companies audited by Big 4 audit firms is small- 17 entities- compared to 44 companies audited by a non-Big 4 external auditor. Under this aspect, the results might not be very representative.

Third of all, the construction of the Disclosure Index which was created in order to define the second dependent variable, namely Disclosure Quality- was based on a subjective approach. Thus, the objectivity criterion was rather shadowed by the manner of classifying the disclosed information in a category or another (the scores attributed from 0 to 5, where 0 represents no information disclosed and 5 indicates high quality disclosure characterized by the presentation of specific elements in the narratives). Last, the significance of the multiple regression for the Disclosure Exposure is not statistically relevant, fact that questions the reliability of this regression.

## 6 CONCLUSIONS AND FURTHER RESEARCH

This research aimed to investigate the association between the audit quality and financial reporting disclosure in Romania for the companies which adopted the International Financial Reporting Standards for the first time. In order to explore this association, two dependent variables were defined with the purpose of capturing the disclosure extent and the disclosure quality. Thus, the research engaged both univariate and multivariate tests.

When comparing the descriptive statistics for companies engaging a Big 4 and those engaging a non-Big 4 auditor, it can be noticed that the mean of extent and quality of disclosure is significantly higher for those companies audited by a Big 4 audit firm.

According to the Spearman's Rank Order Correlation, there is a medium correlation between audit quality and disclosure exposure, while between the audit quality and disclosure quality there is a medium to large association. Moreover, there is a large correlation between company's size and audit quality. According to the Kendall's Correlation results, there is a positive

association between the disclosure exposure and audit quality, on the one hand, and a strong positive association between disclosure quality and audit quality, on the other hand.

The results of the Mann-Whitney Test indicate that there is a statistically significant difference in the extent of disclosure between companies audited by Big 4 auditors and those audited by non-Big 4 audit firms (other), as well as a statistically significant difference in the quality of disclosure between these two categories. The Z-Statistics indicate that, on average, companies audited by Big 4 auditors have higher Extent and Quality scores.

The Kruskal-Wallis Test results indicate that the influence of the Big 4 audit firm on the extent and quality of disclosure is supported. The regression's output reveal that for both the disclosure exposure and disclosure quality, the coefficient for Audit Quality (AQ) is statistically significant, this independent variable making the unique contribution to explaining the dependent variable. This fact supports the two research hypotheses.

In the area of further research, this study can be extended to the other emerging economies across the European Union, so that the tendency crosswise emerging economies could be emphasized in terms of IFRS disclosure quality and quantity, under the influence of a Big 4 audit firm. Another possible aspect to be taken into consideration refers to the audit committee existence variable, which can be set as a categorical independent variable in the multiple regression designed for capturing the disclosure exposure and disclosure quality.

## ACKNOWLEDGEMENT

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/159/1.5/S/142115 "Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain".

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**APPENDIX A. THE RATING SCHEME EMPLOYED IN THE RESEARCH FOR DEVELOPING THE DISCLOSURE INDEX  
(ADAPTED FROM PALMER, 2008, P.24)**

<b>Rating</b>	<b>Criteria</b>
<b>0 - non-specific information</b>	The sentence contains no real information about the adoption of IFRS, and is not company - related.
<b>1-general information on the implementation on IFRS</b>	Indicates general information about the adoption of IFRS in relation to the company, without presenting a specific Standard.
<b>2-specific aspects</b>	Identifies issues/aspects relevant to the company, but not accounting policies.
<b>3-specific aspects</b>	Indicates disclosure of some impact on the company without specifying how this change will impact company`s accounting policies and practice.
<b>4-specific aspects</b>	The sentence provides a description of the impact of adopting IFRS and gives an indication of the nature and direction of the impact.
<b>5-specific aspects</b>	Moreover than 4, this criterion adds information related to the direction of the change raised from the adoption of IFRS.