

audit

FINANCIAR

Anul XVII, nr. 155 - 3/2019

3/2019

- Sondaj de opinie: auditul intern în era transformării continue
- Survey: Internal Audit in the Era of Continuous Transformation



- Evaluarea comparabilității informației financiare cu ajutorul analizei datelor de panel
- Organizarea auditului public intern în Albania și România (studiu comparativ)
- Aspecte privind modificarea coordonatelor raportului auditorului independent
- Influențele mecanismului de guvernanță corporativă asupra performanței financiare
 - Analiza relației contabilitate – dezvoltare sustenabilă

- Assessing Comparability of Accounting Information Using Panel Data Analysis
- Organization of Internal Public Audit in Albania and Romania (Comparative Study)
- Aspects Regarding the Changes to the Independent Auditor's Report
- The Influences of Corporate Governance Mechanism towards Financial Performance
- Analysis of the Relationship between Accounting and Sustainable Development

Criptomoneda Bitcoin,
impact în piața de capital din România

Cryptocurrency Bitcoin,
Impact on the Romanian Capital Market

Sumar / Content



- Ioan-Bogdan ROBU, Ionuț Viorel HERGHILIGIU, Bogdan BUDEANU, Sorin CHIRU**
- *Assessing Comparability of Accounting Information Using Panel Data Analysis* [Click here!](#).....441
- Cezar FURTUNĂ, Adela CIUCIOI**
- *Internal Audit in the Era of Continuous Transformation. Survey of Internal Auditors in Romania* [Click here!](#).....452
- Nensi XHANI, Marioara AVRAM, Ilir MEÇE, Latif ÇELA**
- *Comparative Study on the Organization of Internal Public Audit in Albania and Romania* [Click here!](#)473
- Denis Adrian LEVANTI**
- *Aspects Regarding the Changes to the Independent Auditor's Report. The Case of Public Interest Entities* [Click here!](#).....486
- Ready WICAKSONO, Dasriyan SAPUTRA, Hairul ANAM**
- *The Influences of Corporate Governance Mechanism towards Company's Financial Performance* [Click here!](#).....496
- Ștefan-Cosmin DĂNILĂ, Ioan-Bogdan ROBU**
- *The Influence of Cryptocurrency Bitcoin over the Romanian Capital Market* [Click here!](#)507
- Elena NECHITA**
- *Analysis of the Relationship between Accounting and Sustainable Development. The Role of Accounting and Accounting Profession on Sustainable Development* [Click here!](#)...520

Revistă editată de
**Camera Auditorilor Financiari
din România**
Str. Sirenelor nr. 67-69, sector 5,
București, OP 5, CP 83

Director științific:
prof. univ. dr. **Pavel NĂSTASE**

Director editorial:
dr. **Corneliu CĂRLAN**

Redactor șef:
Cristiana RUS

Secretar de redacție:
Cristina RADU
Prezentare grafică și tehnoredactare:
Nicolae LOGIN

*Colegiul editorial științific și colectivul
redacțional nu își asumă
responsabilitatea pentru conținutul
articolelor publicate în revistă.*

Indexare în B.D.I.:
Academic Keys;
Cabell's;
Deutsche Zentralbibliothek für
Wirtschaftswissenschaften;
DOAJ;
Ebsco;
ERIH PLUS;
Global Impact Factor;
Google Scholar;
Index Copernicus;
ProQuest;
Research Papers in Economics
(RePEc);
SCPIO;
Ulrich's

Marcă înregistrată la OSIM,
sub nr. M2010 07387

Telefon: +4031.433.59.22;
Fax: +4031.433.59.40;
E-mail: audit.financiar@cafr.ro;
revista@cafr.ro; <http://revista.cafr.ro>;
[facebook.com/revistaauditfinanciar](https://www.facebook.com/revistaauditfinanciar)
ISSN: 1583-5812,
ISSN on-line: 1844-8801

Tipar: SC Print Group Serv SRL
Str. Baicului nr. 82, sector 2, București
e-mail: office@printgroup.ro

Scientific Editorial Board

- Dinu Airinei** – „Al. I. Cuza” University, Iași
Veronel Avram – Craiova University
Yuriy Bilan – Szczecin University, Poland
Daniel Botez – „Vasile Alecsandri” University, Bacău
Ovidiu Bunget – West University Timișoara
Alain Burlaud – The National Conservatory of Arts and Crafts, Paris
Tatiana Dănescu – University of Medicine, Pharmacy, Sciences
and Technology of Târgu Mureș
Cristian Drăgan – Craiova University
Nicoleta Farcane – West University Timișoara
Liliana Feleagă – Bucharest University of Economic Studies
Lilia Grigori – Academy of Economic Studies of Moldova, Chișinău
Allan Hodgson – University of Queensland, Australia
Costel Istrate – „Al. I. Cuza” University, Iași
Ion Mihăilescu – „Constantin Brâncoveanu” University, Pitești
Vasile Răileanu – Bucharest University of Economic Studies
Donna Street – Dayton University, SUA
Aurelia Ștefănescu – Bucharest University of Economic Studies
Adriana Tiron Tudor – „Babeș-Bolyai” University, Cluj Napoca

All rights of this edition are reserved to the Chamber of Financial Auditors of Romania (CAFR). Reproduction, even partially, on any support, and the sale are prohibited without prior consent of the CAFR, being subjects to the stipulations of the copyright law.

Important for Authors!

The articles are submitted to the editor by e-mail at: revista@cafr.ro, compulsory in MS Office Word format, in black-and-white.

The authors are kindly requested to comply with the following:

- the language the article is drafted in is English
- the optimal size of the article is: 7-10 pages with 2000 signs/page, spaces included;
- the article must mention the title, the research methodology used, authors' contributions, the imperfect on the accounting profession and the references;
- an Abstract is compulsory, which must be written at the 3rd person plural, presenting the subject of the research, the main problems and authors' contributions;
- 4-5 key words;
- JEL Classifications.

Tables and graphs are developed in black and white whit up to six shades of gray and sent also separately, if they were elaborated in MS Office Excel.

The review of the articles is performed by members of the Scientific Assessment Council of the „Audit Financiar” Journal, by means of the „double-blind review” method, that is, the reviewers do not know the names of the authors, nor the authors know the names of the reviewers.

Assessment criteria for articles: innovative input, topicality, importance and relevance for the subject matter; the quality of the research methodology; clarity and pertinence of the presentation and argumentation; the relevance of the bibliographic sources used; contribution made to the research in the area.

The resolution of the Scientific Assessment Council of the journal can be: acceptance; acceptance with revisions; rejection. The results of the assessments are communicated to the authors and only the articles approved by the Scientific Assessment Council are published.

More details can be found on our website www.revista.cafr.ro, sections „Reviews” and „Manuscripts”.

Journal published by the
**Chamber of Financial Auditors
of Romania**

67-69 Sirenelor Street, District 5,
zip code 050855, Bucharest, OP 5,
CP 83

Scientific Director:
Professor **Pavel NĂSTASE**, Ph.D.

Editorial Director:
Corneliu CĂRLAN, Ph.D.

Editor in Chief:

Cristiana RUS

Editorial Assistant:

Cristina RADU

DTP: **Nicolae LOGIN**

The Scientific Editorial Board and the editorial technical team shall take no responsibility for the content of the articles published in the journal.

International Databases:

Academic Keys;

Cabell's;

Deutsche Zentralbibliothek für

Wirtschaftswissenschaften;

DOAJ;

Ebsco;

ERIH PLUS;

Global Impact Factor;

Google Scholar;

Index Copernicus;

ProQuest;

Research Papers in Economics

(RePEc);

SCPIO;

Ulrich's

OSIM Trademark no. M2010 07387

**Chamber of Financial Auditors
of Romania**

Phone: +4031.433.59.22;

Fax: +4031.433.59.40;

E-mail: audit.financiar@cafr.ro;

revista@cafr.ro; <http://revista.cafr.ro>;

[facebook.com/revistaauditfinanciar](https://www.facebook.com/revistaauditfinanciar)

ISSN: 1583-5812,

ISSN on-line: 1844-8801

Printing:

SC Print Group Serv SRL

Str. Baicului nr. 82, sector 2, București

e-mail: office@printgroup.ro

Assessing Comparability of Accounting Information Using Panel Data Analysis

*Lecturer Ioan-Bogdan ROBU, Ph. D.,
Faculty of Economics and Business Administration,
"Alexandru Ioan Cuza" University of Iasi,
e-mail: bogdan.robud@feaa.uaic.ro*

*Lecturer Ionuț Viorel HERGHILIGIU, Ph. D.,
"Gheorghe Asachi" Technical University of Iași,
e-mail: herghiligiuiunut@gmail.com*

*Bogdan BUDEANU, Ph. D.,
"Gheorghe Asachi" Technical University of Iași,
e-mail: bogdan.budeanu@tuiasi.ro*

*Sorin CHIRU, Ph. D.,
Internal Auditor, Clinical Recovery Hospital of Iasi,
e-mail: sorichiru@yahoo.com*

Abstract

Information comparability can be ensured by consistently applying the same financial reporting framework or similar financial reporting frameworks. The comparability of financial information can be measured both between firms and from one period to another. In the study there has been evaluated the comparability of accounting information over time, from one financial exercise to another, and in space, between firms, with panel data analysis using models with fixed-effects. The study was conducted on a sample of 63 BSE Romanian listed companies, during the period 2007-2016, and to obtain the research results, panel data analysis was performed. The main results have revealed that the move to IFRS has led to increased comparability of financial information, based on the estimates of time and cross fixed effects.

Keywords: *accounting information, accounting quality, comparability, IFRS, panel data analysis*

JEL Classification: *C13, C20, C58, M41*

To cite this article:

Robu, I.-B., Herghiligiu, I. V., Budeanu, B., Chiru, S. (2019), Assessing Comparability of Accounting Information Using Panel Data Analysis, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp.441-451,
DOI: 10.20869/AUDITF/2019/155/015

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/015>

Received: 16.04.2019

Revised: 30.04.2019

Accepted: 10.05.2019

1. Introduction

The IASB's general framework specifies that accounting information reported by a firm is useful when it can be compared to information reported by other similar firms or information reported by the same firm but in different time periods (IASB, 2015, p. A34). The comparability of accounting information can be ensured by consistently applying the same financial reporting framework or similar financial reporting frameworks and its measurement can be achieved through comparability indexes (Gray et al., 2009, pp. 431-447).

The comparability of the reported accounting information is influenced by the financial reporting system to which a firm subscribes, influenced in turn by a number of cultural, social or economic factors (Nobes and Sandler, 2013, pp. 573-595). The impact of these factors on the comparability of accounting information can be found at the level of reporting, content, and even at the level of the values recorded for certain financial indicators. Differences in financial reporting due to membership of a particular accounting system may lead to different performance records, although the companies under review record comparable values (total assets), number of employees and turnover (Rossetti and Verona, 2017, p. 30).

The adoption of IFRS is a desideratum in reflecting a true and a fair view on the financial position and performance. Comparability may highlight convergence to IFRS or significant differences between this reporting referential (IFRS) and local or national standards. According to IFRS, comparability helps users of accounting information to identify differences or similarities between a set of items included in the financial statements (IASB, 2015, A34).

The purpose of this study is to assess the quality of accounting information, in terms of comparability, at the level of the Romanian companies listed on the Bucharest Stock Exchange (BSE), under the transition to the new financial reporting system - IFRS, proposed by the IASB. In the study, the comparability assessment is performed by using panel data analysis (Jaba et al., 2017, p. 5).

The paper is structured as follows: a section on literature review and hypothesis development, a section dedicated to research methodology, a section on results and discussion, and finally the section dedicated to the research conclusions.

2. Literature review and hypothesis development

Accounting information provides a relevant description and in the most significant aspects of the financial system, and it must provide to all users a good presentation of the financial position and performance that a firm record in a financial year. The true and the fair view of financial position and performance is ensured by reporting and presenting standardized financial statements (IAS 1, IASB, 2015, p. A738).

Using accounting information, existing and potential investors, creditors and equity lenders can estimate the value of the firm (IASB, 2015, A32). Also, based on reported information, users can identify firm strengths and vulnerabilities, assess their liquidity and solvency, the need for additional funding, probability of obtaining funding, and last but not least prospects for future cash flows (Vernimmen et al., 2009, p. 17).

In order that accounting information to be useful, the IASB's conceptual general reporting framework (issued on January 1, 2015) proposes a set of quality characteristics, structured in two groups, the fundamental characteristics and the ones that amplify the first ones (IASB, 2015, pp. A31-A35). In the category of the fundamental quality characteristics are included the value relevance and the faithful representation, and in the category of the quality characteristics that amplifies the first ones, are included: comparability, verifiability, timeliness and understandability (IASB, 2015, pp. A31-A35; Istrate, 2016.b, p. 30).

The accounting quality can be assessed by using quality criteria (Isaic-Maniu and Voda, 1998; Jemna, 2005). Based on quality criteria and indicators, end-users of the information transmitted can make judgments and make decisions (Wang et al., 1995, p. 350; Wand and Wang, 1996, p. 87). The quality of accounting information is intended to give the financial position and financial performance of the firm as much is possible, without being materially misstated by fraud or errors (Robu et al., 2016, pp. 602-603).

Ensuring the quality of accounting information can be achieved on the basis of recognized and accepted international reporting references (Hansen, 1991, p. 30; Barth et al., 2008, p. 468), such as IASB (The International Accounting Standards Board) or the FASB (The Financial Accounting Standards Board) in order to

minimize the determining factors that lead to the occurrence of frauds and errors and to increase transparency in financial reporting (Barth et al., 2012, pp. 69-70).

The comparability of the accounting information is based on the possibility of identifying certain differences or asymmetries both between messages sent from the same source to different users and from the same source but to one user at different times (Jemna, 2005, p. 46). The issue of comparability is aimed at identifying similarities or differences between accounting information reported by the same firm but at different times (using or not common accounting references) or at the same time, or between information reported by the firm and other firms with which it can be compared, based on the use of a common accounting reference (Christensen and Demsky, 2008, p. 427; Dick and Missonier-Piera, 2010, pp. 20-21).

Comparability can be ensured by applying a common reporting framework, by using the same currency in which the values of items describing position and financial performance are expressed, or by calculating some financial ratios (Barth et al., 2012, pp. 69 -70).

Compliance with IFRS provides users with: a) substantiating the decisions to purchase, store or sell assets; b) assessing the management and management's accountability capacity; c) assessing the ability to pay staff, to provide benefits to its employees; d) assessing the guarantees the firm can provide for the credits that have been granted to it; e) compliance with fiscal policies; f) determining profit and dividends to be distributed; g) development and use of statistical data on national income; h) regulating the business of the company (IASB, 2015, p. A22).

Measuring the difference between IFRS and national rules can be achieved using a comparability index - *CI* (Gray, 1980, pp. 64-76; Gray et al., 2009, pp. 431-447):

$$CI = 1 - (ValueIFRS - ValueNIFRS) / (|ValueNIFRS|) \quad (1)$$

where,

CI represents the comparability index for which values higher than 1 show a decrease in the values of indicators obtained under the IFRS (*ValueIFRS*) against *ValueNIFRS* (the values of the indicators obtained under the application of the national financial reporting rules), while a sub-unitary value reflects the opposite - an increase in the figures due to the changeover to IFRSs.

Comparability of accounting information can be assessed both between firms (applying similar accounting rules) and from one period to another (when switching to another reporting framework). Identifying differences between firms but also over time may explain changes in the response of key users to the disclosure of accounting information in financial statements (Barth et al., 2012, pp. 68-93).

Starting from the evidence presented in the literature from the field, the following research hypothesis is proposed in the study to be validated:

H: The transition to IFRS has led to significant differences in the financial reporting of BSE listed companies from one period to another, but has ensured the comparability of financial information between firms.

Starting from this hypothesis, the study proposes the estimation of the differences indicating the existence of the comparability of the accounting information from one financial year to the other, as well as the differences indicating the existence of the comparability of the accounting information from one firm to the other.

3. Research methodology

In order to achieve the objectives proposed in the study and to obtain the research, a statistical approach is taken in defining the analysis problems and choosing the models and methods of analysis, observing and collecting the data used in the analysis, processing and statistical analysis of the collected data, and at the last stage the interpretation the results obtained and decision-making (Bărbat, 1972, p. 33; Jaba, 2002, p. 15).

In the study it was analyzed the comparability of accounting information both in time, from one financial exercise to another, and between firms. The comparability assessment was carried out with panel data analysis using fixed-effects models. The estimation of non-significant fixed time effects indicates the existence of comparability of accounting information from one financial year to another, while non-significant individual fixed effects indicate the existence of comparability of financial information from one firm to another.

3.1. Target population and sample

In the paper, for the statistical assessment of the quality of accounting information, the studied population is represented by Romanian companies listed on a

regulated capital market and applying IFRS in the reporting of financial statements.

In Romania, the main regulated capital market is represented by the Bucharest Stock Exchange (BSE), under the direct supervision of the Financial Supervisory Authority (FSA). Currently, the BSE includes the following sections: *Regulated Market - BSE*, *AeRo* (a regulated market dedicated to companies that do not meet the size or seniority criteria to be listed on the Regulated Market) and *ATS-International* (Alternative Transaction System trading of international shares).

By the end of 2017, the BSE had 403 listed and active companies, as follows: in the Regulated Market section - BSE, 87 companies; at the AeRo section, 301 firms; at the ATS-International section, 15 companies.

In the paper, there were selected only the companies included in the first section of BSE, those that are traded on the Regulated Market. Criteria for admission and maintenance on the Regulated Market are much more rigorous for companies included in this section than those listed on AeRo and ATS-International. The main criteria refer to the anticipated market capitalization of at least 1 million euros and at least 3 years of financial reporting. The main post-admission conditions also include the obligation to report to FSA and BSE, the mandatory publication of both annual and quarterly financial statements (subject to statutory audit), and the application of a Corporate Governance Code by firms. These conditions aim at ensuring transparency in financial reporting and obtaining quality of accounting information.

The BSE Regulated Market section comprises two major categories of companies, *Premium* and *Standard*. The inclusion of companies listed in one of the two categories is intended to meet a range of minimum capital, minimum performance, financial performance and liquidity criteria (Filip and Raffournier, 2010, p. 83).

By the end of 2017, the BSE Regulated Market section had 87 companies, out of which 24 were *Premium* companies, 60 were *Standard* companies, and 3 *International (Int'l)*. Only firms included in the *Premium* and *Standard* categories, respectively 84 firms were considered in the analysis. Starting from the 84 traded companies in the BSE regulated market (*Premium* and *Standard* categories), the following restrictions were taken into account for the selection of the companies included in the final sample:

- a) the exclusion of companies that have been suspended due to insolvency, bankruptcy or are very rarely traded;
- b) the exclusion of companies operating in the banking, investment, insurance or other financial intermediaries, precisely to ensure the comparability of the financial indicators related to the position and the financial performance, provided that such firms are subject to other regulations on financial reporting;
- c) the exclusion of companies for which not all the financial and non-financial information necessary for analyzing the analysis was found.

Depending on the restrictions mentioned, the size of the sample analyzed shall be calculated as follows:

Total tradable companies in the BSE Regulated Market section, <i>Premium</i> and <i>Standard</i> categories:	84
- companies operating in the banking, investment and insurance funds, or acting as financial intermediaries:	(15)
- companies for which all the information necessary for the analysis has not been found:	(6)
Total sample:	63

The sample to be analyzed includes 63 Romanian companies listed on the BSE, in *Premium* and *Standard* categories, as showed in **Table A.1.** in the **Appendix**, for which data were collected during the period 2007-2016, which ensures a number of 630 observations.

The timely comparability of accounting information has taken into account the two reporting periods under RAS - Romanian reporting standards and IFRS - International Financial Reporting Standards. The reporting period under RAS covers the financial years 2007-2011 and the reporting period under IFRS covers the years 2012-2016.

3.2. Variables, data source and methods for data analysis

Starting from the system of indicators by which the accounting information is reported and valued by the stakeholders, the variables used in the paper refer to the

main elements that reflect the financial position and performance (Raffournier, 2012, p.16; IASB, 2015, p. A741).

The data for the variables considered in the analysis, from the **Table A.1**, were collected with the dedicated *DataStream Advanced 9.2* software for the 2007-2016 period, thus reducing the collection-record errors.

The assessment of the comparability of accounting information as well as the impact that accounting information may have over time and between firms on investor decisions has been made by using panel data analysis (Jaba et al., 2017, p. 5). The study retains the models with time fixed effects and with fixed individual effects (**Figure A.1** from the **Appendix**).

Starting from the classic model used to assess the value relevance of accounting information based on yields (Barth et al., 2012, pp. 68-93), the following regression model is proposed for analysis:

$$\ln(P_t/P_{t-1}) = \beta_0 + \beta_1 \cdot \Delta ROA + \beta_2 \cdot \Delta ROE + \beta_3 \cdot \Delta FL + DFi + DTt + \varepsilon_{it} \tag{2}$$

where,

P represents the stock price of the company at end of the year,

ΔROA represents the relative variation of return on assets,

ΔROE represents the relative variation of return on equities,

ΔFL represents the relative variation of financial leverage,

DFi represents the differences between firms that arise as a result of RAS or IFRS application in the same time period (cross effects),

DTt represents the differences between different time periods for the same firm arising from the application of RAS or IFRS from one financial year to another (time fixed effects).

In the paper, to obtain the results of the research, data analysis was carried out by using *IBM SPSS 22.0* (Statistical Package for Social Sciences) and *SAS 9.0* (Statistical Analysis Software).

4. Results and discussions

Starting from the research objectives proposed in the study, the main reached results consider the identification of the principal components of the Romanian *BSE* listed companies' financial statements, as well as the estimation of these components' influence on the transparency in financial reporting.

The comparability over the time of accounting information has taken into account the two reporting periods, under *RAS* - the Romanian Accounting Standards and *IFRS* - International Financial Reporting Standards. The reporting period under *RAS* covers the financial years 2007-2011 and the reporting period under *IFRS* covers the years 2012-2016.

Using ANOVA for the financial ratios included in the *equation (2)*, as well as for the market response to the reporting of the financial statements, namely the price variation, there have been estimated some descriptive statistics, that are summarized in **Table no. 1**.

Variables		N	Mean	Std. Dev.	Std. Error
ln(Pt/Pt-1)	1-IFRS	314	.0560	.57728	.03258
	2-RAS	315	-.1780	.80449	.04533
	Total	629	-.0612	.70950	.02829
FL	1-IFRS	314	.490271	1.2348750	.0696880
	2-RAS	316	.770680	1.0252554	.0576751
	Total	630	.630921	1.1423310	.0455116
ROA	1-IFRS	314	.020162	.0762778	.0043046
	2-RAS	316	.035472	.0690888	.0038865
	Total	630	.027842	.0731053	.0029126
ROE	1-IFRS	314	.048152	.1401309	.0079080
	2-RAS	316	.022749	.1366553	.0085914
	Total	630	.036817	.1390446	.0058393

Source: Own processing in SPSS 22.0

Based on the results presented in **Table no. 1**, it can be noticed that there are significant differences in the financial position and performance information reported by BSE listed companies under RAS and IFRS. These results lead to the conclusion that there is no comparability between the two reporting referentials. The main differences were recorded at both the level of

the indicators related to the profitability and the one related to the financial structure.

The main results obtained under SAS 9.0 refer to a series of statistics related to the proposed model (**Table no. 2**), testing the model with fixed effects using the F test (**Table no. 3**), testing the model using the Hausman test (**Table no. 4**) and the estimations for the fixed effects model (**Table A.1** from **Appendix**).

Table no. 2. Statistics related to the model with cross and fixed effects

Statistics for the model with fixed effects			
SSE	7226808.644	DFE	491
MSE	14718.5512	Square root of MSE	121.3200
R ²	0.1267		

SSE = Sum of squares of errors;

DFE = The number of degrees of freedom associated with errors: the number of observations in the data set minus the number of parameters;

MSE = Mean squares of errors.

Source: Own processing in SAS 9.0

From **Table no. 2**, based on the R² value, it can be seen that 12.67% from the variance in the variance in the yield of a share ($\ln(P_t/P_{t-1})$) is explained by the influence

of ROA, ROE and FL, in the case of the model with cross and time fixed effects.

Table no. 3. Testing the Fixed Effect Model with the F Test

F statistic for testing the existence of fixed effects			
No. DF	Den DF	Value of F test	Pr > F
70	491	1.02	0.4474

Source: Own processing in SAS 9.0

The value of the F test, calculated as a ratio between the total variance estimator (MST) and the error variance estimator, is 1.02. This value indicates the absence of cross and time fixed effects at the level of the proposed

model in *equation (2)*, although the determinants, ROA and ROE, have a significant influence on the variance of the share's yield ($\ln(P_t/P_{t-1})$).

Table no. 4. Testing the model with fixed effects using the Hausman test

Hausman test for random effects		
DF	Value of the test	Pr > m
3	2.11	0.5500

Source: Own processing in SAS 9.0

Table no. 4 complements **Table no. 3** by providing the result obtained by applying the Hausman test (H_0 : the model has random effects; H_1 : the model has no random effects). The Hausman specification test can also be used to test the consistency of the predictors of the proposed model parameters; in the case of the model with time-fixed effects, the null hypothesis (H_0) specifies that the parameter estimators are consistent but inefficient, and in the case of the alternative hypothesis (H_1) the model parameters estimators are consistent and possibly efficient. Based on the results obtained, it can be appreciated that the estimated parameters for the proposed model has no random effects, and the model parameters are consistent but ineffective.

For the time-fixed effects model, the parameter estimates are presented in *Table A.1* of the *Appendix*. Only the estimates of cross and time fixed effects are retained for the study of comparability. The data shown in the table shows the absence of cross and time fixed effects (except for one company, *CS6: AeroStar*). This highlights the comparability of reported accounting information between firms. Also, the table shows the existence of only one-time fixed effect (*TS: 2011*) for the financial year 2011, the last year in which RAS was applied in the financial reporting of BSE listed companies. The adoption to IFRSs, starting in 2012, has led to the maintenance of comparability of financial information from one period to another.

5. Conclusions

Using advanced statistical data analysis methods, the quality of financial information can be assessed, as well as the analysis of the influence of its determinants, at the level of each quality feature. As well, advanced statistical data analysis methods can be used to assess the comparability of accounting information.

The use of panel data analysis can provide solutions to the influence in time of specific factors on the quality of accounting information. Estimating the differences in time and between the companies, at the level of the quality of accounting information, can provide clues of its comparability in terms of adopting new financial reporting frameworks, but also of increasing its relevance or faithful

representation. The main results have revealed that the IFRS adoption has led to an increase of comparability of accounting information.

The use of panel data analysis contributes to increasing the accuracy of regression model parameter estimates, improving the analysis of a phenomenon by including individual and time dimensions in the model, simplifying the statistical inference process (using the classical assumptions of the regression analysis is not obligatory) (Hsiao, 2003, p. 1).

The panel data analysis can be restricted by recording data, distorting error measurement, selecting individuals included in the analyzed sample, using time series over short periods, by dependence of factors (Baltagi, 2005, pp. 4-9). Typical sampling problems may affect the construction and collection of panel data. The most common problems are to ensure representativeness, occurrence of non-responses, inaccurate answers or aberrant values, ensuring a constant frequency in data collection, and a set reference period (Baltagi, 2005, pp. 4-9).

A limit of this study is determined by the population observed and by the relatively small volume of the analyzed sample. Compared to international studies, using samples of thousands or tens thousands of firms, the Romanian financial market is characterized by a small number of firms that can be analyzed. This is due precisely to the insufficient development of the Romanian financial market, marked by a normative framework still undergoing transformation. Also, the Romanian experience regarding the implementation and application of reporting referencing to ensure the quality of financial information - IFRS is recent, compared to international practice and experience.

From the point of view of the analysis, future directions aim at conducting international research, including other firms listed on the main European financial markets or that use the IFRS reporting framework. This will make a significant contribution to increasing the quality and the relevance of results achieved at national and international level.

Acknowledgments

This work was supported by a National Research Grant of the "Gheorghe Asachi" Technical University of Iasi, Romania, project number GnaC2018_119.

REFERENCES

1. Atwood, T.J., Drake, M., Myers, J., Myers, L. (2011), Do earnings reported under IFRS tell us more about future earnings and cash flows?, *Journal of Accounting and Public Policy*, 30, pp. 103-121

2. Baltagi, B. (2005), *Econometria Analysis of Panel Data*, 3rd edition, *John Wiley & Sons*, West Sussex, England
3. Barth, M.E., Landsman, W.R., Lang, M.H. (2008), International accounting standards and accounting quality, *Journal of Accounting Research*, 46(3), pp. 467-498
4. Barth, M.E., Landsman, W., Lang, M., Williams, C. (2012), Are IFRS-based and US GAAP-based accounting amounts comparable?, *Journal of Accounting and Economics*, 54, pp. 68-93
5. Bărbat, A. (1973), *Teoria statisticii sociale*, Editura Didactică și Pedagogică, București
6. Christensen, J., Demski, J. (2008), *Accounting Theory: An Information Content Perspective*, McGraw-Hill Primis
7. Dick, F., Missonier-Piera, F. (2010), Financial reporting under IFRS: a topic-based approach, *John Wiley & Sons*, West Sussex
8. Field, A. (2009), *Discovering Statistics using SPSS*, 3rd edition, *SAGE Publication*, London
9. Filip, A., Raffournier, B. (2010), The value relevance of earnings in a transition economy: The case of Romania, *The International Journal of Accounting*, 45(1), pp. 77-103
10. Gray, S.J. (1980), The impact of international accounting differences from a security-analysis perspective: some European evidence, *Journal of Accounting Research*, 18(1), pp. 64-76
11. Gray, S.J., Linthicum, C. L., Street, D.L. (2009), Have European and US GAAP measures of income and equity converged under IFRS? Evidence from European companies listed in the US, *Accounting and Business Research*, 39(5), pp. 431-447
12. Hansen, M.D. (1991), Zero defect data. Tacking the corporate data quality problem, MIT, <http://dspace.mit.edu/handle/1721.1/13812>, accessed on 21.03.2018
13. Hsiao, C. (1999), *Analysis of panel data*, *Cambridge University Press*, Cambridge
14. IASB (2015), *International Financial Reporting Standards (IFRS) Official regulations issued from January 1, 2015*, CECCAR, Bucharest
15. Isaic-Maniu, A., Vodă, V. (1998), *Manualul calității*, Ed. Economică, București
16. Istrate, C. (2016a), *Contabilitatea nu-i doar pentru contabili!*, Evrika Publishing, București
17. Jaba, E. (2002), *Statistica*, ed. a 3-a, Ed. Economică, București
18. Jaba, E., Robu, I.B., Istrate, C., Balan, C.B., Roman, M. (2016), Statistical Assessment of the Value Relevance of Financial Information Reported by Romanian Listed Companies, *Romanian Journal of Economic Forecasting*, 19(2), pp. 27-42
19. Jaba, E., Robu, I.B., Balan, C.B. (2017), Panel data analysis applied in financial performance assessment, *Revista Română de Statistică*, 2, pp. 3-20
20. Jemna, D.V. (2005), *Eficiența sondajului statistic*, Ed. Sedcom Libris, Iași
21. Lang, M., Stice-Lawrence, L. (2014), *Textual Analysis and International Financial Reporting: Large Sample Evidence*, available at: <https://pdfs.semanticscholar.org/e1f5/a44f88c8cef7e6d70281b03789e334636a7b.pdf> accessed on 23.03.2018
22. Nobes, C.W., Stadler, C. (2013), How arbitrary are international accounting classifications? Lesson from centuries of classifying in many disciplines and experiments with IFRS data, *Accounting, Organizations and Society*, 38, pp. 573-595
23. Raffournier, B. (2012), *Les Normes Comptables Internationales (IFRS)*, 5ème édition, *Economica*, Paris
24. Robu, I.B., Carp, M., Popescu, C., Păvăloaia, L., Istrate, C., Georgescu, I.E. (2016), The country risk influence on accounting quality in the case of Romanian listed companies, *Transformations in Business and Economics*, 15(3c), pp. 597-616
25. Rossetti, S., Verona, R., (2017), International Differences in IFRS Policy Choice and the Persistence of Accounting Classification: The Case of China, *International Journal of Business and Management*, 12(2), pp. 27-46
26. Vernimmen, P., Quiry, P., Dallochio, M., Le Fur, Y., Salvi, A. (2009), *Corporate finance. Theory and practice*, 2nd edition, *John Wiley & Sons*, West Sussex
27. Wang, R.Y., Reddy, M. P., Kon, H.B. (1995), Toward quality data: An attribute-based approach, *Decision Support Syst.*, pp. 349-372
28. Wand, Y., and Wang, R. Y. (1996), Anchoring Data Quality Dimensions in Ontological Foundations, *Communications of the ACM* (39:11), pp. 86-95

Table A.1. Parameters estimates for the model with fixed effects

Parameters estimates						
Variable	DF	Estimate	Std. Error	T value	Pr > t	Label
CS1	1	-1.00916	57.3154	-0.02	0.9860	Cross Sectional Effect 1
CS2	1	1.722453	57.2719	0.03	0.9760	Cross Sectional Effect 2
CS3	1	1.08143	57.2507	0.02	0.9849	Cross Sectional Effect 3
CS4	1	0.445955	57.2117	0.01	0.9938	Cross Sectional Effect 4
CS5	1	-9.71163	57.5608	-0.17	0.8661	Cross Sectional Effect 5
CS6	1	-323.205	57.3112	-5.64	<.0001	Cross Sectional Effect 6
CS7	1	0.327731	57.3579	0.01	0.9954	Cross Sectional Effect 7
CS8	1	0.072639	57.2630	0.00	0.9990	Cross Sectional Effect 8
CS9	1	0.23852	57.2312	0.00	0.9967	Cross Sectional Effect 9
CS10	1	-1.00066	57.2963	-0.02	0.9861	Cross Sectional Effect 10
CS11	1	-0.77448	57.2293	-0.01	0.9892	Cross Sectional Effect 11
CS12	1	-0.83643	57.2317	-0.01	0.9883	Cross Sectional Effect 12
CS13	1	-2.13001	57.4266	-0.04	0.9704	Cross Sectional Effect 13
CS14	1	-0.63178	57.4122	-0.01	0.9912	Cross Sectional Effect 14
CS15	1	-3.35168	57.3593	-0.06	0.9534	Cross Sectional Effect 15
CS16	1	1.193345	57.2995	0.02	0.9834	Cross Sectional Effect 16
CS17	1	0.703253	57.2763	0.01	0.9902	Cross Sectional Effect 17
CS18	1	-1.08276	57.3001	-0.02	0.9849	Cross Sectional Effect 18
CS19	1	-2.33626	57.2392	-0.04	0.9675	Cross Sectional Effect 19
CS20	1	-10.9816	57.2785	-0.19	0.8480	Cross Sectional Effect 20
CS21	1	-5.55073	57.3981	-0.10	0.9230	Cross Sectional Effect 21
CS22	1	-2.77558	57.3443	-0.05	0.9614	Cross Sectional Effect 22
CS23	1	1.100698	57.2652	0.02	0.9847	Cross Sectional Effect 23
CS24	1	-6.87207	59.0711	-0.12	0.9074	Cross Sectional Effect 24
CS25	1	-4.63501	57.2215	-0.08	0.9355	Cross Sectional Effect 25
CS26	1	0.80004	57.2772	0.01	0.9889	Cross Sectional Effect 26
CS27	1	-1.44561	57.5442	-0.03	0.9800	Cross Sectional Effect 27
CS28	1	1.283593	57.2337	0.02	0.9821	Cross Sectional Effect 28
CS29	1	1.025493	57.2508	0.02	0.9857	Cross Sectional Effect 29
CS30	1	0.036051	57.2129	0.00	0.9995	Cross Sectional Effect 30
CS31	1	-3.71103	57.7540	-0.06	0.9488	Cross Sectional Effect 31
CS32	1	-10.3874	57.5004	-0.18	0.8567	Cross Sectional Effect 32
CS33	1	0.779668	57.2178	0.01	0.9891	Cross Sectional Effect 33
CS34	1	0.284308	59.1522	0.00	0.9962	Cross Sectional Effect 34
CS35	1	0.389696	57.2700	0.01	0.9946	Cross Sectional Effect 35
CS36	1	1.643145	57.3851	0.03	0.9772	Cross Sectional Effect 36

Parameters estimates						
Variable	DF	Estimate	Std. Error	T value	Pr > t	Label
CS37	1	-2.98148	57.2388	-0.05	0.9585	Cross Sectional Effect 37
CS38	1	-0.22618	57.2330	-0.00	0.9968	Cross Sectional Effect 38
CS39	1	-3.2983	57.4232	-0.06	0.9542	Cross Sectional Effect 39
CS40	1	-0.99003	57.2381	-0.02	0.9862	Cross Sectional Effect 40
CS41	1	-0.22487	57.1911	-0.00	0.9969	Cross Sectional Effect 41
CS42	1	1.060595	57.3967	0.02	0.9853	Cross Sectional Effect 42
CS43	1	1.723089	57.3626	0.03	0.9760	Cross Sectional Effect 43
CS44	1	1.095906	57.2207	0.02	0.9847	Cross Sectional Effect 44
CS45	1	-1.32113	57.2987	-0.02	0.9816	Cross Sectional Effect 45
CS46	1	-3.00147	57.4560	-0.05	0.9584	Cross Sectional Effect 46
CS47	1	-3.77064	57.3613	-0.07	0.9476	Cross Sectional Effect 47
CS48	1	-4.42145	57.4339	-0.08	0.9387	Cross Sectional Effect 48
CS49	1	0.99379	57.2015	0.02	0.9861	Cross Sectional Effect 49
CS50	1	-1.10891	57.2809	-0.02	0.9846	Cross Sectional Effect 50
CS51	1	-0.90982	57.2381	-0.02	0.9873	Cross Sectional Effect 51
CS52	1	0.516221	57.2539	0.01	0.9928	Cross Sectional Effect 52
CS53	1	-3.31482	57.7753	-0.06	0.9543	Cross Sectional Effect 53
CS54	1	0.242856	57.1914	0.00	0.9966	Cross Sectional Effect 54
CS55	1	0.306257	57.3848	0.01	0.9957	Cross Sectional Effect 55
CS56	1	-0.38408	57.2590	-0.01	0.9947	Cross Sectional Effect 56
CS57	1	1.335047	57.1915	0.02	0.9814	Cross Sectional Effect 57
CS58	1	-2.8059	57.3048	-0.05	0.9610	Cross Sectional Effect 58
CS59	1	2.116559	57.2763	0.04	0.9705	Cross Sectional Effect 59
CS60	1	2.646005	57.2317	0.05	0.9631	Cross Sectional Effect 60
CS61	1	0.464029	57.2969	0.01	0.9935	Cross Sectional Effect 61
CS62	1	1.532114	57.3114	0.03	0.9787	Cross Sectional Effect 62
TS1_2008	1	-8.90866	21.6327	-0.41	0.6807	Time Series Effect 1
TS2_2009	1	0.942808	21.6286	0.04	0.9652	Time Series Effect 2
TS3_2010	1	0.349965	21.7784	0.02	0.9872	Time Series Effect 3
TS4_2011	1	-47.9221	21.7788	-2.20	0.0282	Time Series Effect 4
TS5_2012	1	-0.9201	21.7776	-0.04	0.9663	Time Series Effect 5
TS6_2013	1	2.57315	21.6427	0.12	0.9054	Time Series Effect 6
TS7_2014	1	-0.4929	21.6224	-0.02	0.9818	Time Series Effect 7
TS8_2015	1	-0.28705	21.6946	-0.01	0.9894	Time Series Effect 8
Intercept	1	5.053593	42.9770	0.12	0.9064	Intercept
Δ ROA	1	0.015509	0.3511	0.04	0.9648	
Δ ROE	1	0.028289	0.2647	0.10	0.9149	
Δ FL	1	1.01997	1.3661	0.75	0.4557	

Dependent variable: $\ln(P_t/P_{t-1})$

Source: Own processing in SAS 9.0

Figure A.1. Source code in SAS 9.0 used for the panel analyse of data in the case of fixed and random effects

```

TITLE;
TITLE1 "Regression Analysis of Panel Data";
FOOTNOTE;
FOOTNOTE1 "Generated by the SAS System (&_SASSERVERNAME, &SYSSCPL) on
%TRIM(%QSYSFUNC(DATE(), NLDATE20.)) at %TRIM(%SYSFUNC(TIME(), NLTIMAP20.))";
PROC TSCSREG DATA = WORK.SORTTempTableSorted
;
      MODEL "Ln(Pt/Pt-1)"n=      D_Re D_Rf D_LF /
      FIXTWO
      RANTWO
      CORRB
;
      ID Simbol An
;
/* -----
End of task code.
----- */
RUN; QUIT;
%_eg_conditional_dropds(WORK.SORTTempTableSorted);
TITLE; FOOTNOTE;

```

Source: Own processing in SAS 9.0

Internal Audit in the Era of Continuous Transformation. Survey of Internal Auditors in Romania

Cezar FURTUNĂ,
Partner, Head of Audit & Assurance, KPMG in Romania,
e-mail: cfurtuna@kpmg.com

Adela CIUCIOI,
Partner, Head of Technology, Media &
Telecommunications Sector, KPMG in Romania,
e-mail: aciucioi@kpmg.com

Abstract

In the era of continuous transformation, the role of internal audit has steadily increased, becoming one of the strategic pillars of today's companies. In the current context, where corporate governance, risk management and internal controls are increasingly in the hands of regulators, shareholders and the general public, internal auditors have the task of reacting proactively and responsibly to the challenges of the market. Thus, it is important to understand the way in which internal audit activity is being carried out as well as its directions of development.

This study aims to provide an overview of the priorities identified by companies in the field of internal audit and to illustrate opportunities to improve the efficiency and effectiveness of the activity of internal audit departments

The themes approached in this research aim to define the role of the internal audit function and to describe the way in which internal audit processes are currently being carried out. The research also aims to identify the prospects for transformation of the internal audit function from one that is focused on regulatory compliance into one that can add value to companies. Issues related to the impact of new technologies in process optimization are explored and another topic of interest is the perceived level of current staff skills and the extent to which the budgets and the size of the audit departments currently correspond to their business needs.

Keywords: internal audit, risk management, compliance, cyber security, new technologies, staff skills

JEL Classification: M42, G32

To cite this article:

Furtună. C., Ciucioi, A. (2019), Internal Audit in the Era of Continuous Transformation. Survey of Internal Auditors in Romania, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 452-472.
DOI: 10.20869/AUDITF/2019/155/016

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/016>
Received: 22.05.2019
Revised: 25.05.2019
Accepted: 28.06.2019

Introduction

In a constantly changing business environment, through the survey of internal auditors in Romania, KPMG in Romania intends to focus on the priorities and challenges of this profession as a result of high interest in the best practices in the market.

In the survey conducted among companies that already have an internal audit function in place, one of the greatest challenges of the internal audit function in recent years has been the positioning of internal audit as a strategic asset that adds value to a company. In the context of ongoing developments in the IT industry as well as changes in operational processes, the ability of internal audit functions to readjust audit plans, verification processes and the human resources needed to carry out their activity is continuously being challenged.

The study illustrates the current practices of internal audit activity, highlighting strengths and weaknesses that department managers currently identify and outlining optimization directions to ensure the evolution of the audit function to a level that enables it to support proactively the organization's operations in accordance with the increasingly demanding regulations and requirements.

Thus, maximizing the value added provided by the internal audit function is imperative in the context of maintaining its effectiveness and in this respect it becomes necessary to identify innovative practices that support the internal audit function in its process of transformation into this era of digitization and "big data".

This research highlights the need for a better alignment of the internal audit function to the objectives of the organization and a greater focus on increasing operational efficiency and effectiveness. In this respect, a number of key points to be achieved in order to increase the level of productivity are identified: proper dimensioning of the internal audit department, establishing the optimal level of investment in human capital and its professional training, adequate use of technologies to increase the efficiency of operations, a better understanding of the potential cyber risks faced by the organization and the establishment of a management plan in advance.

The study reveals that organizations currently perceive these measures to optimize their internal audit function

as "nice to have", but it is important to point out that the increasingly demanding level of internal audit requirements and regulations requires rethinking the process and a clear repositioning of the role of the internal audit function in such a way that it responds better to the company's objectives.

At the same time, it is necessary to mention the areas in which the process is currently carried out optimally in most organizations: the frequency of the internal audit, the typology of the skills involved and the clear orientation towards identifying risk.

1. Methodology and organization of research

Target population

The respondents in this research are heads of internal audit within Romanian companies.

Executives in the field of internal audit were selected to provide answers on all the coordinates assessed in the study.

Research Methodology

100 invitations were sent to an online platform where the respondents filled in an electronic questionnaire anonymously. Responses were obtained from 38 of the selected entities in the initial sample of 100 companies. The survey was conducted at the end of 2018.

Profile of the respondents

Of the 38 respondents, 42% represent the banking sector, 21% the insurance sector, while the remaining 37% are from production and non-financial services.

As far as the distribution of companies by turnover is concerned, 24% are entities with a turnover of more than RON 2 billion, 18% have a turnover between RON 500 million and RON 2 billion, and 58% obtain income of up to RON 500 million.

In terms of the number of employees, the structure of the companies participating in the survey is the following: 31% have up to 250 employees, 29% have between 250 and 1000 employees, while 40% of the companies have more than 1000 employees.

There is no information available to verify to what extent the structure of the studied sample proportionally reflects

the structure of the totality of companies that have an internal audit department.

The figures in this paper are the authors' projection of the results obtained in the study.

2. Research results

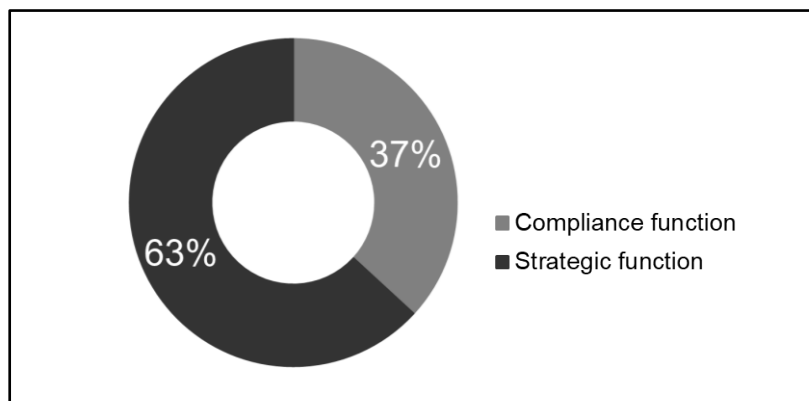
2.1. Role and priorities of the internal audit function

The main objective of this section is to observe the way in which the role of the internal audit function has

expanded and continues to expand beyond the boundaries of traditional responsibilities in the compliance area. We will also highlight the strategic priorities of this function, according to the results of our survey.

Thus, our survey revealed that internal audit has moved its center of interest to having a strategic role within the company, being considered a strategic function by 63% of respondents to the survey. For the others (37%), however, internal audit is not yet ready to go beyond a compliance function (*Figure no.1*).

Figure no. 1: Internal audit within a company – a strategic function or a compliance function



As a foundation of robust corporate governance, an effective internal audit function provides indisputable benefits to companies, such as:

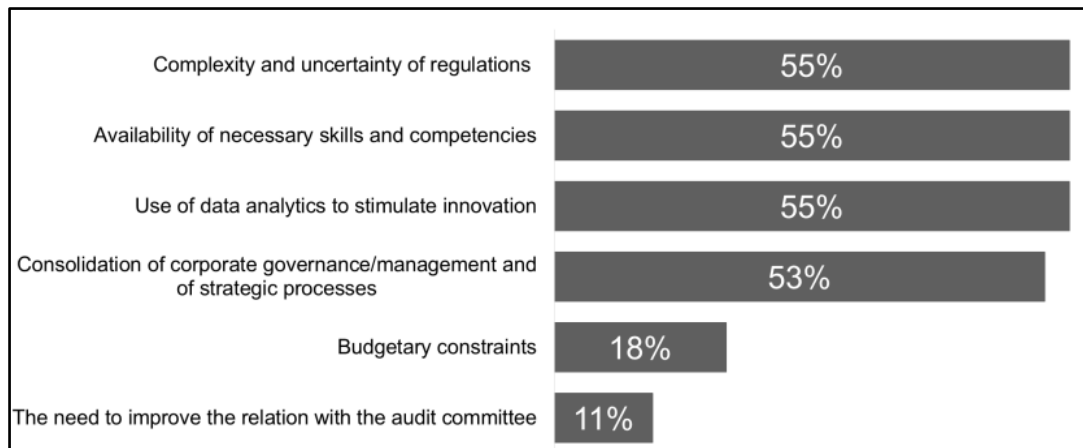
- It provides a means to monitor and improve the company's internal control environment.
- It provides independent reporting to the board of directors.
- It focuses on the major risks and issues for the company, as advised by the board of directors.
- It provides valuable information on a wide range of risks for companies, including financial, operational, technological, strategic, fraud and compliance risks.
- It improves internal controls by risk mitigation, increasing efficiency and effectiveness and / or ensuring compliance with regulatory requirements.

- It provides recommendations to increase the efficiency and effectiveness of operational procedures.
- It facilitates a rapid alert system to identify and rectify deficiencies in a timely manner.

In relation to the internal audit plan, we identified the following three main areas of focus for companies in 2019: operational efficiency and effectiveness, alignment with company objectives, and compliance with current regulations.

Thus, 89% of respondents are concerned about the efficiency and operational effectiveness of internal processes. 71% of respondents place the alignment of operations with the strategy and objectives of the company on their list of priorities, in the planning of internal audit engagements.

Figure no. 2. Main challenges of the internal audit department

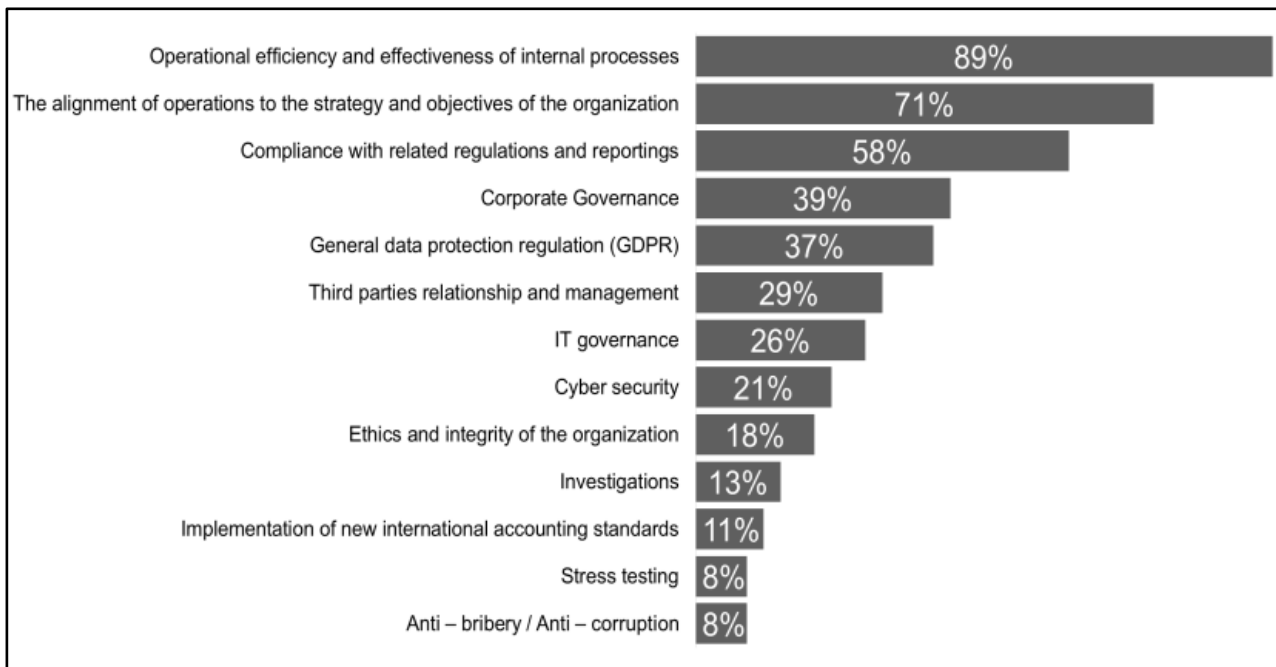


In the current economic climate, characterized by slow growth, economic uncertainty, technological advancement, cyber threats, disruptive business models, increasingly restrictive regulations and

intensified checks, companies need to constantly analyze their business strategy and risk appetite.

In addition, we found that, for 58% of respondents, compliance with regulations and related reporting is the third focal point (*Figure no. 3*).

Figure no. 3. Main priorities of the internal audit departments in relation to the audit plan



Developing a strategy to mitigate the restrictive effects of compliance activities on business operations has become a necessity. For example, internal audit can maintain an inventory of all regulatory requirements that have impact on the company's business or provide specific training to employees in order to ensure compliance with these requirements.

We have found that IT governance and cyber security are not among the top three priorities; only 21% of respondents consider them to be a priority, although companies recognize the increase in the incidence of cyber risks. At the same time, the expectations of the audit committees, according to the KPMG global survey - 2017 Global Audit Committee Pulse Survey – rank cyber security as the top priority for the internal audit function.

Moreover, we have found that 66% of respondents place the effectiveness of risk management programs at the top of the list of challenges faced by companies. The

opinion of the audit committees, expressed in the 2017 KPMG Global Audit Committee Pulse Survey, identifies on the list of challenges an increase in the focus on operational risks (IT, security data, supply chain) and specific internal controls. Audit committee members consider, according to the above- mentioned survey, that risk programs and processes require substantial revision in order to address the need to adequately identify emerging risks.

42% of respondents recognize that cyber- security risk management is the biggest challenge for companies in terms of internal audit. (See also the chapter entitled Impact of Technology on Internal Audit).

Another important issue for 39% of respondents - which is directly related to the digital transformation of companies - is how talent is attracted, managed and retained in the company so as to maximize the impact of digital resources (*Figure no. 4*).

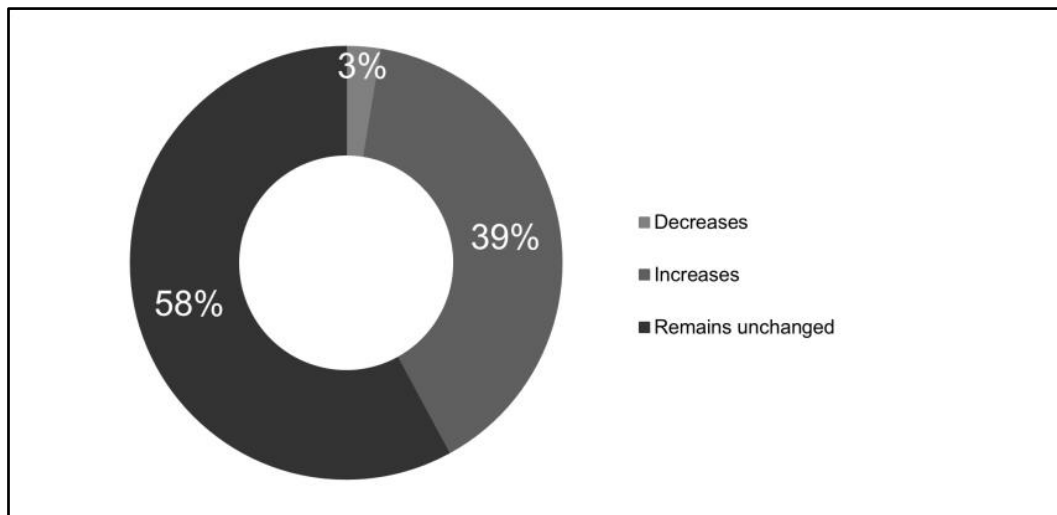
Figure no. 4. Main challenges facing companies from the perspective of the heads of the internal audit department



58% of respondents claim that the budget of the internal audit department will remain unchanged in the next 3 years, and 39% of them believe the budget will increase. A properly designed budget is an extremely important

tool for business decisions: it will support internal auditors and the audit committee in meeting the objectives and benefits of an effective internal audit (*Figure no. 5*).

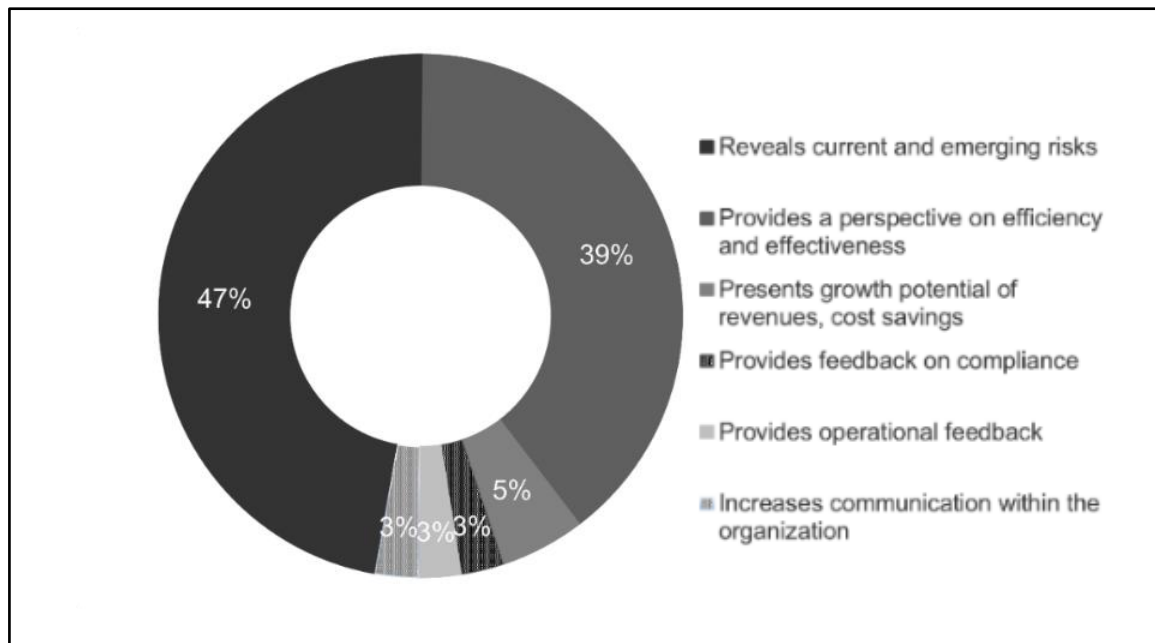
Figure no. 5. Forecasts on the evolution of the budget of the internal audit department in the following 3 years



The coordinators of the internal audit function were invited to present their view on the features of a well-planned and valuable internal audit. Thus, 47% of

respondents consider at the forefront the discovery of the existing risks faced by companies as well as the emerging risks (*Figure no. 6*).

Figure no. 6. Attributes of a well-planned and valuable internal audit



The roles of the internal audit function concerning risk are represented by:

- Providing independent assurance on risk management processes.
- Providing independent assurance that risks are properly assessed.
- Evaluating risk management processes.
- Evaluating Key Risk Reporting.
- Review of Key Risk Management.

However, as the third "line of defense", internal auditors should not assume responsibilities in relation to:

- Establishing the risk appetite.
- Enforcement of risk management processes.
- Decision-making on risk responses.

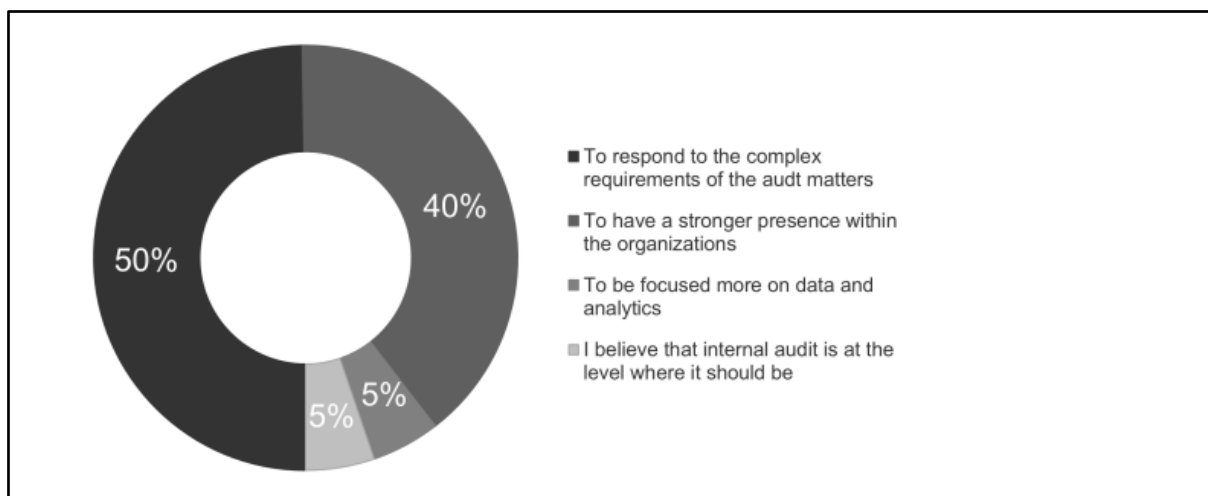
- Implementing risk responses on behalf of management.
- Risk management.

Another important feature, highlighted by 39% of respondents, is the ability to provide a complete picture of the efficiency and effectiveness of financial and operational processes, as well as internal controls within the company.

1 out of 2 respondents believe that the key role of the internal auditor is to meet the complexity requirements of the audited topics. Indeed, professionals aspire for their role to be that of a fully-fledged strategic partner (*Figure no. 7*).

A stronger presence in the company means more power to facilitate decision-making, as appreciated by 40% of the survey respondents.

Figure no. 7. Vision on the evolution of the internal audit role as a profession



Measuring the performance of internal audit activity is of particular importance because it offers the opportunity to assess how the internal audit function is positioned in relation to other functions within the company. In this way, it is possible to identify the areas where improvements in the applied audit practices and instruments are needed.

Our survey highlights the preference for the following three categories of indicators used to measure internal audit performance (*Figure no. 8*):

- Audit plan execution level: 63% of respondents use

the quantitative indicator "completed versus planned audit engagements."

- Recommendation Implementation Level: 53% of specialists measure the quality of the audit engagement through accepted and implemented recommendations or through external audit evaluation (39%).
- Surveys / feedback received from stakeholders: satisfaction of the board of directors / supervisory board, audit committee, executive management (47%) or audited departments (32%).

Figure no. 8. Ways of measuring the performance of internal audit activity

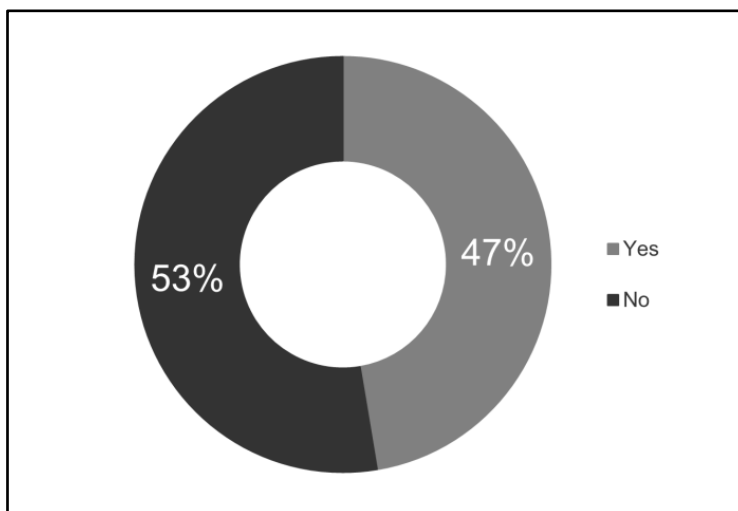


Using specific tools for customer service departments, such as feedback surveys, the internal audit department can measure the audit committee / board of directors' perspectives on the audit experience or the quality and effectiveness of the audit processes.

Feedback received from internal clients can help internal audit departments recalibrate to improve the services they offer.

Less than half of our respondents (47%) say they measure stakeholders' satisfaction through feedback surveys (*Figure no. 9*).

Figure no. 9. Availability of feedback surveys on audited subjects' satisfaction in relation to internal audit missions



58% of respondents use independent external audits of internal audit work (every five years), in line with the requirements of the International Standards on Internal Auditing 1312 - "External Assessments" (*Figure no. 10*).

An independent external view may highlight areas where internal auditing can be optimized, as well as a comparison with best practices by access to constructive recommendations.

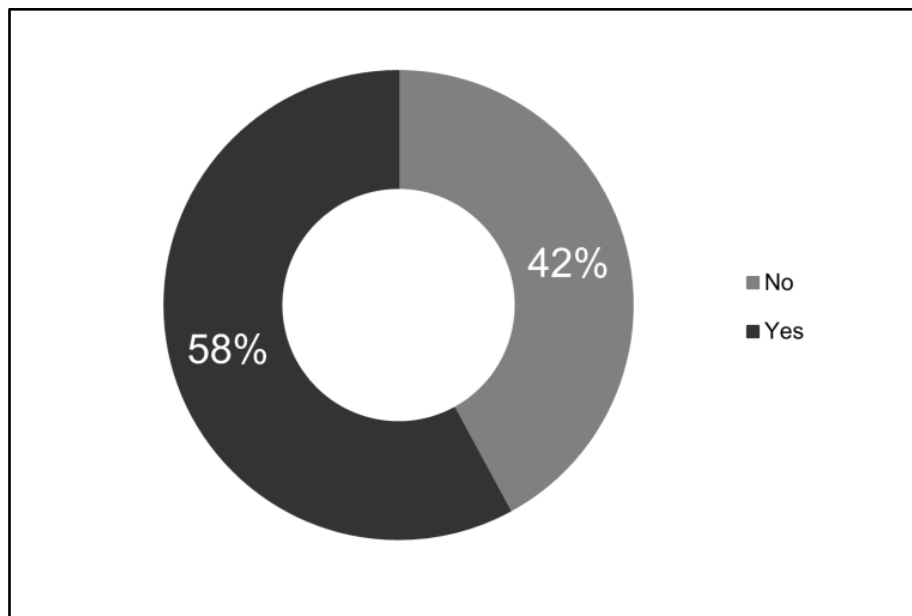
Some strategic questions to which an independent external assessment of the internal audit function could provide an opinion:

- What added value do internal audit services generate for stakeholders? Is the internal audit

adequately positioned, in strategic terms, to contribute to the success of the company?

- Does the internal audit have an adequate strategy, human resources and ability to carry out its duties?
- How effective is internal audit as the third "line of defense" within the corporate governance of the company?
- Are internal auditing processes consistent with business needs?
- How well does the company's internal audit work, compared to similar companies and best practices?

Figure no. 10. Use of periodical (external) independent assessments in compliance with Standard 1312 – „External assessments”



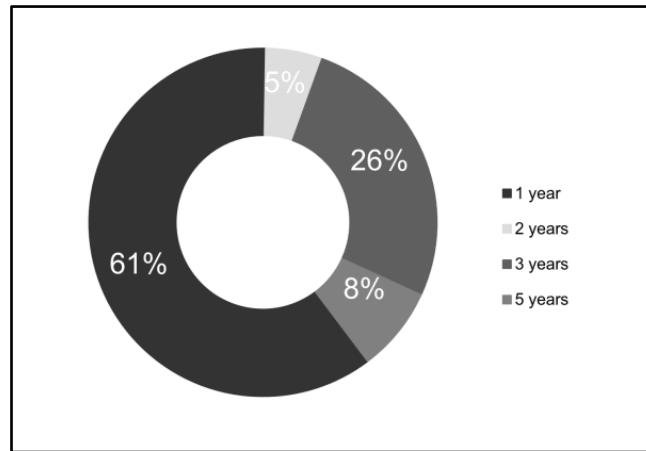
2.2. Methodologies applied in conducting internal audit missions

All companies participating in this survey carry out their internal audit work on the basis of an internal audit plan. Therefore, we found that 61% of the responding companies are developing internal audit plans covering 1 year, while the rest of the

companies (39%) develop internal audit plans for longer periods of 2, 3 and 5 years (*Figure no. 11*).

Regardless of the period covered by the internal audit plan, the priorities of the functions and audited areas are defined in the internal audit plans based on several ways of establishing them.

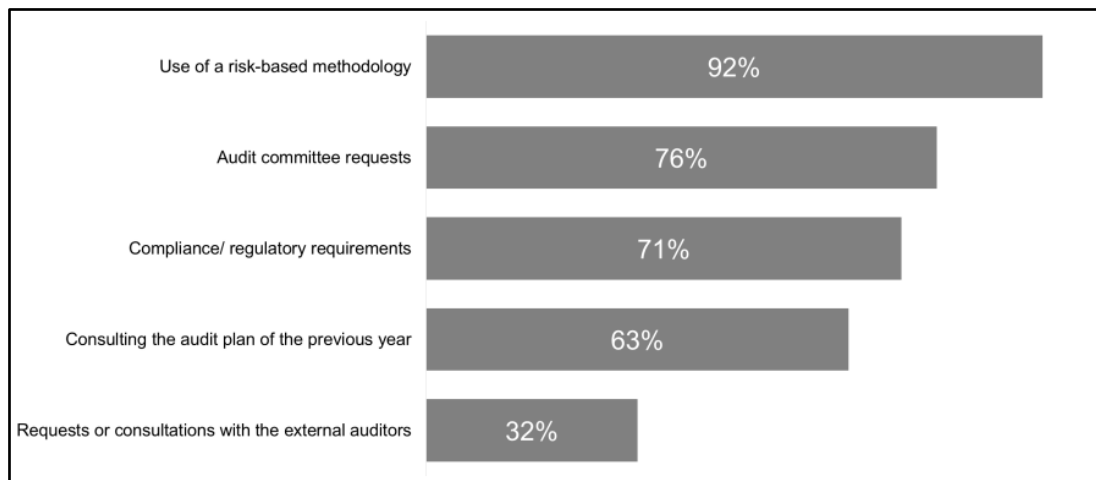
Figure no. 11. Period covered by the internal audit plan



The key drivers in developing the internal audit plan are the use of a risk-based methodology (mentioned by 92% of the participants), requests from the Audit Committee (76% of the participants) and the development of legislative requirements (71% of companies). The consulting of the previous year's internal audit plan is mentioned by two-thirds of the companies participating in the survey, while one-third mention consultations with external auditors.

Except for a limited number of companies that base their internal audit plan on a single criterion, the rest of the companies use a combination of the elements detailed in *Figure no. 12* when defining internal audit priorities. In addition, a small number of the respondents to our survey mentioned additional criteria taken into account in defining internal audit plans, i.e. proposals received from executives, consultations with the parent company, audit cycle, incidents from previous years) etc.

Figure no. 12. Ways of establishing the internal audit plan



Effective business governance is based on a framework that supports management's activities to achieve corporate goals. A robust framework defines the limits of acceptable behavior without necessarily restricting entrepreneurship.

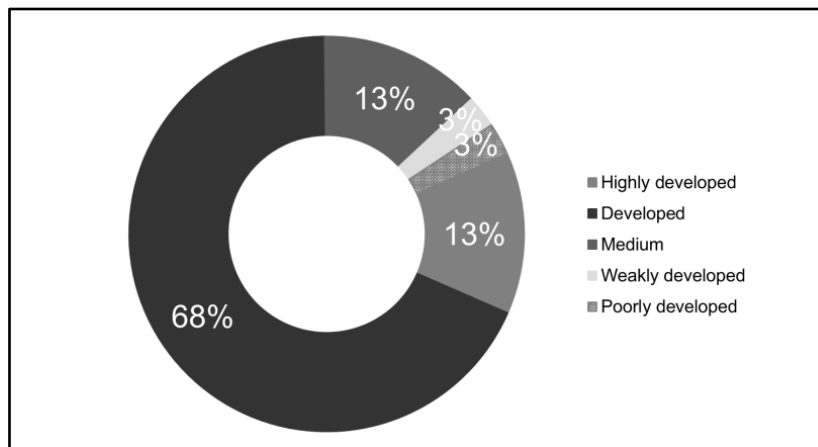
Risk management and internal audit are important parts of the governance framework.

Internal auditing strengthens corporate governance of a company through its perspective on process and

structures, providing an independent view of the effectiveness of all internal processes of a company.

In this context, we found that 31 respondent companies rated corporate governance as being developed or highly developed, accounting for about 81% of the companies surveyed. On the opposite side, only two respondents have classified corporate governance as poorly or very poorly developed (*Figure no. 13*).

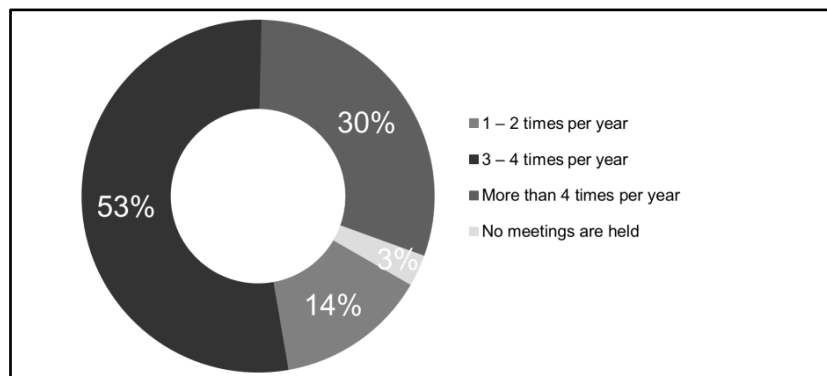
Figure no. 13. Degree of corporate governance development within the company



Half of the respondents (53%) hold meetings with members of the audit committee / board of directors 3-4 times a year and the others (47%) mention a higher frequency of meetings. Following analysis of the responses received, we noticed that about 83% of

respondents, which hold at least 3-4 meetings a year with the audit committee / board of directors, are companies which consider their corporate governance developed or highly developed (*Figure no. 14*).

Figure no. 14. Frequency of formal meetings with the audit committee/ management board



Since it has an assurance and advisory role that adds value to the company and helps it achieve its strategic and operational goals, internal audit is management's basic ally. Therefore, in addition to the internal audit engagements established according to well-defined criteria, the internal audit receives and honors ad hoc requests from the company's management to address specific issues / situations that, by their nature or circumstances, could not be taken into account in the audit plan.

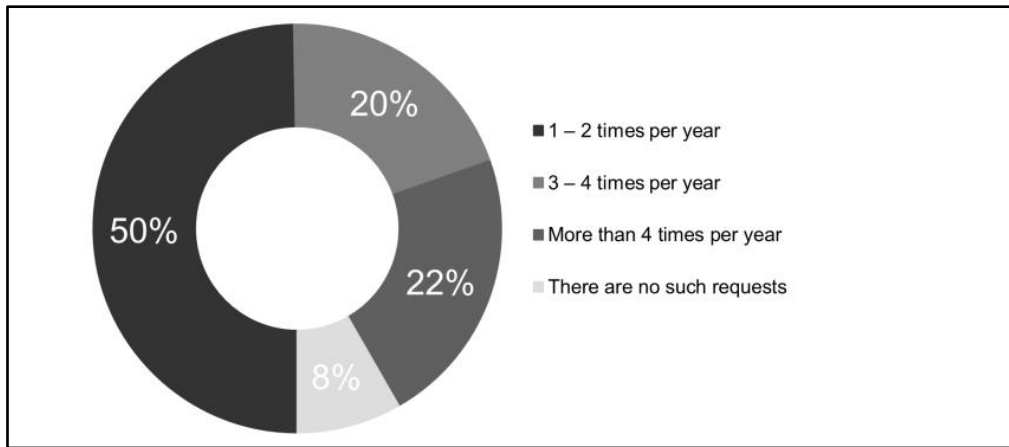
Of the total number of 38 respondents, the internal audit functions of 18 companies mentioned 1-2 ad-hoc

internal audit engagements per year, while 7 companies mentioned 3 or 4 ad-hoc audit engagements per year (*Figure no. 15*).

More than 4 ad-hoc internal audit engagements were mentioned by 8 companies. Most of these companies reported more frequent meetings with the audit committee / board of directors than the other companies participating in the survey.

3 internal audit functions do not receive management requests to carry out ad hoc internal audit engagements.

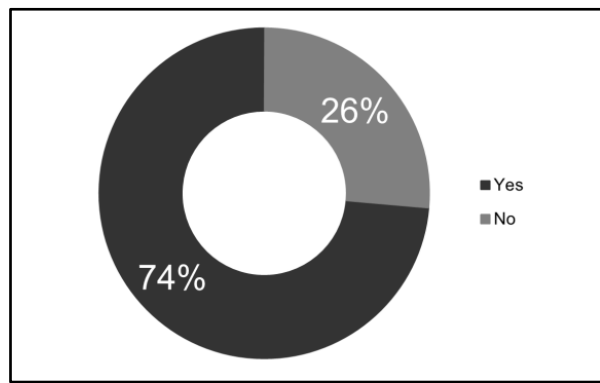
Figure no. 15. Frequency of internal audit ad-hoc missions requested by senior management



When it comes to including cyber risks in the internal audit methodology, our survey shows that 74% of

respondents include checks on cyber risk management as part of the internal audit process (*Figure no. 16*).

Figure no. 16. The existence of cyber security risk management reviews



A reason for concern is that a quarter (26%) of our respondents do not take into account cyber threats in their internal audit, in a world where such attacks have become more and more virulent in recent years.

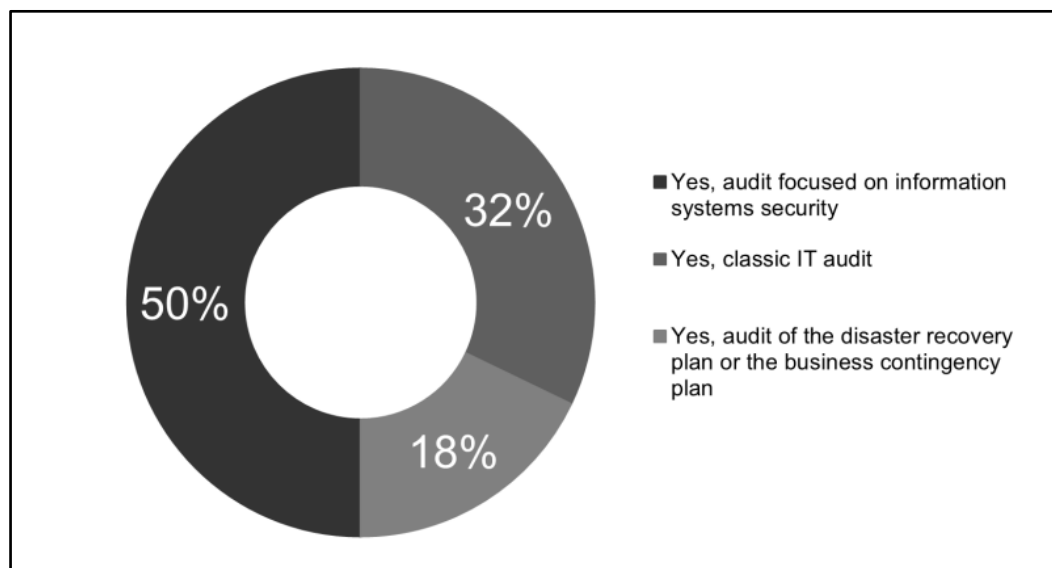
Companies should take into account that occurrence of such attacks could have disastrous consequences for their business, from the impossibility of accessing data in the case of "Ransomware" attacks, to difficulties or

impossibility to access computer systems in the case of "denial of service (DoS)" attacks.

Of the respondents who consider cyber risk management reviews, half of them state that they carry out internal audits that specifically target the security of IT systems (*Figure no. 17*).

The other respondents treat these threats either as part of a classic IT internal audit (32%) or as part of the reviewing of disaster recovery plans (18%).

Figure no. 17. Types of audit used for the review of the security of information systems



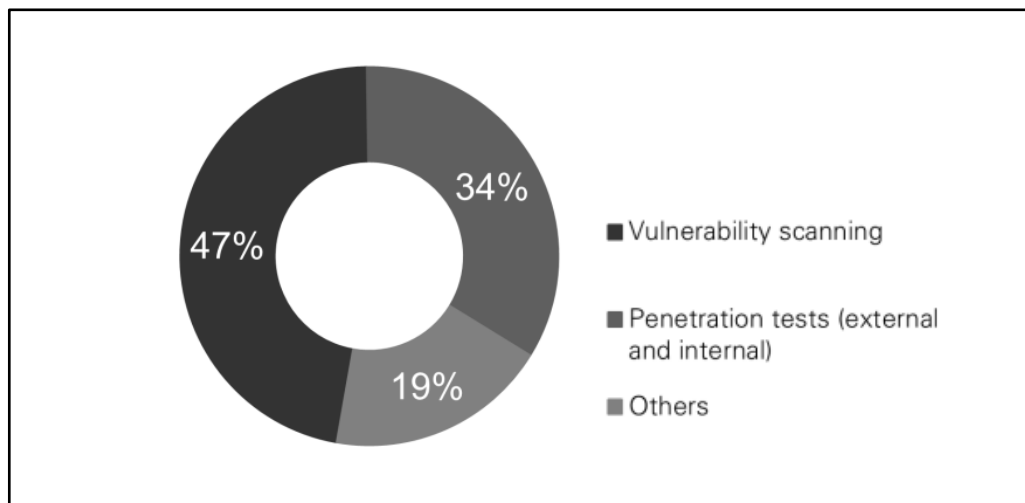
Performing security audits of computer systems used by companies may involve either more complex checks (information systems penetration tests) or more superficial analyses. The latter, although they can discover intrinsic vulnerabilities in computer systems, do not show a complete picture of the cyber risks to which a company may be exposed (vulnerability analyses).

In our survey, internal auditors were asked what types of checks they carry out in internal audits centered on information system security. Thus, almost half of respondents (47%) state that they are limited to vulnerability scans, while only a third of

them (34%) perform penetration tests (internal and / or external). Although it is a very good starting point, companies should focus their efforts on more and more complex procedures to identify the risks they are exposed to and then apply the necessary safeguards (*Figure no. 18*).

An important area in conducting any specialized internal audit, as well as cyber security audit, is the use of appropriately prepared resources, i.e. cyber security and/ or information security specialists. Consequently, survey participants were asked what kind of specialists they use in assessing the cyber risk management process (*Figure no. 19*).

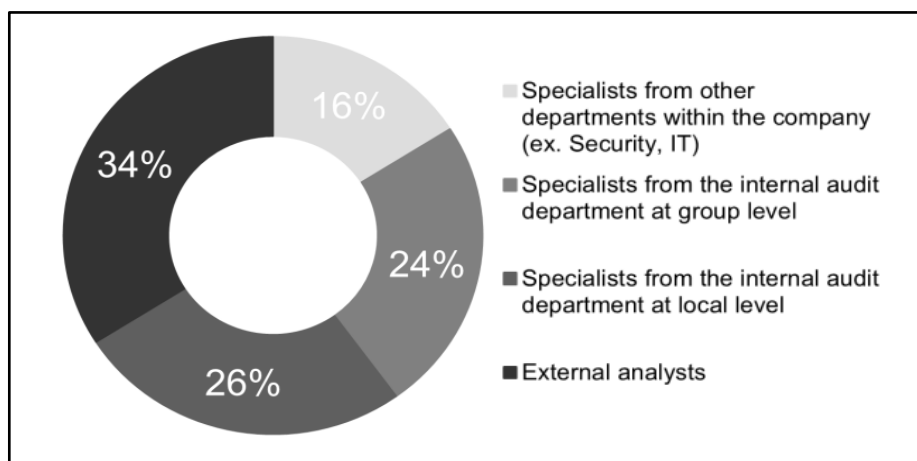
Figure no. 18. Approaches used in audits focused on the security of information systems



The results revealed that, in general, internal audit departments do not use their own resources to carry out these audits: only a quarter of the respondents (26%) have specialists in the internal audit function.

A similar percentage (24%) uses specialized resources within the group, most likely resources that are shared between different entities within a group. The remainder of respondents prefer to work with external consultants (34%) or to use specialists from other departments within the company (16%).

Figure no. 19. Types of specialists involved in cyber security risk assessment activities



2.3. Human capital of the internal audit function

Professionals in the internal audit function must respond agilely to a very dynamic business environment, regulations, the emergence of new business and

operational risks, and digitization by constantly assimilating new information, and demonstrating flexibility in changing priorities and projects. Optimizing the skills of internal auditors requires significant investment in resources, methods, continuous training programs, career models and technical infrastructure.

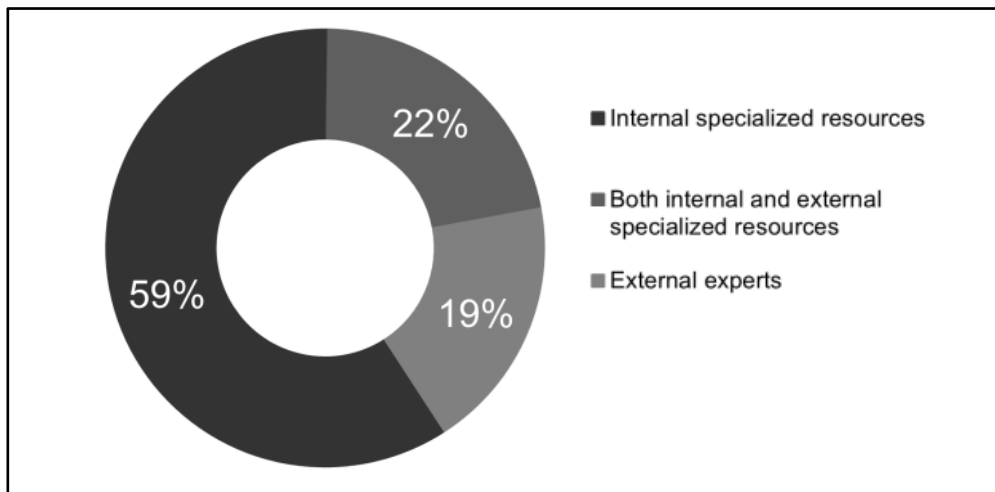
Our survey shows that 59% of companies use only internal resources in internal audit engagements, 19% of them only external experts, and 22% of them use both internal and external experts (*Figure no. 20*).

Companies with an insourced internal audit function benefit from instant access to specialized knowledge on a particular case, which allows them to be fully in

control. One of the drawbacks of the model is the difficulty of some internal auditors to obtain or maintain a certain level of special skills they need (e.g. IT).

By using external resources, the company can focus on building the key skills needed for internal specialists and can also access specific skills, industry practices and internal audit expertise.

Figure no. 20. Types of human resources used during the internal audit missions



In order to carry out the internal audit plan, the company must provide the appropriate qualifications for internal auditors as well as ongoing professional training. Vocational training programs are tailored to audit professionals, as 61% of survey respondents say (*Figure no. 21*),

with up to 5% of the total amount of training budgets allocated to the internal audit department (*Figure no. 22*). In addition, we found that in most of the responding companies (87%) the members of the internal audit department have professional certifications (*Figure no. 23*).

Figure no. 21. Availability of a predefined professional training program for internal audit employees

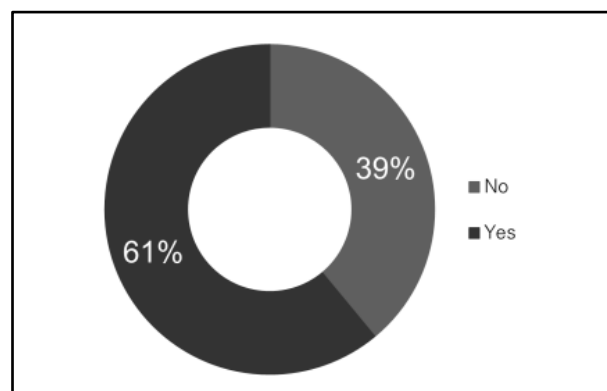


Figure no. 22. Proportion of the budget assigned to professional development in the total budget of the internal audit department

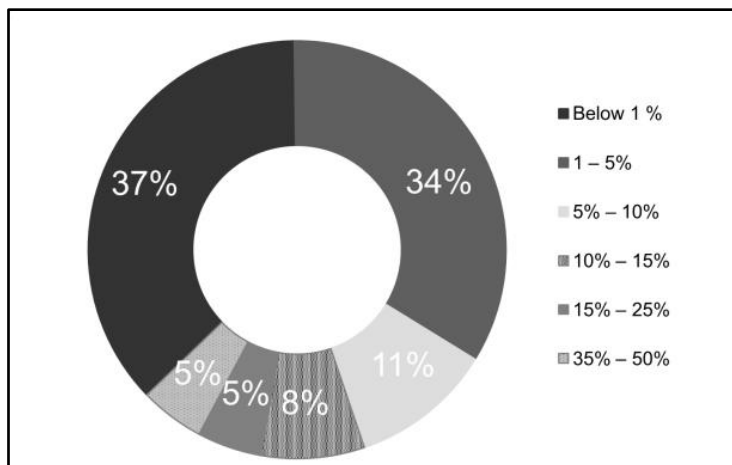
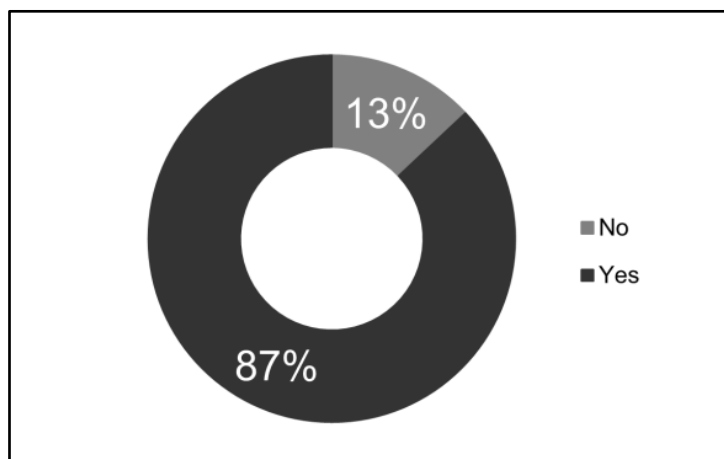


Figure no. 23. Availability of professional certifications within the internal audit department

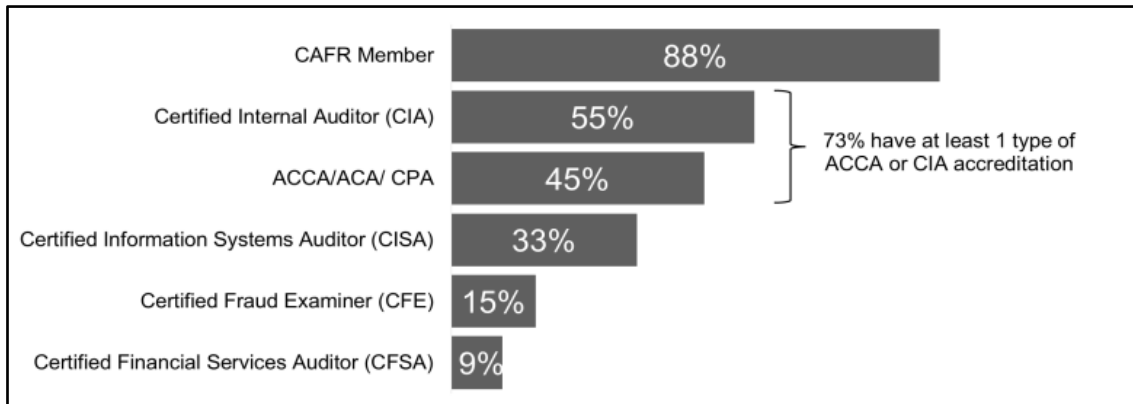


Certifications of the members of the internal audit department reflect the regulated requirements (*Figure no. 24*). Thus, certifications in internal audit are mainly in the accounting and auditing area, i.e. financial auditors are members of the CAFR (88%), CIA (55%) and ACCA / ACA / CPA (45%), while only 33% of the companies have auditors certified in the auditing of computer systems (i.e. CISA).

The latter is a significant risk area, given the importance of IT expertise in the context of digitization and cyber risks.

According to the results of our survey, 73% of members of the internal audit department in the companies surveyed are members of the Association of Chartered Certified Accountants (ACCA) or have the Certified Internal Auditor (CIA) qualification.

Figure no. 24. Types of professional certifications held by the members of the internal audit department



Our survey reveals that internal auditors consider the following areas of expertise to be essential in order to successfully conduct their internal audit engagements:

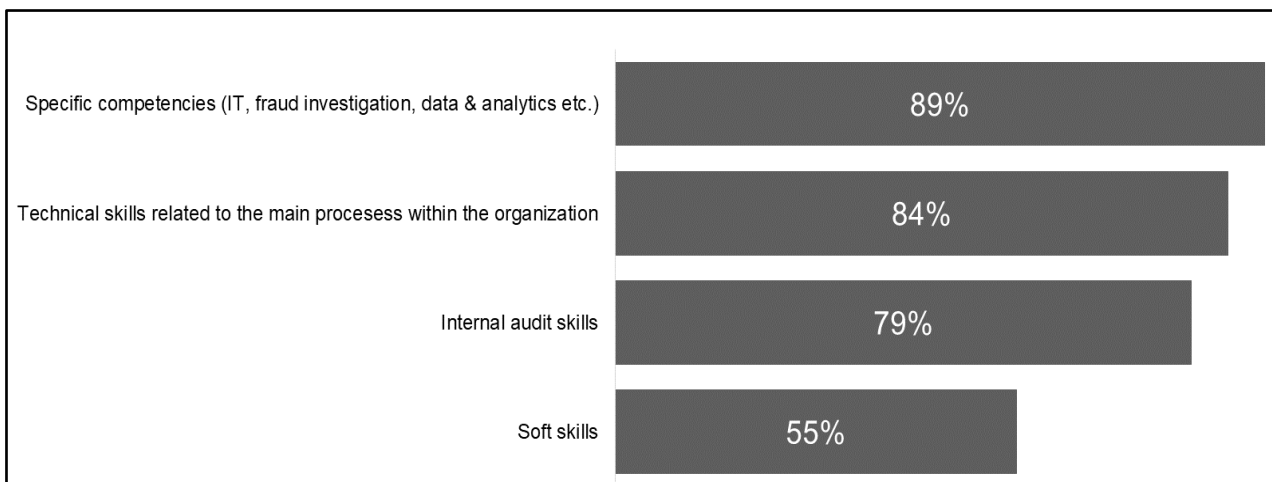
- IT skills, data analysis, fraud investigation for 89% of respondents.
- Technical skills on internal processes for 84% of

respondents.

- Internal audit for 79% of respondents.

Technical skills remain essential, but internal auditors of the future must possess a variety of non- technical attributes, in addition to strong technical expertise (*Figure no. 25*).

Figure no. 25. Essential training areas on which permanent professional training courses for the internal audit department members are based



Competencies in the field of professional standards, governance, business and control / risk are essential to deliver quality internal auditing. However, personal skills such as communication,

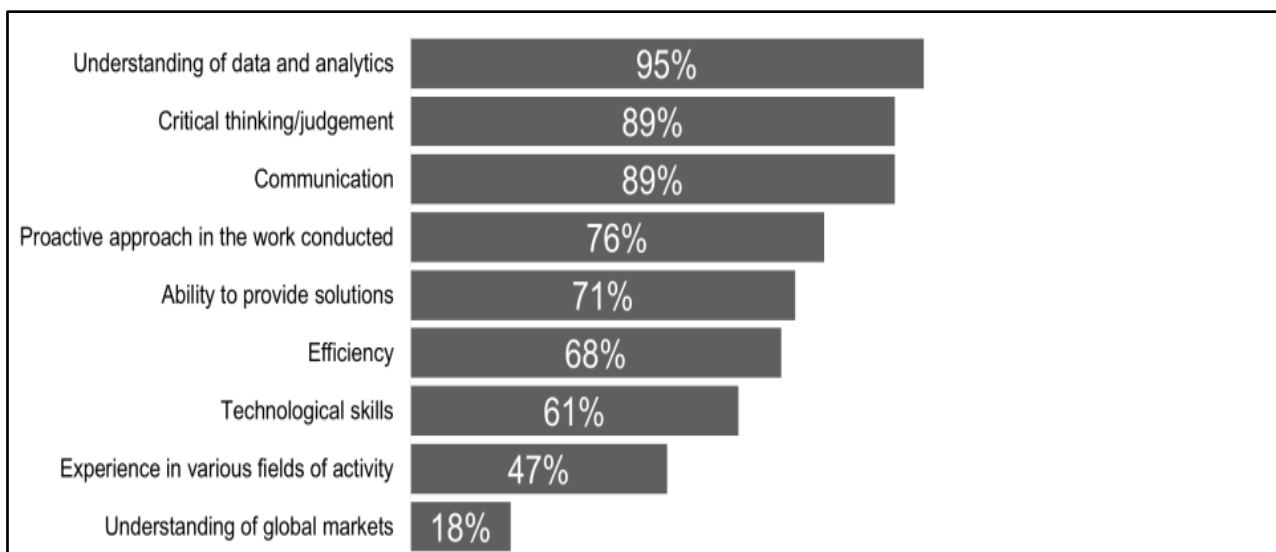
power of influence or critical thinking determine the impact of recommendations and observations issued by internal auditors (*Figure no. 26*). According to the results of the survey, 55% of

respondents face difficulty in retaining talent in the company, and 39% of them believe that the main challenge of the internal audit function is the availability of required skills and abilities.

A plan to attract and develop non- technical skills and abilities for internal audit specialists can be outlined as follows:

- Develop a coherent internal audit brand to attract top talent.
- Apply rigorous selection to identify candidates with the potential to develop these skills and abilities.
- Organise professional training programs focused on communication, critical thinking or "design thinking".
- Develop performance programs which reward these skills and abilities.

Figure no. 26. Main skills necessary for a professional internal auditor



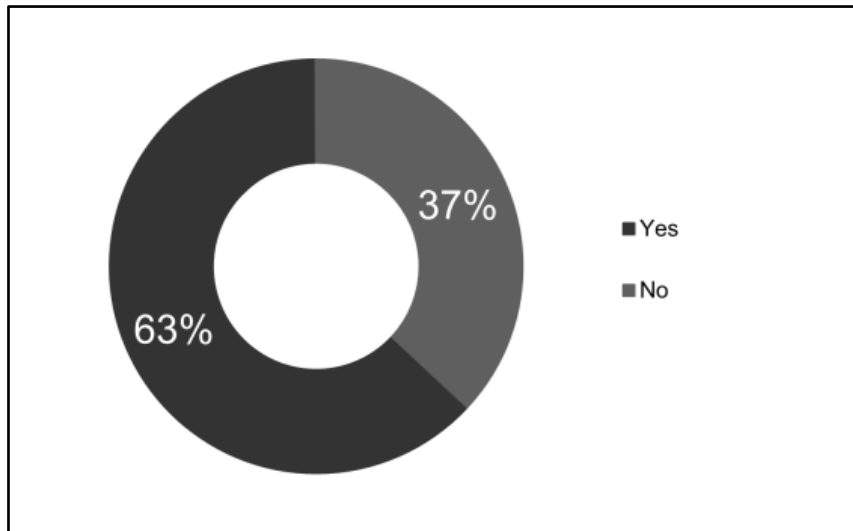
2.4. The impact of technology on the internal audit function

Embracing technology in internal audit engagements, as well as the need to analyze a large amount of data, have transformed the profession of internal auditor. Technology and data analytics are not used to full capacity, and there is room for significant improvement in order for companies to fully benefit from these innovations. At the moment, all business sectors invest in Robotic Process Automation (RPA) advanced technologies, data analysis, predictive analysis, cognitive systems, "machine learning" or artificial intelligence to automate work.

The concept of automation is no longer a novelty, but there are a number of factors that creates a need to embrace intelligent automation. In this context, our survey indicates that 63% of respondents use technology to increase the efficiency of internal audit work.

In spite of the added value that can be obtained by using the analysis of a large amount of data ("big data"), 37% of the internal auditors participating in this survey indicated that this is not a pattern in their model of internal audit engagement delivery (*Figure no. 27*).

Figure no. 27. Use of technology to increase the efficiency and effectiveness of internal audit



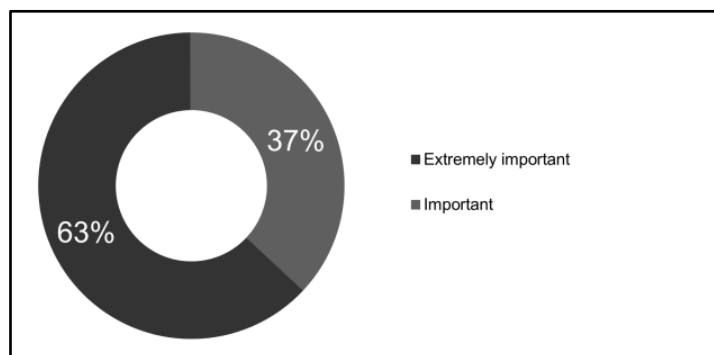
Adoption of data analytics tools provides the opportunity to increase efficiency and to facilitate concentration on areas with the greatest potential risks. In this context, we noticed that 63% of respondents considered data analytics to be extremely important, while 37% of them considered it important (*Figure no. 28*).

Data integration and data analytics in compatible technologies as well as audit tools and techniques at all stages of the audit engagements (risk assessment, planning, execution and reporting) add value to the company's internal processes and mitigate risks.

Data analytics can be applied in the following three important areas:

- In terms of planning, it can be used for risk profile determination, data testing by simulation and statistical sampling.
- Data analytics can ease the execution of internal audit: it can provide a way to monitor internal controls (fast and cost- effective) or to identify risks and fraud.
- It can support risk reporting and quantification, management of outliers and root-cause analysis.

Figure no. 28. The degree of importance of big data analysis to increase the added value of a company



Innovations in intelligent automation have the potential to increase speed, operational efficiency, cost efficiency, control and accuracy of daily activities.

These innovations will also support professionals in making the right decisions in a shorter time.

Our survey reveals the benefits of using data analytics (*Figure no. 29*):

- Processing very large volumes of information with fewer resources and lower costs at a high-quality level (82%).
- Easier identification of potential risks and the

need to carry out an in-depth investigation of anomalies (76%).

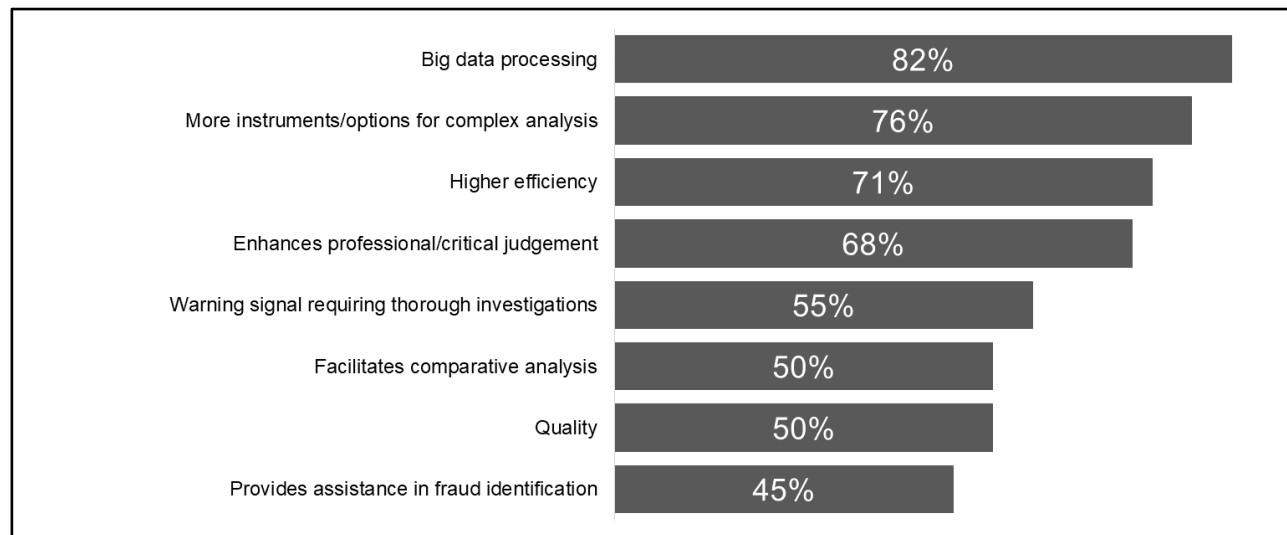
- Increase in efficiency (71%).

How internal audit can contribute to the preparation and implementation of such a program:

- By integrating governance, risks and controls throughout the automation project.
- By identifying opportunities to implement automated key controls in an operational process or in another department within the company.

Certainly, the internal audit function can rely on automation to streamline its own activities.

Figure no. 29. Ways in which technology contributes to the deployment of the internal audit missions



3. Conclusions and future directions

Currently, a large number of internal auditors appreciate that the internal audit function has a strategic role in companies. They demonstrate this by aligning it with the overall strategic planning process through consultations with the board of directors and assessing the potential risks associated with strategic directions.

The results of the survey reveal an upward trend in the key role already played and which is to be played further in the future by the internal audit function.

Companies are currently facing an accelerated increase in the complexity of the needs to which the internal audit department has to answer, and are thus faced with critical decisions about how they choose to allocate resources in that direction.

New requests from the board of directors, leaders and regulators require internal auditors to increasingly focus their efforts on activities that help the organization understand and manage associated risks, achieve the expected results of automation, and continue to innovate to obtain added value.

The main priorities of the internal audit departments in 2019 in relation to the internal audit plan are: increasing

operational efficiency and effectiveness, aligning operations to the organization's objectives, and ensuring compliance with current regulations.

On the other hand, the biggest challenges currently faced by internal audit departments relate to the availability of employees' skills, the ability to use data to stimulate innovation and the need to enhance corporate governance and strategic processes.

In this respect, the introduction of technologies in order to accelerate labor productivity, as well as investment in human resources capable of managing both the technological factor and the implications of advanced analysis of the information received, together with the development of the capability to anticipate potential changes in legislation, all represent tools which need to be taken into account in order to increase the efficiency of the internal audit function.

By using intelligent automation solutions, the internal audit function gains efficiency and effectiveness by improving the quality and consistency of processes, of planning, testing and reporting activities, including the transition from limited sample testing to full testing of the audited population.

Moreover, through digitization and automation processes, the internal control environment can be improved, especially in the prevention area, by introducing automatic controls instead of manual ones, real-time analysis, followed by automatic escalation and anomaly resolution, thus allowing the organization to add value with limited resource consumption.

At the same time with the use of the most advanced automation and digitization technologies, it has become

imperative to develop the skills of the internal audit staff in order for them to be able to effectively access these technologies and to make out of the information received the best operational directions.

A professional in the internal audit function needs an extensive set of skills in his or her daily activity (analytical and synthesis capacity, effective communication, critical thinking), but currently, the budgets allocated for providing specialized training cover less than 5% of the total budget of the internal audit department for most respondents.

Moreover, forecasts for the development of the internal audit budget are rather moderate, in contrast to the high expectations of the development of the internal audit function so that it can respond as closely as possible to the increasing complexity of the areas audited.

Another important issue to point out is that cyber security is ranked 8th among the top priorities of the Internal Audit function, and yet no less than 42% of internal auditors recognize that cyber security risk management is one of the main challenges which companies face.

Thus, the directions for the successful future development of the internal audit function are clearly outlined: the accelerated incorporation of technologies designed to develop the capacity of data analytics and investment in the human factor so that internal audit staff are able both to manage technological advances and analyze the results of the analyses carried out. Effective monitoring of the growing cyber risk is also a critical consideration for the future.

Comparative Study on the Organization of Internal Public Audit in Albania and Romania

*Nensi KHANI, Ph.D. Student,
University of Craiova, Faculty of Economics and
Business Administration, Romania,
e-mail: xhaninensi@gmail.com*

*Univ. Prof. Marioara AVRAM, Ph. D.,
University of Craiova, Faculty of Economics and
Business Administration, Romania,
e-mail: marioaraavram@yahoo.com*

*Ilir MEÇE,
Internal Audit Directorate, Ministry of Finance and
Economy, Albania, e-mail: Ilir.Mece@financa.gov.al*

*Latif ÇELA,
Internal Audit Directorate, Ministry of Finance and
Economy, Albania, e-mail: Latif.Cela@financa.gov.al*

Abstract

The audit process has progressed and improved with the economic and political development of each country as response to the challenges of society and politics in each country and as result of the global changes' effect. The purpose of this study is to analyze the development of the audit concept and to study the main factors influencing the internal audit legislation in Albania and Romania. The research aimed to highlight some aspects of theory about how the internal audit has emerged in Albania and Romania, and to provide an overview of the differences and similarities of the two legislations on public internal audit. A detailed comparative study of the laws of both countries has concluded that Albania's legislation needs to be revised, as there are some issues that are not fully covered by the law. Efforts to improve the internal audit activity are numerous, but much remains to be done. Although Romania has a more comprehensive and detailed internal audit law, both countries need to strengthen the enforcement of legislation. For a reasonable use of public funds, the authors advocate the imposition of "restrictive"/"blocking" mechanisms or procedures for entities that do not comply with the legal provisions on internal audit.

Keywords: *internal audit, control, legal framework, public entities*

JEL Classification: *H83, M42, M48*

To cite this article:

Xhani, N., Avram, M., Meçe, I., Çela, L. (2019), Comparative Study on the Organization of Internal Public Audit in Albania and Romania, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 473-485,
DOI: 10.20869/AUDITF/2019/155/017

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/017>
Received: 19.05.2019
Revised: 27.05.2019
Accepted: 5.06.2019

Introduction

In a world that is evolving and ever-changing, an important place is held by the use of public funds. The economic, social and political changes of recent decades have increased awareness of population on the economic activity exerted by public institutions. The internal audit has now become a powerful profession, a tool that adds value in terms of efficient use of public funds. Promoting responsibility, in order to ensure the correct use of public funds, requires a legal framework in the field of internal audit activity. Legal provisions are the main element for the functioning of the rule of law. The lack or breach of the legal provisions regarding the exercise of internal audit activity has serious consequences in the activity of public institutions and in the sound management of public funds.

The aim of the paper is to develop the concept of internal audit and to study the main factors that influenced the legislation on the organization and conduct of the internal audit in Albania and Romania. In this study are specified the theoretical milestones on development of the internal audit process in the public sector, followed up a detailed analysis of the similarities and differences in legal regulations in the field of internal audit in Albania (EU candidate country) and in Romania (EU state). Both in Romania and Albania, any public institution, autonomous administrations and state-owned companies are subject to internal audit activity.

MacRae and Van Gils (2014, p.18) examined the situation of the public sector worldwide in terms of the elements needed to establish an effective internal audit activity and noted that the external regulatory environment may have an impact on the capacity of internal audit activity. The sample consisted of approximately 13,500 responses from internal auditors and other practitioners from 107 countries. Based on the questionnaire sponsored by the Institute of Internal Auditors (IIA), empirical results show that more than 3/4 of the public sector respondents (77%) indicated that auditing was required by law or regulation where their organizations were based. The largest percentage of respondents with legal mandates was from Europe-Central Asia (92%), and the lowest rate was in the United States and Canada (66%), followed closely by the Middle East and the Asia Pacific regions. Even in our case, both states that we will analyze have drafted and approved legal regulations on internal audit.

Regarding articles and studies on internal audit practice, we mention that there are numerous empirical researches in this field in the Romanian literature. Avram et al (2014) monitored the R&D expenditures made by the governmental, private and academic sectors and concluded that the government contributes with over 50% to the total R&D expenses. In Albania, scientific research on internal audit is incipient. Through this work, we intend to complete the current literature which exists in the current period with studies on internal audit, providing concrete suggestions for improving the legislation and the value of audit based on the views arising from this study. Also, this study can serve the government, politicians, heads of public institutions and stakeholders to improve the legal framework of internal audit.

1. Review of the specialized literature

In order to provide taxpayers with the guarantee that the government uses public funds in accordance with the principles of sound financial management, an adequate and efficient public internal financial control system is needed. Public internal financial control is based on three pillars:

- managerial accountability,
- functionally independent internal audit,
- central harmonization unit for developing methodologies and standards for the first two pillars.

For most of its history, internal auditing served as a simple administrative procedure comprised mainly of checking documents, counting assets, and reporting on past events in the activities of different entities. But in recent times, a combination of forces has led to a quiet revolution in the profession (Van Gansberghe, 2005, p.69). According to the IIA International Professional Practice Framework, internal audit is defined as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Internal public audit is undergoing an intense process of development and evolution, aimed not only at

discovering irregularities and infringements, but mostly at perfecting and optimizing processes in public institutions. (Dumitrescu, 2015, p.351). Internal audit is an exchange of ideas that leads to enriching the information available, and the management obtaining reasonable assurances of achieving the objectives set (Avram, 2011, p.4). The importance, place and visibility of the internal audit function within the organization are not a given but the result of dedicated, professional and objective work done year after year (Stanciu & Seria, 2019, p. 272). The quality of good practices is determined by the level in which the internal auditors correctly anticipate the evolution of the risks and requirements of the auditing committee and of the management, concentrating their attention on the areas that are the most exposed to risk, and offering recommendations for improving the processes and attaining the strategic objectives. In the activity of internal auditors, the priority remains the risk evaluation and the internal control (Fülöp & Szekely, 2017, p.449). Each internal control system has to be monitored as a regular process if it is to continue to be effective. Monitoring is usually an ongoing process with the internal audit function reviewing in turn all areas of the business regularly (Trenerry, 1999, p.14). Internal control contributes not only in achieving the management's targets but also to ensuring the entity's prestige and longevity by helping it continuously modernize itself through the implementation of systems and concepts that correspond to the present time and by distancing the entity from concepts such as: "if it's broken don't fix it" (Dragomir et al., 2016, p.502). Good governance within an organization reduces risks, increases performance, paves the way for financial markets, develops the capacity of marketing for goods and services, improves management, and shows transparency and social responsibility (Troi, 2018, p.706). A solid organizational culture and a more rigorous legal framework on governance issues will be able to improve the performance of public institutions, will increase their efficiency in fighting corruption, and adopt an antibribery behavior (Carataş and Spataru, 2018, p.569). Jones et al. (2017) conducted a study on the multidimensional aspects of the organizational change in the internal audit function in eight specific organizations, using the new two-tiered organizational change framework. Research results demonstrate that change can be evolutionary, episodic, continuous and/or teleological, and people, organisms and organizations

that are the subject of these changes will react or respond to that change in a myriad of ways.

The development of information technology is one of the factors contributing to the evolution of internal audit process, but internal auditors do not have sufficient knowledge to develop IT audits. According to Stanciu and Seria (2019, p.272), a good mastering of IT techniques and technologies bring efficiency, superior quality of internal auditors' work and consequently, well-documented opinions and sound recommendations. A high performance public internal audit function creating new value cannot be realized without professionals with experience and a profound understanding and openness towards the new elements in profession and a good knowledge of the public sector (Stanciu, 2018, p.551). It is important to identify and study the main determinant factors influencing the sizing of internal audit departments, in order to set the internal auditors' number in the public sector (Dascălu, 2016, p.649). The audit should focus on assessing the managerial capacity to achieve organizational goals, so to determine the extent to which the managerial decisions are appropriate to achievement of their objectives and how they are achieved.

Stanciu (2018, p.551) concluded that the state of public internal audit in Romania still requires significant improvements in order to strengthen its role and increase its visibility. Internal Public Audit has a relatively recent history in Romania, and the perception that public managers have about the role of auditors is, in many instances misguided; for example, although Article 9 of Law no. 672/2002 imposes on the heads of public entities the obligation to organize internal audit activity and to refrain from using internal auditors for other organizational activities, tasks and needs (except auditing), most of the public sector leaders comply only formally while, in practice, they use internal auditors for other organizational tasks and activities (Macarie and Moldovan, 2018, p.283). Moreover, according to Dragan (2018, p.110) regardless of how the subject is treated, internal auditors need to have the courage to address such topics, which are far from being considered delicate or difficult to approach. It is preferable that the topic approached within the internal audit missions exceeds, in a constructive sense for the organization, the requirements imposed by the Law 672/2002, regarding the internal public audit, art. 3, (2), "The area of Internal Public Audit". In his opinion, the provisions of

art. 3, (2) of the abovementioned law cannot be interpreted restrictively.

In Albania is a need for multi-qualified specialists, with expertise in accounting but having also multidisciplinary skills, which seem to be lacking in the public sector, thus leading to traditional and limited audit activities performed with existing audit resources (Bello & Karapici, 2012, p.17). The audit process will not be able to fulfill its potential as a fair and competent catalyst until it becomes a true profession with a well-defined, unique role correctly appropriated by professionals and government (Angjeli, 2014, p.124). The results of Üç & Shehu's research (2017, p.93) show that private sector internal auditors are more independent than internal auditors in public sector in Albania. Internal audit is an important profession that need to be supported and developed.

From a formal point of view, the public sector audit function is defined from legal perspective and is generally provided by both external and internal audits. Regardless of the fact that the audit coverage is guaranteed by the constitutional, legislative and regulatory framework, it cannot be said that the dynamics of the interaction between these two forms of audit is exceeded in an effort to provide taxpayers with the assurance that funds are spent with economy, efficiency and effectiveness in accordance with legal provisions in effect (Xhani & Iliescu, 2018, p. 54). Avram et al. (2008) brought to the forefront the need for collaboration between the auditors and the audited entity's managers, based on its major importance for the prevention of frauds and errors concerning:

- the correction of the weak points in the control of the entity whenever they are identified by the auditor;
- the improvement of internal control system and accounting system;
- the elaboration of a set of proposes and recommendations for improving the activity in its assembly.

2. Research methodology

Research methodology of the study was based on quantitative data provided by the official websites of the Ministry of Finance and Economy of Albania and the Ministry of Public Finance of Romania. The paper presents a review of the scientific literature on the

importance and the internal audit process. This study consists of a comparative analysis of Albanian and Romanian legislation in the field of internal audit, following the institutional and legal changes necessary to increase the efficiency of public sector's activity. To accomplish the purpose of the study, its main objectives are:

- Exploring literature on internal audit;
- Comparing the internal audit legislations of Romania and Albania to identify key factors, analyzing at the same time the implementation of legal framework;
- Presentation of conclusions and recommendations on internal audit in the public sector.

The research addresses an important issue regarding the implementation of the legal framework for internal audit in Albania and Romania.

The paper has encountered some difficulties in collecting and processing data on the internal audit structures in Albania. In analyzing the implementation of internal audit legislation, the total number of entities that have the obligation to establish internal audit departments could not be included. Also, our analysis did not include the number of audit committees set up in public units because annual reports on internal audit activity in Albania do not contain this information.

3. Historical stages of the internal audit framework organization

3.1. Albania

The internal audit during the communist dictatorship was carried out by the control - revision structures, which, according to the Council of Ministers Decision no. 237 of 13.06.1983, were part of the structure of the Finance Directorates and the object of their activity was defined by Order no. 1 of the Council of Ministers of 10.02.1984, "On financial control - revision". The most important deficiency in organizing these structures was related to their independence.

At the beginning of 2000, the European Union started to support Albania in introducing the new

concept and elements of Public Internal Financial Control. In each ministry, financial control units were established. In the Ministry of Finance, a central institution, the General Directorate of Financial Control, was created in order to harmonize financial control activities in the public sector Halili et al, 2017, p.47).

The first normative act that introduced the internal audit in Albania was Law no. 9009 of February 13, 2003 "On internal auditing in the public sector", eliminating definitively the concept of "financial control - revision". In order to strengthen the legal framework for auditing, the Law on Internal Audit in the Public Sector was revised in 2007 and 2010, giving importance to the regulation of internal audit activities and the precise definition of the main components such as the purpose, objectives, principles, organization, and responsibilities (Law 9720 of 23.4.2007 "On Internal Audit in the Public Sector", as amended by Law no. 10318 of 16.09.2010). In order to achieve international best practice, in 2015 the need to revise the legislative acts regulating the internal audit activity was identified. Compared to Law no. 9720, dated 23.04.2007, as subsequently amended and supplemented, Law no. 114/2015 defines the internal audit mission, the responsibilities of public units managers, heads of audit structures and internal auditors, the changing of employment criteria, the obligation to set up internal audit committees in public entities and improve the relationship with external public audit. Internal audit, referred to in Law no. 114/2015, is defined as an independent activity that provides objective safety and advises on the planned management to increase the value and improve the performance of public entities. Internal audit helps public entity to achieve its objectives through disciplined and systematic work, to assess and improve risk management as well as the control and governance processes. One of the issues worth mentioning is to avoid overstressing internal audit, external audit, control and financial inspection functions. Overlaps between external audit, internal audit and financial inspection are regulated by legal improvements in internal and external audit, as well

as cooperation agreements between internal and external audit.

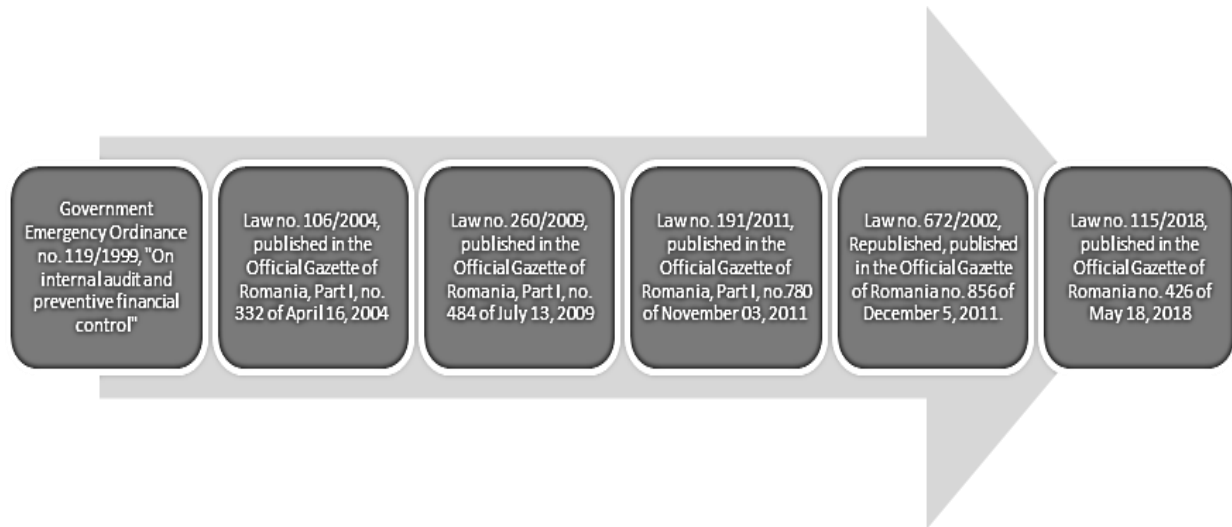
As regards the institutions responsible for internal audit in Albania, there is an institutional framework where the Ministry of Finance and Economy is the main coordinator and monitor of this activity, supported by the General Directorate of Harmonization of Public Internal Financial Control, the Internal Audit Harmonization Directorate, the Internal Audit Committees in public entities in which internal audit structures are established, and internal audit structures.

In line with its statutory obligations, the Ministry of Finance and Economy published the Internal Audit Manual in 2016 and the International Standards on Professional Practice of Internal Auditing and the Methodology for Quality External Assessment were published in 2017.

3.2. Romania

The term of internal audit was used as a concept for the first time in Government Emergency Ordinance no. 119, dated 31.08.1999, "On internal audit and preventive financial control", modified by Ordinance no. 72/2001. During the period 1999-2003, based on the normative framework set up through the Governmental Emergency Ordinance no. 119/1990, the internal audit inspections were set up and they became responsible with control actions/inspections reported as internal audit activities. This period of time was a stage of confusions in this respect. There were many problems related to the understanding of the concepts and to the internal control and internal audit prerogatives, but it has also been a stage that has helped to the clarifying of their role, position and orientation towards European standards (Munteanu et al, 2010). The fact that the above-mentioned Ordinance regulated the activity of two different structures, led to the necessity of drafting Law no. 672 of December 19, 2002 "On Public Internal Audit". *Figure no. 1* provides a framework for the evolution of the law on public internal audit, which has been amended and supplemented by other legal regulations.

Figure no. 1. Evolution of legislation on public internal audit in Romania



Source: Own projection, based on the internal audit framework in Romania

Internal Public Audit, by Law no. 672/2002, republished, is defined as the functional independent and objective activity provides assurance and consulting, conceived to improve the activity of the public institution; it helps the public entity to accomplish its objectives by a systematic and methodical approach meant to assess and improve the effectiveness, and efficiency of risk management, of control and governance processes.

Public internal audit includes some organizational structures:

- Central Harmonisation Unit for Internal Public Audit within the Ministry of Public Finance;
- Public Internal Audit Committee;
- Internal Audit Committees;
- Internal Audit Departments.

Compared to Albania, the Internal Public Audit Committee is functioning in Romania, alongside the Central Harmonization Unit for Internal Public Audit, consisting of 11 members, as a consultative body, to act in defining the strategy and improving the internal public audit activity in the public sector. In Albania, this Committee has been organized with nine members, having the same functions as those stipulated in Romanian law. After the entry into force of Law no.

114/2015, the functioning of this committee was not foreseen in the legal provisions.

The Romanian Central Harmonisation Unit for Internal Public Audit has developed and published 44 procedural and practical guides, manuals and methodologies for each type of audit.

Thus, we note the guidelines and methodologies elaborated in Romania are more detailed and complete. Albania's Internal Audit Harmonization Directorate should elaborate more comprehensive manuals, procedures and guidelines on how to conduct different types of internal audit missions in order to assist internal auditors in their work.

4. 4. Comparative analysis of legislation and challenges in its implementation

Before analyzing the legislation in the two countries, we need to take into account country-specific factors such as economic, social and cultural factors. It is estimated that the Albanian economy undergoes presently a stable stage, just like Romania, although it is worth pointing out that Romania is affected by European factors since it is part of the EU. In this respect, Albania is trying to make progress on the objectives to be fulfilled in order to become a member of the EU.

Firstly, the development of audit process in Albania and Romania took place around the same time, in the early 2000s. While Albania was in the early stages of organizing its internal audit activity, Romania signed the EU accession and the European Commission has exerted its influence and pressure on strengthening internal audit functions for years. This is noted in the elaboration of the Internal Audit Law in Romania, which is more complete and more detailed compared to Albania.

Secondly, both legislations ensure the independence of public sector auditors. Audit structures report directly to the entity's manager, auditors perform the audit function independently and have access to all technical, economic, financial, and managerial data of the audited entity.

Thirdly, both laws define the role, principles, organization, scope, mission, conflict of interest, functioning and responsibilities.

Fourthly, the Finance Ministry plays the leading role in both countries. The obligation to set up an internal audit service is stipulated in laws regulating the internal audit activity in the public sector.

The analysis of legislation in both countries shows that there are some similarities but also differences, grouped on two levels, namely:

1. Regarding employment and certification of internal auditors

In Albania, according to Law no. 114/2015, in addition to the general conditions of public servant legislation and the Labor Code, auditors should have:

- a. A second level university diploma in the legal sciences, economic and other sciences, depending on the needs of the audited sector;
- b. the manager of internal audit unit must be certified as "internal auditor" and must have 5 years of experience as an internal or external auditor;
- c. the internal auditor must be certified as "internal auditor" and have a 5-year work experience in the profession or as an internal or external auditor;
- d. an employee who does not hold the certificate of "internal auditor" but has 3 years of experience in that profession, is employed in the internal audit unit and during the first 2 years he works under the supervision of the direct superior. During this period, this employee must necessarily undergo the certification

procedure as an "internal auditor". If the employee is not certified as "internal auditor" during this period, his employee terminates the employment relationship and is deemed to be interrupted by this law.

In order to benefit from the internal auditor certificate in the public sector, in addition to completing the above criteria, the auditor must participate in the 6 modules of the certification program and be subjected to the preliminary tests for each module. At the end of the certification program, the auditors are enrolled in written and oral exams for all the modules developed during the process, which lasts for almost a year. The fee for registration and participation in the certification process is 40,000 ALL¹. Deregistration from the National Internal Auditor Register is performed when:

- the internal auditor has not participated in continuous professional training,
- he or she has been involved in one or more audits presenting a conflict of interests,
- or there is a court order by which it is forbidden for him/her to exercise public functions.

In Romania, according to Law 672/2002, with subsequent amendments, the appointment or dismissal of internal auditors is done by the head of the public entity audited, with the approval of the internal audit department manager. The internal public audit department manager is appointed/ dismissed by the head of the entity/institution and for the subordinated institutions the appointment/dismissal is done with the approval of hierarchically superior public body. The CHUIPA coordinates the recruitment system in the field of internal public audit, the national certification system for internal auditors in public entities and the continuing professional training system. Interestingly, among the functions of CHUIPA is the approval of the appointment/dismissal of heads of internal audit departments within public entities. In Albania, the Internal Audit Harmonization Directorate does not have this statutory function.

The internal auditor's certificate in the public sector, which certifies that the necessary conditions for an internal auditor to perform internal public audit activities in public entities are fulfilled, is issued if:

- auditor has a professional experience of at least one year,

¹ Albania's currency (Lek), 100 ALL ≈ 0,8 Euro, 100 ALL ≈ 3,9 RON

- professional honesty is confirmed by two recommendations from internal auditors or specialists in the field who have a 5-year experience in public activity,
- the recognition of professional skills of internal auditor was verified by the multiple choice test. The test is organized by the Ministry of Public Finance/CHUIPA in at least the following areas: internal audit, public finance, accounting, law, management, information technology, risk management, internal control and governance.

The certificate shall become invalid when the internal auditor did not carry out internal audits for five years and did not participate in the continuing professional training due to his fault. Internal auditors are required to submit to the body that issued the certificate, every 5 years, reports on how he/she implemented the continuous professional training programs, approved by the public entity's head, on the basis of which the validity of the

auditor's certificate will be maintained/lost. Annual plans for professional training should therefore ensure the systematic, consistent and purposeful development of professional competence through training programs, which upgrade the knowledge and skills that internal auditors have already acquired, on the basis of an objective appraisal of demands (Ivanova, 2019, p.79).

An audit in line with IIA standards involves a more professional, fair, efficient and capable audit staff to respond to ongoing challenges. For the period 2005-2018, 1960 internal auditors were certified in Albania. On basis of the approved and published documents, the number of employees planned decreased between 2009 and 2014, with 42 posts, but after 2014 till 2017, it increased from one year to another by 54 posts (Table no. 1). In public sector audit structures during 2009-2017, there is a difference between the number of auditors planned in the organization chart and the number of auditors involved in internal audit structures.

Table no. 1. Evolution of the number of internal auditors in Albania

Year	Planned number of posts	Real number of posts	Number of vacancies
2009	416	402	14
2010	416	406	10
2011	403	392	11
2012	406	391	15
2013	407	387	20
2014	374	351	23
2015	395	363	32
2016	416	386	30
2017	428	400	28

Source: Authors' projection, based on Annual Reports of the General Directorate of Harmonization of Public Internal Financial Control

2. On offences and sanctions

Even if both legislations need to be improved, the biggest challenge is the law enforcement in both countries. In Romania, the legal basis for offences and sanctions is complete due to Law no. 672/2002, republished. Responsibility for the detection of offenses and the enforcement of sanctions belongs to the authorized representatives of the Ministry of Public Finance, and at the level of the subordinated public entity belongs to the authorized representatives of the hierarchically superior body. Sanctions, according to legislation, refer to:

- Non-compliance with the obligation of ensuring the organizational and functional framework necessary for the performance of the internal public audit activity;
- Non-compliance with the obligation to design the norms of internal public audit, specific to the public entity, as well as to submit them for endorsement;
- Non-compliance with the provisions on the elaboration of the draft internal audit plan;
- The refusal of the execution or management staff involved in the audited activity to present any

- required documentation to those who are responsible for the internal audit,
- Failure to observe the provisions on the appointment/dismissal of the Head of the internal

audit department, respectively of the internal auditors.

Table no. 2 shows the number of public institutions in Romania bound to set up the public internal audit function.

Table no. 2. Public institutions in Romania required to set up the internal public audit function			
	2015	2016	2017
Number of entities that were required to organize the public internal audit activity.	9.977	11.031	11.937
Number of public institutions that did not set up the internal audit, out of which:	1.817	2.364	2.512
- public entities of central public administration	186	81	103
- public entities of local public administration	1.631	2.283	2.409
Number of public institutions that did set up the internal audit, out of which:	8.160	8.667	9.425
- are truly functional	7.512	6.715	7.447
- Are not functional	648	1.952	1.978
Number of public institutions that have set up the internal public audit function by their own structure	1.345	1.365	1.641
Number of public institutions that have established the public internal audit function through the hierarchical superior body	4.443	4.410	4.409
Number of public institutions that have established the public internal audit function through service contracts	-	182	138
Number of public institutions that have established internal audit function by cooperation system	2.372	2.707	3.237
Number of public internal audit structures in co-operation system	42	42	46

Source: Authors' projections, based on CHUIPA Annual Reports

Based on the results presented in **Table no. 2**, we noticed that there is a relatively large number of audit structures in the internal public sector. According to the CHUIPA annual Reports this occurs because the heads of public entities have yet to understand the role and need for public internal audit and, on the other hand, the existing financial resources are insufficient. There are also legislative restrictions regarding the maximum number of posts that can be created within the institutions. Contrary to the legal provisions, the sanctions provided by the law (Article 24) have never been applied, because the main creditors have to empower representatives who will identify the contraventions and apply the sanctions. The lack of

implementation of these provisions in the 17 years since the issuance of the Internal Public Audit Law (2002), combined with budgetary and personnel restrictions applied in the public administration, have generated the existing situation in the field of internal public audit.

Under Law 114/2015, in Albania, the Internal Audit Unit Director is responsible for preparing the annual report, approved by the Head of the Public Entity, who is required to send this report to the structure responsible for harmonizing internal audit. **Table no. 3** provides information on fulfilling the obligation to draw up the Annual Report on Internal Audit, based on the standard reporting template set out in the *Internal Audit Manual*.

Table no. 3. Situation of public entities that have drawn up the Annual Report on Internal Audit				
	2014	2015	2016	2017
Number of structures that have submitted annual reports	82	98	110	115
Number of internal audit structures	100	103	112	119

Source: Authors' projection, based on Annual Reports of the General Directorate of Harmonization of Public Internal Financial Control

According to the data reported to the Harmonization Directorate for Internal Audit, the number of structures that did not prepare and submit the Annual Report was significantly reduced from 18 structures in 2014 to 4 structures in 2017. Also, the number of internal audit structures is increasing. Until 2017, 119 internal audit structures are registered as functional, with 19 structures more than in 2014. A considerable number of internal audit structures operate in violation of applicable legal regulations. For the year 2017 there were some deficiencies, namely, there was a staff shortage in 40 structures, 10 heads of audit structures are not certified as "internal auditors for public sector" and 4 structures have more than 1/3 uncertified employees in the field of auditing.

Conclusions

Albania has taken important steps on the implementation of the internal audit function in the public sector due to coordination of auditing activity and the support of the Harmonization Directorate for Internal Audit, but there is still need of improvement. This paper highlights a lack of scientific studies in the field of internal audit in Albania. Internal audit researches in Albania, as a developing country, are interesting and have an important contribution to Albanian scientific literature.

Our study concludes that there are some deficiencies in the conduct of the internal audit process in Albania, which have already been highlighted in our study. In our opinion, Romania has a more complete and crystallized legislation compared to Albania. A law is effective to the extent that it is applicable, and in this sense both countries suffer from lack of enforcement of relevant legislation in force. Even if Romania has a stronger law in the field, both states need, in addition to the creation of audit structures and internal audit committees in those entities of public interest, to strengthen the role of the internal auditor.

The Romanian legislation provides for sanctions for non-compliance with the legal provisions regulating the internal audit activity, which have never been applied since the entry into force of the law on public internal audit (2002), while the Internal Audit Law in Albania does not provide for measures and/or sanctions for breach of the legal provisions. In the context of the implementation of a modern internal audit system, given

the problems faced by the structure responsible for the harmonization of internal audit, we suggest the implementation of legislative measures that would imply an efficient inspection of the use of public funds. In this regard, we propose imposing "restrictive" or "blocking" mechanisms for entities that do not comply with the legal provisions regulating the internal audit activity in the public sector. When the responsible bodies (the government, the Prime Minister, the Department of Public Administration in Albania) find that the statutory provisions on the organization of internal audit by public institutions are not met, they could sanction such behavior in the following ways:

- reducing budget allocations;
- limiting expenditure to the respective public institutions up to a maximum of 30%;
- not to approve changes to the organizational structure of those institutions until the moment of compliance.

The functioning of a fair, successful, well-organized internal audit service in accordance with legal provisions is the responsibility of the management of public entities. The Government should intervene with concrete actions, develop appropriate mechanisms and procedures to underline the importance of the internal audit process. For efficient, economical and effective use of public funds and the achievement of entity objectives, management at the entity's top level should consider internal audit as an added value function.

The Albanian Supreme State Audit Institution, in accordance with Article 16 of the Law no. 154/2014, assesses the overall functioning of the systems of internal control and audit bodies subject to audit, giving, as appropriate, opinions and recommendations. In order to ensure the complementarity and efficiency of the Romanian audit activity, Law No.94/1992 on the organization and functioning of the Romanian Court of Accounts was adopted, and art. 42 requires that the Court of Accounts to assess the activity of its own financial control and the internal audit of controlled legal entities. Legal entities under the control of the Court of Accounts are required to submit a Report on the elaboration and implementation of the internal audit program by the end of the first quarter of the previous year. In this context, the Romanian Court of Accounts continues to evaluate the internal audit

system. Auditors of the Supreme Audit Institution in Albania, in the exercise of their competences, should be more involved in the effective functioning of the internal control and audit system, because they do not prepare each year a special report on the audit activity to assess points weaknesses and strengths of the system as a whole, as in the case of Romania.

Research findings indicate that the public sector should start by reviewing the legal framework for internal audit activity in line with the international standards and the best practices so that internal audit structures are developed and consolidated, which would ensure, in turn, the growth of entities' performance, but also of the economy in general.

REFERENCES

1. Angjeli, G. (2014), *Auditimi dhe qeverisja e mire*, Monografi, UMSH Press - KLSH, Classic Print, Tirana.
2. Avram, A., Avram C.D., Avram, V. (2014), Research and development expenditures between discretionary cost and source for economic growth, *Romanian Journal of Economics*, Institute of National Economy, Volume 39, p. 49-66.
3. Avram, M., Avram V., Avram A. (2008), The implications of the financial auditors' to detect the frauds, *Annals of the University of Oradea*, Economic Science Series, Vol. 17, Issue 3, p.928-934.
4. Avram, M. (2011), Considerations on the Practical Application of International Auditing Standards Regarding the Environment of Control, *Annals of University of Craiova - Economic Sciences Series*, vol. 3(39), pp. 1-7.
5. Bello, H., Karapici, V. (2012), The Risk-based Role of Internal Audit within Albania, Public Organizations, *International Journal of Business and Technology*: Vol. 1: Iss. 1, Article 2, DOI: 10.33107/ijbte.2012.1.1.02.
6. Carataş, M. A., Spătariu, E. C. (2018), The Role of Internal Audit in Fighting Corruption, "Ovidius" *University Annals, Economic Sciences Series*, Volume XVIII, Issue 2, pp. 566-569.
7. Dascălu, E.D. (2016), Factors supporting and adequate sizing of internal audit departments in the public sector, *Audit Financiar*, vol. XIV, no. 6(138)/2016, pp. 642-650, DOI: 10.20869/AUDITF/2016/138/642.
8. Drăgan, C. (2018), Internal audit and risk management, *Annals of Constanta Maritime University*, Vol 27 No 223, Section VI - Maritime Economics, Logistics and Social Sciences, pp. 107-110.
9. Dragomir, I.V., Avram M., Domnişoru S. (2016), Considerations Regarding the Contents of Internal Control, *Ovidius University Annals, Series Economic Sciences*. Vol. 16 Issue 1, p. 497-502.
10. Dumitrescu, P.A., (2015), The Romanian Internal Audit System - An X-Ray Analysis of Audit Compartment Activities, *Review of International Comparative Management*, vol. 16(3), pp. 343-353.
11. Fülöp, M.T., Szekely, S.V. (2017), The evolution of the internal auditing function in the context of corporate transparency, *Audit Financiar*, vol. XV, no. 3(147)/2017, pp. 440-450, DOI: 10.20869/AUDITF/2017/147/440.
12. Halili, K., Fino, D., Karapici, V. (2017): External Quality Assessment of Internal Audit in the Albanian Public Sector, Abstract Proceedings of *MODAV International Conferences on Accounting*, edited by Beyhan Marşap and Pınar Okan Gökten, Issue: 1/December 2017, pp.46 – 50, Tirana, Retrived from <http://www.modav.org.tr/images/abstratcs.pdf>
13. Imbrescu, C. M., Peţa C. (2017), Internal Audit: "A Necessary Evil" or A Creator of Added Value?, "Ovidius" *University Annals, Economic Sciences Series*, Volume XVII, Issue 2, pp. 571-575.
14. Ivanova, D., (2019), The professional competence of public sector internal auditors in Bulgaria – opportunities and challenges, *Business Management*, Issue 1, pp. 67-82
15. Jones, K. K., Baskerville R. L., Sriram R. S., Ramesh B., (2017), The impact of legislation on the internal audit function, *Journal of Accounting & Organizational Change*, Vol. 13 Issue: 4, pp.450-470, <https://doi.org/10.1108/JAOC-02-2015-0019>.
16. MacRae, E., Van Gils, D. (2014), Research report: Internal Audit Capabilities and Performance Levels

- in the Public Sector, A Global Assessment Based on IIA's 2010 Global Internal Audit Survey and Internal Audit Capability Model (IA-CM) for the Public Sector, *The Institute of Internal Auditors Research Foundation*, accessed on May 29 2019, available online at:
<https://www.interniaudit.cz/download/novinky/Internal-Audit-Capabilities-and-Performance-Levels-in-the-Public-Sector.pdf>
17. Macarie C. F., Moldovan O. (2017) Evoluția auditului public intern în perioada 2006-2015. Introducere în IA-CM (Modelul de Măsurare a Capacității Auditului Public Intern, *Revista Transilvană de Științe Administrative* 2(41)/2017, pp.14-33.
 18. Munteanu, V., Zuca, M., Tinta A. (2010), Internal audit regulations in Romania and their convergence to European exigencies, *Annales Universitatis Apulensis Series Oeconomica*, No. 12 /2010, Issue 1, p. 267-273.
 19. Naska, K. et al. (2012), Historiku i Kontrollit të Lartë të Shtetit 1925-2012, *Seria: botime KLSH* - 09/2012.
 20. Stanciu, V. (2018), Public internal audit – the awareness and necessity assumption. An investigation of the Romanian reality, *Audit Financiar*, vol. XVI, no. 4(152)/2018, pp. 544-552, DOI: 10.20869/AUDITF/2018/152/023.
 21. Stanciu, V. and Seria, C. (2019), Insights on the New Coordinates in Internal Audit, *Audit Financiar*, vol. XVII, no. 2(154)/2019, pp. 261-273, DOI: 10.20869/AUDITF/2019/154/009.
 22. Trenerry A. (1999), Principles of Internal Control, Publisher: *University of New South Wales Press*.
 23. Troi, S. M. (2018), The Relation Between Culture, Corporate Governance and the Role of the Internal Auditor, "Ovidius" *University Annals, Economic Sciences Series*, Volume XVIII, Issue 2, pp. 702-706
 24. Van Gansberghe C.N. (2005), Internal Auditing in the public sector, Publisher: *Internal Auditor*. Aug 2005, Vol. 62 Issue 4, p. 69 - 73.
 25. Xhani, N., Iliescu, M. A. (2018), Coordination of audit work between the internal and external audit, *Annals of the University of Craiova, Economic Sciences Series*, Vol. 2, Issue 46, pp. 53-60.
 26. Xhani, N., Meçe, I. and Çela, L. (2019). The Necessity to Improve the Internal Audit Framework in Albania: A Comparative Analysis With the Romanian Legislation, edited by Kürşat Ç, Hilal A, İnanç K, *The Third InTraders International Conference on International Trade Abstract Book*, Sakarya, Turkey.
 27. Üç, M., Shehu, D. (2017), The Attitudes of Internal Auditors to Internal Audit Practice in Post-communist Countries - Case of Albania, *Accounting and Finance Research*, Vol. 6, No. 3; pp. 88-93.
 28. *** IIA, Definition of Internal Auditing, available online at: <https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Definition-of-Internal-Auditing.aspx> [Accessed May 19, 2019].
 29. *** Law No. 672/2002, on Public Internal Audit with Subsequent Amendments, republished in 2011, Romanian Official Gazette No. 856 from Dec.5, 2011, available online at: http://discutii.mfinante.ro/static/10/Mfp/audit/lege672_mo856_en.pdf [Accessed May 19, 2019].
 30. *** Law No. 115/2018, available online at, [accessed May 19, 2019]: http://discutii.mfinante.ro/static/10/Mfp/audit/legea115_06062018.pdf
 31. *** Internal audit framework in Romania, available online at, [accessed May 19, 2019]: <http://www.mfinante.gov.ro/pagina.html?categoriebunuri=cadru-normativ-ucaapi&pagina=domenii&menu=Ucaapi>
 32. *** Law No 114/2015, on internal auditing in the public sector, available online at: https://financa.gov.al/wp-content/uploads/2018/06/Ligji_114_22.10.2015.pdf [Accessed May 19, 2019].
 33. *** Law no. 9720 date 23.04.2007, on internal audit in the public sector
 34. *** CHUIPA/Ministry of Public Finance, Rapoartele privind activitatea de audit intern din sectorul public din România, available online at [accessed May 19, 2019]:
 35. http://discutii.mfinante.ro/static/10/Mfp/audit/Rap_activ_audit_intern_sect_public_2017.pdf
 36. http://discutii.mfinante.ro/static/10/Mfp/audit/Rap_activ_audit_intern_sect_public_2016.pdf

37. http://discutii.mfinante.ro/static/10/Mfp/audit/Rap_activ_audit_intern_sect_public_2015.pdf
38. *** General Directorate of Harmonization of Public Internal Financial Control/Ministry of Finance and Economy, Albania, Joint reports for CHU/FMC and CHU/IA, Reports on the functioning of public internal control system in the general government units in Albania, 2010-2017, available online at, [accessed May 19]:
39. <https://financa.gov.al/en/raportet-vjetore/>
40. https://financa.gov.al/wp-content/uploads/2018/07/Raporti_Vjetor_i_KBFP_2017.pdf
41. https://financa.gov.al/wp-content/uploads/2018/06/Raporti_PIFC_-_30_05_2016-1.pdf
42. https://financa.gov.al/wp-content/uploads/2018/03/Annual_PIFC_Report_2014_EN-1.pdf
43. https://financa.gov.al/wp-content/uploads/2018/03/Raporti_Vjetor_i_KBFP_2013.pdf
44. https://financa.gov.al/wp-content/uploads/2018/03/Annual_Report_of_PIFC_2012.pdf
45. https://financa.gov.al/wp-content/uploads/2018/03/Annual_Report_of_PIFC_2011.pdf
46. https://financa.gov.al/wp-content/uploads/2018/03/Annual_Report_of_PIFC_2010.pdf
47. *** http://ec.europa.eu/budget/library/biblio/documents/control/brochure_pifc_en.pdf

Aspects Regarding the Changes to the Independent Auditor's Report. The Case of Public Interest Entities

Denis Adrian LEVANTI,
Manager, Assurance Department, PwC Romania,
e-mail: levantidenis@yahoo.com

Abstract

The time when the auditors of the public interest entities have been issuing a standardized audit report, without describing the most significant risk identified throughout the audit process, has ended. In the new reporting framework, the audit reports provide more information and transparency to stakeholders, in particular on the significant matters discussed by the auditors with those charged with the entities' governance.

The purpose of the research is to identify and analyze the key audit matters reported by the financial auditors for a sample of public interest entities in Romania. The results highlighted that most auditors complied with ISA's requirements on the presentation of key audit matters, respectively that auditors have different approaches in terms of the average number of key audit matters reported, nature of the key audit matters and disclosure of the materiality used in the audit process.

Keywords: audit report, public interest entities, key audit matters, stakeholders

JEL Classification: M42

To cite this article:

Levanti, D. A., (2019), Aspects Regarding the Changes to the Independent Auditor's Report. The Case of Public Interest Entities, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 486-495, DOI: 10.20869/AUDITF/2019/155/018

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/018>
Received: 07.05.2019
Revised: 13.05.2019
Accepted: 29.06.2019

Introduction

In the aftermath of the global financial crisis and with growing complexity of financial reporting, investors' demands for more informative reporting have increased. The auditing profession had to respond to investors who expressed dissatisfaction over the audit report; a simple opinion, according to which the financial statements give a true and fair view on an entity's activity was no longer sufficient. Beyond the qualified or unqualified opinion, the audit report contained mostly standardized wording.

The investors' demands did not focus only on the audit reports containing an unqualified opinion but also on those that expressed a qualified one. In this context, the auditor's opinion needed to be supplemented with bespoke descriptions of key audit matters identified during the audit. The Financial Reporting Council in the United Kingdom responded first, introducing new requirements for the auditors of entities subject to the United Kingdom's Corporate Governance Code for periods commencing from 2012. The International Auditing and Assurance Standards Board (IAASB) later released its new auditor reporting standards effective for periods ending on or after 15 December 2016. Following the IAASB's action, the standard-setting bodies in several countries revised their national standards to ensure compliance with the internationally agreed rules.

The most important changes in the structure of the audit report include: the section on the auditor's opinion is now placed first, introduction of a new section dedicated to key audit matters description, disclosure of the management and auditor responsibility with regards to the going concern and of any uncertainties in this respect, the auditor's affirmative statements of independence and compliance with the Code of Ethics.

With regards to the auditing of public interest entities, at European Union (UE) level, the new auditors' reporting requirements were implemented by EU Regulation no. 537/2014 of the European Parliament and of the Council on specific requirements regarding the statutory audit of public interest entities.

In this context, this research aims to identify and analyze the key audit matters presented by the financial auditors in the audit reports issued in connection with the financial statements of the most important public interest entities from Romania, namely the entities listed on the Bucharest Stock Exchange (BSE) and credit institutions.

Compared to the results of the existing research on this topic, the contribution of this paper is that it identifies and analyses the key audit matters reported as at 31 December 2017 by the financial auditors of the most important public interest entities in Romania based on their nature, industry in which they operate, different approaches of the auditors in terms of the average key audit matters report and disclosure of materiality.

Moreover, we also believe that the study can be used as a benchmarking tool by stakeholders and other parties interested in the outcome of the audit process, including: financial auditors, management staff and investors.

The article has the following structure: the first section is dedicated to literature review on the audit report, followed by the section which describes the research methodology. The next section includes the results obtained with the paper, ending with the section dedicated to conclusions reached.

1. Literature review

The purpose of an independent expert's opinion is to strengthen the credibility of an entity's financial statements. The communication of the auditor's opinion is called attestation; in an audit, this attestation is called *audit report* (Hayes et al., 2015).

Land (2014) finds it surprising that the auditor report, the only independent voice on the financial statements prepared by an entity, is the only part of a set of financial statements in which there is no reading point. The author also notes that the audit report has not undergone fundamental changes for 80 years in the United States of America and approximately 150 in the United Kingdom.

The primary users of the financial statements of a public interest or private entity are its shareholders and investors, followed by other stakeholders. Abma (2009) indicates that the Corporate Governance Forum Eumedion, one of the institutions representing the interests of European investors, has sent a letter to the International Organization for Securities (IOSCO), expressing its views on the informative value of the audit report. The Forum's proposal was to reorganize the audit report so that it becomes an important form of communication between auditors and investors. An example indicated by the Forum was the inclusion in the audit report of the professional judgments undertaken by the auditor during the audit process.

Also, Asare and Wright (2012) believe that the traditional reporting model is highly standardized and therefore perceived as insufficiently useful, informative and transparent. In particular, in the aftermath of the financial crisis of 2008, regulators, standard-setters and the investment community started seriously questioning the informative value of the auditor's report. Similarly, academic research in the last decade has also repeatedly emphasized that there may be a need for change, motivating audit report reforms. For example, Carcello (2012) and Turner et al. (2010) find that users generally valued the auditor's opinion but showed little interest in reading the actual report given its highly standardized format. The results of the study performed by Church et al. (2011) and Gray et al. (2011) showed that users assessed the traditional auditor's report as uninformative in particular because nearly all public companies receive the same unqualified opinion.

Following their study, Mock et al. (2013) concluded that stakeholders desire more information about the audit, the auditor and financial statements. Moreover, Vanstraelen et al. (2012) find that users were interested in additional disclosures on audit findings such as key areas of risks.

Given this context, IAASB revised the International Auditing Standards („ISA”) related to auditor reporting. The IAASB considers that the new standards ensure increased transparency and informative value of the audit report, respectively an improved communication between auditors and investors and an increase attention from the entities' management and those charged with governance with regards to the information presented in the financial statements, subject to the audit process and audit report issuance.

In relation to public interest entities, the most important changes to the auditor report is the presentation of the key audit matters. According to ISA 701 “Communication of key audit matters in the audit report” (ISA 701), paragraph 8, the key audit matters represent those matters which, in the auditor's professional opinion, were the most significant during the financial statements audit. The paper continues with the presentation of a series of opinions and results of studies undertaken on the impact of the publication of the extended audit report and disclosure of key audit matters on the stakeholders.

Cates (2014) observes that the new audit report is submitted and actively discussed among shareholders as part of the usual review of the entity's activity. Richards (2014) states that he was pleasantly surprised

by the usefulness of the new information presented in the report.

Banerjee (2017) welcomes the developments brought to the audit report, the introduction of the new elements removing the mystery of the auditors' work and the manner through which they based their opinion. For listed entities, Sim (2017) believes that the key audit matters are the basis for conversations between the Directors and institutional and retail investors.

Among the studies conducted on this topic, we mention the one conducted by Kohler et al. (2016), which aimed to examine the communicative value of the expanded auditor's report among institutional and retail investors. They find that investment professionals' assessments of the economic situation of a company are influenced by variations in the key audit matters disclosures, however, these appear to have no communicative value for retail investors as they have difficulties to process the new information presented.

The experimental study by Carver and Trinkle (2017) suggests that retail investors believe that the disclosure of the key audit matter lead to a less readable report that did not result in incremental changes of investors' valuation judgments. The study by Sirois et al. (2018) shows that the information on the key audit matters increases users' attention to key audit matters-related information in the financial statement disclosures.

Gutierrez et al. (2018) states that they did not identify any evidence to conclude that the additional information included in the audit report influences investors' reactions and decisions. This is aligned with the findings of Lennox et al. (2018), concluding that disclosure of the key audit matters does not influence investor behavior.

Overall, the studies conducted so far and interviews with industry professionals, provide mixed results regarding investor behavior and market reaction in response to key audit matters disclosure. From this perspective, we consider that further research is necessary to explore the economic consequences associated with key audit matters disclosure.

2. Research methodology

In order to achieve the research objective we used the qualitative research method.

The research premise has taken into account the public interest entity definition according to Law no. 162/2017 related to the statutory audit of annual financial statements and consolidated financial statements. The

definition public interest entity is broad, so for the analysis purpose, we included only those entities whose shares have been admitted for trading on BSE and credit institutions operating on the Romanian market.

To determine the sample, we considered the following:

- All 78 entities whose shares are tradable on BSE, sector Bucharest Stock Exchange, status “Tradeable”. For two of these we were unable to obtain the audit report from public sources and three of them are credit institutions, legal entities registered in Romania, that were included in the sample dedicated to this type of entities;
- Top 25 credit institutions operating on the Romanian banking market. For two of these we were unable to obtain the audit report from public sources and three of them are branches of foreign credit institutions whose financial statements are prepared by the parent entity.

Therefore, the sample comprises a total of 93 public interest entities, out of which 73 are entities whose shares are traded on BSE and 20 are credit institutions, legal entities registered in Romania, having a market share of 84.03% as at 31 December 2017 based on total assets value.

We reviewed the audit reports issued in connection with the statutory statements for financial periods ending as at 31 December 2017 because as at the time of our analysis the deadline for submission of the financial statements for the financial period ending 31 December 2018 was not exceeded. Please note that all entities

included in the sample prepared their financial statements in accordance with the International Financial Reporting Standards (IFRS). The audit reports were obtained from public sources, by investigating the information available on the BSE official website and those of the entities included in the sample.

To achieve the proposed goal, we completed the following steps:

- Sample establishment and identification of data sources;
- Obtaining the audit reports from public sources;
- Individual analysis of the audit reports and data collection with regards to: auditor name, report format, type of opinion issued, reported key audit matters, disclosure of materiality, non-audit services disclosures;
- Analysis of data collected; and
- Interpretation of results obtained.

3. Results and discussions

A first analysis revealed the distribution of the entities according to the industry in which they operate. The results showed that the 93 analyzed entities operate in 19 different industries. Regarding the entities listed on BSE, we note that the activity of 30% of them is concentrated around 3 industries, namely: production and processing (manufacturing), financial services (investment entities, insurance brokers) and construction (Table no. 1).

Table no. 1 Public interest entities included in the sample, by industry

Industry	No. of entities	% of total no. of entities
Banking	20	22%
Manufacturing	11	12%
Financial services	9	10%
Constructions	7	8%
Electro-technical and electronics	7	8%
Oil and gas	6	6%
Industrial goods	4	4%
Pharmaceutical	4	4%
Real estate	4	4%
Energy	3	3%
Food industry	3	3%
Automobiles	3	3%
Hotels	3	3%
Other	9	10%
TOTAL	93	100%

Source: Author's own analysis

The analysis continues with the identification of audit firms' distribution, separately for entities listed on BSE (Table no. 2) and credit institutions (Table no. 3). We observed that only 38% of the entities listed on BSE have their financial statements audited by a Big 4 company (PricewaterhouseCoopers – PwC, Deloitte, Ernst & Young – E&Y and KPMG), compared to the credit institutions,

whose financial statements are audited exclusively by these companies. This is justified by the stricter rules imposed by the National Bank of Romania through the regulations issued on the requirements related to the auditors' reputation and experience. 52% of the entities listed on BSE are audited by local audit firms or financial auditors, individuals.

Table no. 2 Financial auditors of entities listed on BSE

Audit firm	No. of audited entities	% of the total no. of audited entities
Other financial auditors	38	52%
Big 4	28	38%
BDO & Mazars	7	10%
TOTAL	73	100%

Source: Author's own analysis

Table no. 3 Financial auditors of credit institutions

Audit firm	No. of audited entities	% of the total no. of audited entities
PwC	6	30%
Deloitte	6	30%
KPMG	4	20%
E&Y	4	20%
TOTAL	20	100%

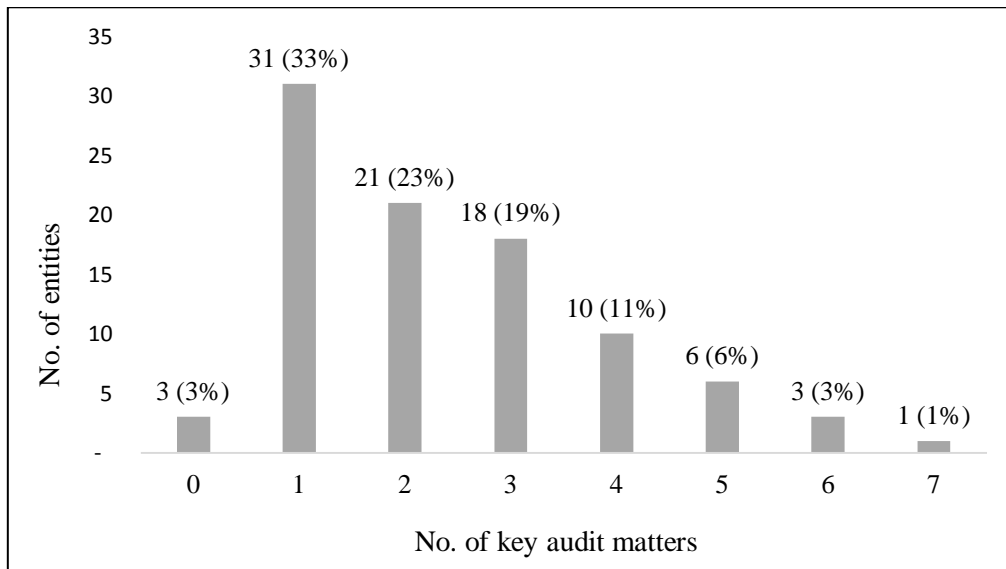
Source: Author's own analysis

Moving forward, we will identify and analyze the key audit matters presented in the audit reports. In order to establish the key audit matters, financial auditors take into account the following criteria: significant risk areas, accounting areas that require significant professional judgment of the auditor and the impact of the significant transactions on the audit. Out of the most significant matters identified, the auditor selects those that have a significant impact on the financial statements and reports them as key audit matters to those charge with governance. *Figure no. 1* shows the total number of key audit matters reported in the analyzed audit reports.

The results of the research revealed the following:

- 75% of the audit reports contain between 1-3 key audit matters, the most frequently encountered being the audit reports containing only one key audit matter;
- 22% of the reports include four to seven key audit matters; and
- For 3% of the reports, the auditor did not report any key audit matters (Electroaparataj SA, Electromagnetica SA and SNTGN Transgaz SA.), which does not comply with ISA 701 revised requirements.

Figure no. 1. Number of key audit matters per entity

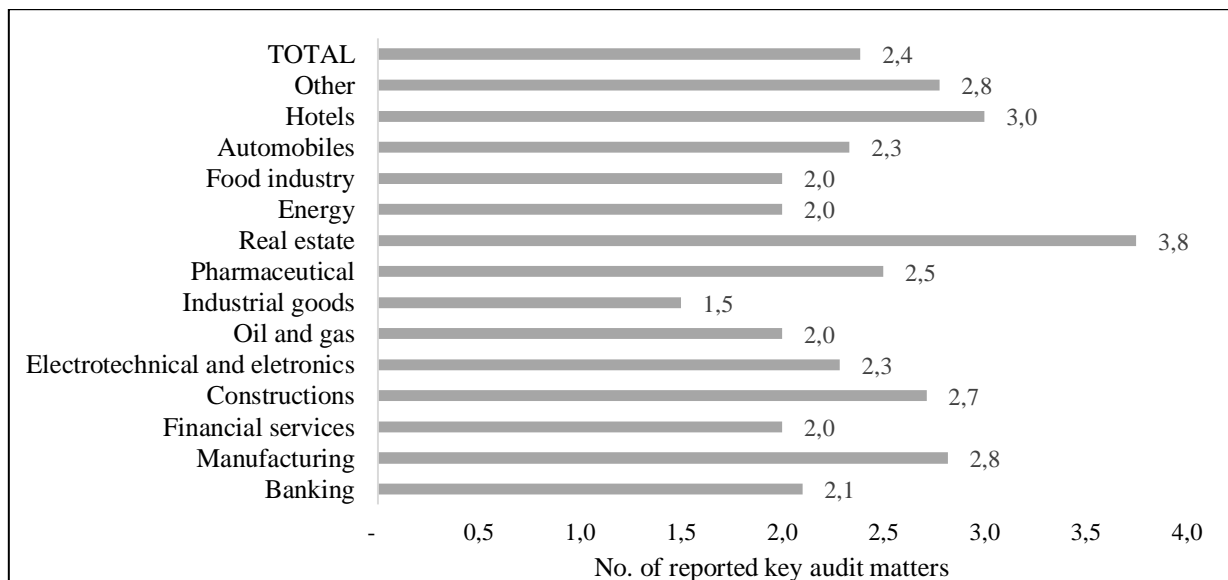


Source: Author's own analysis

From **Figure no. 2** we note that the auditors reported on average 2.4 key audit matters per report. The highest values were identified for entities operating in telecommunications, real estate and chemical industries. At the opposite pole are found those operating in the

medical, services and industrial goods industries. For credit institutions, the average number of key audit matters reported is below the average recorded at sample level, with the auditors reporting one of two audit matters for 70% of the analyzed institutions.

Figure no. 2. Average number of key audit matters reported per industry



Source: Author's own analysis

Figures no. 3 and 4 illustrate the reporting frequency of the key audit matters per industry, separately for entities listed on BSE and credit institutions. As for the entities listed on BSE, five of the most commonly reported key audit matters represent 60% of the total number of key audit matters identified following our analysis.

Although the most commonly reported key audit matter is related to revenue recognition, the presumed fraud risk indicated by ISAs in connection with revenue recognition has not been presented as such in all the reports analyzed. Revenue recognition was considered a key audit matter due to specific reasons, such as the complexity of the accounting treatment, the use of estimates for revenue recognition and the use of manual procedures for bookkeeping a high volume of transactions.

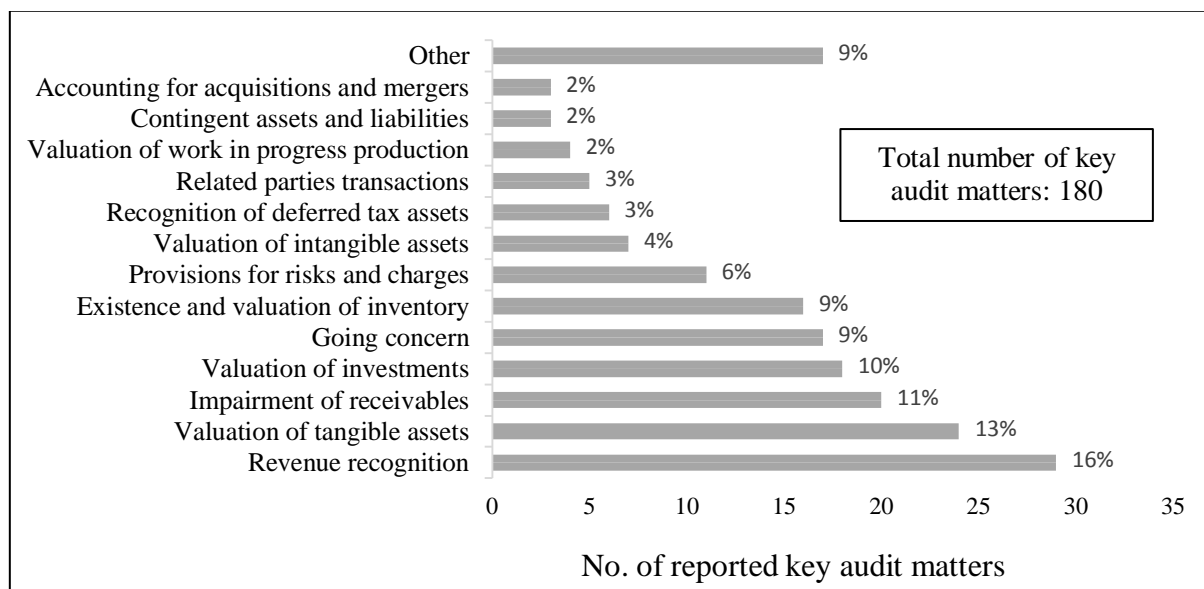
Also, we do not find it surprising that the most important key audit matters reported by the auditors include the impairment for property, plant and equipment and receivables, since the accounting treatments applicable to them require a high level of professional judgments from the management, including the use of estimates with regards to uncertain events or conditions. In order to reduce the risk of material misstatement in relation to these, the auditor should obtain corroborative evidence

of the management's assessment and also to exercise an appropriate level of professional skepticism to verify its accuracy.

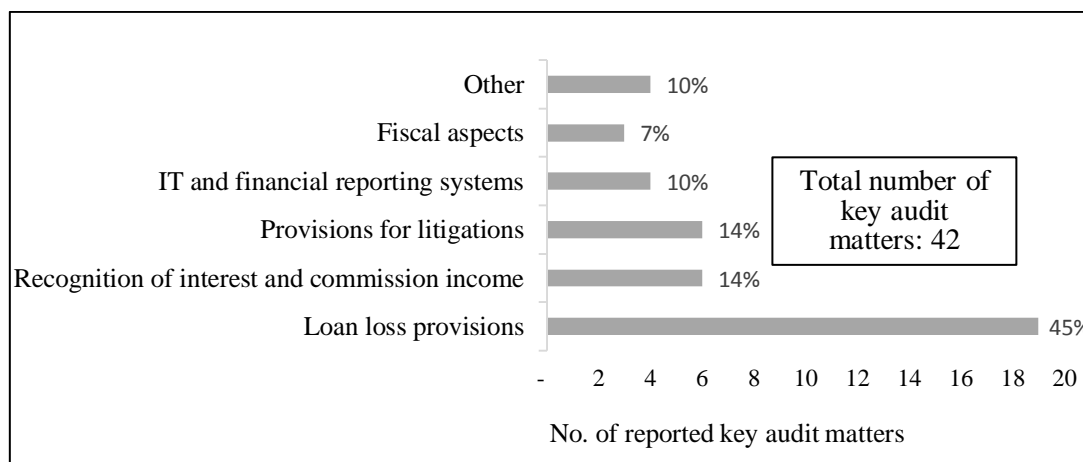
The impairment for receivable balances represents the most commonly reported key audit matter also for the credit institutions. The manners in which the banks estimate the loss adjustments due to the debtors' risk of default imply a complex process where several estimates, statistical analysis and a high level professional judgment from the management's side are used.

Contrary to most of the entities listed on BSE, credit institutions have complex IT systems that ensure the bookkeeping of a high volume of transactions on a daily basis, including the automatic bookkeeping of interest and commission income deriving from the lending activity. However, the auditors considered appropriate to include interest and commission income recognition among the key audit matters as these revenues represent the most significant part of a bank's turnover. As for the impairment for receivables, the provisions for litigations have been identified as key audit matters given the high level of professional judgment required from the management's side and the use of estimates with regards to uncertain events or conditions.

Figure no. 3. Key audit matters based on their nature – entities listed on BSE



Source: Author's own analysis

Figure no. 4. Key audit matters based on their nature – credit institutions


Source: Author's own analysis

The results of the research reveal that, for public interest entities, the audit companies E&Y and PwC reported a higher average number of key audit matters than the 2.4 average identified at the level of the entities listed on BSE. We also noticed that Deloitte, BDO and Mazars reported, on average, a similar number of key audit matters. As for the credit institutions, E&Y and PwC reported an average of 2.8 and 2.4 key audit matters, higher than the 2.1 average recorded at the level of the credit institutions included in the analysis.

According to ISA 701, in order to conclude that certain aspects communicated between the auditors and those charged with governance are key audit matters, the auditors should consider a number of aspects, including the importance of these aspects for the stakeholders' understanding of the financial statements and, in particular, its materiality for the financial statements as a whole. In this sense, during our analysis, we observed that, in certain situations, the auditors considered appropriate to disclose the value of the materiality used to conduct the audit, together with a description of the calculation methodology.

From another analysis, we observed that PwC Romania is the only local audit company that chose to present the value of the materiality used throughout the audit process in all the audit reports issued in connection to the financial statements for the financial year ending 31 December 2017 of the entities included in the sample.

Conclusions

Auditors have been required to issue standard audit reports for many decades. Moving to an environment of bespoke auditor's reports is undoubtedly changing this long-established culture in the auditing profession.

The implementation of the new and revised auditor reporting standards poses significant challenges to auditors, to management of the entities and those charged with governance because the preparation of the auditor's reports could not be undertaken without their involvement. These challenges at the same time provide opportunities for the development of the audit profession so that auditors can provide greater insights into their work and improve the relevance of their audits for the benefit of entities and their stakeholders. Entities can also take the opportunity to enhance their financial statements disclosures and to stimulate dialogues with their stakeholders in particular on those matters that are considered significant by the auditors.

The research revealed that the auditors complied with the new ISAs requirements regarding the format and content of the audit report, except for three situations where the auditors considered that there are no key audit matters to report. In the future, it is interesting to observe whether the auditor's approach for the concerned entities will undergo changes. Also, the results of the study indicate different approaches of the

audit firms in terms of the number of key audit matters reported and the disclosure of the materiality level used during the audit process.

Considering the fact that the extended audit reports were issued only for two financial years (namely 2016 and 2017), auditors are expected to analyze the changes needed to improve the content of the reports based on the experience already gained, in particular for the presentation of key audit matters. It is also expected that entities will continue to develop their corporate governance practices and disclosures from financial statements and annual reports in order to meet increased stakeholders expectations.

Regarding the research limitations, we consider that one of the limitation is represented by the lack of the audit reports for two of the credit institutions, legal entities, operating on the Romanian market and for the three branches of foreign credit institutions, whose financial statements are prepared by the parent company. However, given their weight in the total sample, we consider that the results obtained are not significantly influenced.

With regards to future research directions, we aim to continue the research with identifying and analyzing the key audit matters reported by the auditors of entities operating in other industries.

REFERENCES

1. Arens, A., Elder, R., Beasley, M. (2014), Auditing & assurance services – an integrated approach, Pearson, Fifth Edition, pp. 47 – 76.
2. Asare, S., Wright, A. (2012), Investors', auditors', and lenders' understanding of the message conveyed by the standard audit report on the financial statements. *Accounting Horizons*, no. 26(2), pp. 193–217, available online <https://doi.org/10.2308/acch-50138>.
3. Carcello, J. (2012), What do investors want from the standard audit report? Results of a survey of investors conducted by the PCAOB's Investor Advisory Group, *The CPA Journal* no. 82(1), pp. 22–28.
4. Carver, B., Trinkle, B. (2017), Nonprofessional investors' reactions to the PCAOB's proposed changes to the standard audit report, available online <https://papers.ssrn.com/sol3/results.cfm?Request-Timeout=50000000>.
5. E&Y (2017), Adoption of new auditor's report, available online [https://www.ey.com/Publication/vwLUAssets/EY-adoption-of-new-auditors-reports-july-2017/\\$File/EY-adoption-of-new-auditors-reports-july-2017.pdf](https://www.ey.com/Publication/vwLUAssets/EY-adoption-of-new-auditors-reports-july-2017/$File/EY-adoption-of-new-auditors-reports-july-2017.pdf).
6. International Federation of Accounting, <http://www.ifac.org/>.
7. Gold, A., Heilmann, M. (2019), The consequences of disclosing key audit matters (KAMs): A review of the academic literature, *Maandblad voor Accountancy en Bedrijfseconomie* 93(1/2), pp. 5–14.
8. Gray, G., Turner, J., Coram, P., Mock, T. (2011), Perceptions and misperceptions regarding the unqualified auditor's report by financial statement preparers, users, and auditors, *Accounting Horizons*, no. 25(4), pp. 659–684, available online <https://doi.org/10.2308/acch-50060>.
9. Gutierrez, E., Minutti-Meza, M., Tatum, K., Vulcheva, M. (2018), Consequences of adopting an expanded auditor's report in the United Kingdom, *Review of Accounting Studies*, no. 23, pp. 1543–1587, available online <https://doi.org/10.1007/s11142-018-9464-0>.
10. IAASB (2015), New and revised Auditor Reporting Standards and Related Conforming Amendments, available online <https://www.iaasb.org/>.
11. IAASB (2018), Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements, available online <https://www.iaasb.org/>.
12. KPMG International (2016), A guide to enhanced auditor's reports, available online <https://assets.kpmg/content/dam/kpmg/sg/pdf/2016/12/Enhanced-auditor-reports.pdf>.
13. KPMG International (2018), New auditor's report requirement – communication of key audit matters, *Accounting and Auditing Update*, issue no. 20/2018.

14. Köhler, A., Ratzinger-Sakel, N., Theis, J. (2016), The effects of key audit matters on the auditor's report's communicative value: Experimental evidence from investment professionals and non-professional investors, available online <https://doi.org/10.2139/ssrn.2838162>.
15. Law n. 162/2017 regarding statutory audit of annual financial statements and consolidated financial statements and the amendment of certain normative acts, published in the Official Journal of Romania no. 548 July, 12th, 2017.
16. Lennox, C., Schmidt, J., Thompson, A. (2018), Is the expanded model of audit reporting informative to investors? Evidence from the U.K., available online https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2619785.
17. PwC Singapore (2017), Enhanced auditor's report, available online <https://www.pwc.com/sg/en/publications/enhanced-auditor-report.html>.
18. PwC Hong Kong (2017), Enhanced auditor's report, available online <https://www.pwchk.com/en/services/audit-and-assurance/publications/enhanced-auditor-s-report.html>.
19. Tian, J., Xin, M. (2017), Literature review on audit opinion, *Journal of Modern Accounting and Auditing*, June 2017, Vol. 13, N. 6, pp. 266-271

The Influences of Corporate Governance Mechanism towards Company's Financial Performance

Lector Ready WICAKSONO,
Master în Contabilitate la Sekolah Tinggi Ilmu Ekonomi
Balikpapan, East Kalimantan, Indonesia,
e-mail: ready@stiebalikpapan.ac.id

Lector Dasriyan SAPUTRA,
Master în Management la Sekolah Tinggi Ilmu Ekonomi
Balikpapan, East Kalimantan, Indonesia,
e-mail: dasriyan@stiebalikpapan.ac.id

Lector dr. Hairul ANAM,
Balikpapan University, East Kalimantan, Indonesia,
e-mail: hairul@uniba-bpn.ac.id

Abstract

The aim of this study is to find out whether the board of commissioners, board of independent commissioners, audit committee, managerial ownership, institutional ownership, or auditor type has an influence on company's financial performance. The method used is double regression analysis. The studied population is involving real estate companies which are registered in BEI (Indonesian Stock Exchange). Then, the sample itself is purposive sampling and the data type used is financial report data. The result shows that the board of commissioners and institutional ownership has significant positive influence toward financial performance; meanwhile, board of independent commissioners, audit committee, managerial ownership, and auditor type has no significant influence on financial performance.

Keywords: board of commissioners, managerial ownership, institutional ownership

JEL Classification: G34, M42

To cite this article:

Wicaksono, R., Saputra, D., Anam, H. (2019), The Influences of Corporate Governance Mechanism towards Company's Financial Performance, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 496-506, DOI: 10.20869/AUDITF/2019/155/019

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/019>
Received: 20.02.2019
Revised: 5.05.2019
Accepted: 1.07.2019

1. Introduction

Martono and Harjito (2013) assert that company is established for several purposes, that is: to get maximum profit, to give prosperity for the stakeholders, and to improve company's value. Those purposes become the bases for the company in determining policy as well as the appropriate management.

In order to achieve the company's purposes, company management is needed. It has been mentioned before that one of company purposes is to get maximum profit, which reflects on company's financial performance. Hence, the depictions of financial company which analyze using financial analysis tool are called as financial performance (Rachman et.al, 2015).

Concerning the company's purpose to achieve through its management, the company will give the position to the professional called agent. The agent has the authority in running the company operational since the owner believe that the agent is able to understand the company's operational activities.

The delivering operational in company will lead to authority separation. The separation that appear between the owner and the company management causes a problem called agency problem. However, the problems have been reflected on some cases which are relating with the company's bad management.

One of the cases is Kimia Farma Company, in 2002. In this case, Kimia Farma is doing a mistake in its financial report relating with net profit. Kimia Farma reported the net profit around 132 billion rupiahs, but meanwhile the truth net profit was about 99,56 billion rupiahs or 24,7% lower from the reported profit. That is why, it can be proved that the application of good corporate governance in Indonesian company is considered being less.

Kusumawati and Riyanto (2005) argue that the application of good corporate governance in Indonesia is determined by the weakness of the legislation, accountant standard and auditing process which is not established yet. Since then, the government and also the investors begin to give more attention on corporate governance practice. It should be understood that global competition is not inter-state competition but inter-corporal competition in these countries. Hence, the successfulness of economy in a country is depending on the existence of companies. It has been proved that

companies in Indonesia are not well-managed (Moeljono, 2005). According to the results of a survey done by Indonesia Institute for Corporate Directorship (IICD) on 2013, Indonesia is on the second place on Southeast Asia in Corporate Governance application.

Thus, the reason of for applying corporate governance is due to some obstacles faced by Indonesian companies. The obstacles are including internal and external obstacles. The internal obstacles are in form of commitment between the employee and worker in company, understanding level about good corporate governance principal and internal control affectivity. Meanwhile, the external obstacles are in form of legal instruments along with the rules and its establishment.

Some of previous studies have mentioned that GCG influences company's financial performance whether in Indonesia or in other country. However, from the previous studies, there are found some inconsistencies on the results. Therefore, in this study, the variables will be developed. *Auditor type* is used as the independent variable. The reason to choose auditor type is that a Public Accountant Firm which is affiliated with Big Four Companies provides a good quality on audit result compared with the Public Accountant Firms which are not affiliated with Big Four.

In this study, the research objects are involving the property and Real Estate Companies. The reason to choose these companies is due to the fact that better economic condition will lead to better of financial performance on property and Real Estate Sector Company. The increasing demand will make the amount of transaction for Property Company to increase as well. Besides, the decrease of interest rate of commercial credit will facilitate to get credit. Property and Real Estate are firstly based on the land then it is added permanent assets as like buildings, warehouses, and other things which cling on its product construction. Property and Real Estate industry need more ability whether dealing with intellectual or physical. From the physical point of view, company need bigger financial funds to create a new product, ability to choose and manage the raw material, improve physical assets and construct it to be a product which have attractive selling for consumer. On the other hand, company also needs intellectual ability resource to create concept, choose location, determine the price, and make another decision. Besides the intellectual and physical intelligence, company also needs ability to create a good

relation with external party to improve company's profit so it will encourage the growth of employees' performance.

2. Literature Review

2.1. The Board of Commissioners

The Board of commissioners is depicted as one of functional control which exists in a company. The control function which is performed by boards of commissioners is including practical and agency theoretical. In a company, the board of commissioners has the role to represent the primary internal mechanism to implement control function from principal as well as from the management point of view. In this case, the board of commissioners tries to intermedate both the principal and manager's concern in company.

2.2. The Board of Independent Commissioners

The Board of independent commissioners is a company's part that has the role to control management's performance. The proportion of independent commissioner is established by the number of commissioners from the outside corporate, then divided by the number of commissioners and multiplied by 100% (Rustiarini, 2010). These commissioners are expected to be neutral, therefore they can create balanced interests from any parties, like the major shareholders, directors, commissioners, management, employees, and public shareholders. Hence, it can be said that independent commissioners represent minority shareholders concerns and other related parties.

Meanwhile, Weisbach (1988) states that independent commissioner in a company must be truly independent so the commissioners can reject the influence, intervention, and pressure from the major shareholders who have certain concern. It is also hoped that independent commissioners have certain full concern and commitment in doing their duty and responsibilities. Therefore, independent commissioners should have board knowledge and high integrity.

2.3. The Audit Committee

This committee is considered as a corporate component which is formed by the board of the commissioners to

control financial management by checking the financial report (Rustiarini, 2010). The Audit committee consists of the chosen board of commissioners. It has the responsibility to help in determining the management's proposal. Based on the definition, it is acknowledged that the audit committee is a group of people who are independent or do not have any concern on management and have ability on accounting field and other related fields with the company's internal control mechanism.

2.4. The Managerial Ownership

The Managerial ownership can be depicted as shareholders from management parties which is actively involve on determining company's decision (director and commissioner). It helps in decrease the conflict of agent mechanism. The bigger is the share ownership by the management, it will decrease the tendency of the management to optimize the resources' use as well as reduce the agency costs due to different interests. Through its managerial ownership position, they will be more careful in taking decisions. (Martsila dan Meiranto, 2013).

2.5. The Institutional Ownership

Sekaredi (2011) assumes that the institutional ownership is sharing ownership by the government, legal institute, abroad institution, trust funds, and other institution at the end of the year. The existence of institutional ownership is hoped to encourage better the controlling of company management, also it can improve the prosperity for the shareholders. Principally, the bigger is the institute's ownership that will lead to better controlling of the management. Then, the demand for optimizing the performance will have great contribution for its company.

2.6. Auditor Types

DeAngelo (1981) describes that the quality of public accountant can be seen from the measure of accounting firms who obtain audit. *The Big4* accounting firms are considered to conduct audit with high quality, in comparison with the Non-Big4 accounting firm. The indicator of auditor types is performed based on the amount of the client audited by the accounting firm, the number of members who join, and the total amount of income earned.

2.7. Financial Performance

The financial performance is described as a measure tool used by the audit report's maker in measuring and determining the extent of a company's quality (Fahmi, 2013:239). Moreover, financial performance can be used as an analysis tool to see the performance of company in implementing financial rules properly and correctly. There are three groups of performance measure which are explained by Weston and Copeland (2010: 237) including:

- a. Profitability Ratio to measure the effectiveness of management based on the result generated from the investment sale.
- b. Grow Ratio measures the company's ability to maintain its economic position in the economics and industries' growth or in product market.
- c. Valuation Measures used to value the ability of management to achieve market values that exceed the cash outlays.

Kasmir (2012) gives his opinion dealing with return on assets. It is depicted as ratio that shows return for assets amount used in a company. Besides, ROA provides better values for company profitability since it indicates management activity to gain income. So, ROA is a form of profitability ratio which is aimed to measure or value company ability for all invested funds in the company's operating activity. Moreover, it is also purpose on generate profit by utilizing assets. ROA is obtained by comparing net income with total asset.

3. Hypothesis Development

3.1. The influence of board of commissioners on financial performance

The Board of commissioners is a company body which has duty and responsible collectively to control and give advice to the director as well as ensure that the company is obtained GCG.

Bukhori (2012) states that by the increasing the number of members of the board of commissioners, the control toward the board of directors can be better.

The researchers Noviawan and Septiani (2013), Ahmed and Hamdan (2015), Ahmed and Gabor

(2012) give their statement that the number of commissioners in the board has a positive impact towards company's performance.

Thus, based on the explanation above, the first research hypothesis is as follow:

H₁: The number of board of commissioners influences the financial performance.

3.2. The influence of Board of independent commissioners on financial performance

The Board of independent commissioners has no affiliation with the management, other members of board of commissioners and shareholder, being as well free from business relation or another relation that can affect the ability to be independent or act solely in the interest of the company (National Committee on Governance, 2006).

The result of researches made by Ahmed and Hamdan (2015) and Muntiah (2013) prove that the Board of independent commissioners has a positive impact on company's performance. Thus, based on the explanation above, the second hypothesis is:

H₂: The Board of independent commissioners influences financial performance.

3.3. The influence of Audit Committee on financial performance

Sam'ani (2008) states that Audit Committee has an important role and provides strategies in maintaining credibility on the company's financial reporting process as well as maintaining the appropriate controlling system and good corporate governance application. Through the effective function of audit committee, the control function toward company will be better and could prevent agency conflict, as well as improving financial performance.

The studies conducted by Sekaradi (2011), Ahmed and Gabor (2012), Muntiah (2013), Arifani (2013) shows that the audit committee has positive impact on company's financial performance. Based on the explanation above, the hypothesis is:

H₃: The Audit Committee influences the financial performance.

3.4. The influence of managerial ownership on financial performance

Herawaty's opinion (2008) is that the managerial ownership is an effective monitoring tool that can reduce profit management from manager. The expectation concern on managerial ownership is that the managers can be more consistent in running the company. Therefore, there is equal concern between management and the shareholder that it can improve companies financial (Syafuruddin, 2006).

Arifani (2013) has proved that managerial ownership has positive impact toward financial performance. According to the result, the fourth hypothesis is:

H₄: Managerial ownership has influence on financial performance.

3.5. The influence of institutional ownership on financial performance

Jensen and Meckling (1976) give their opinion that managerial ownership and institutional ownership are two primary corporate governance mechanisms which help to control agency conflicts. The existence of institutional investor can lead into powerful corporate governance as well as it can led to better monitoring company's management. The influence of institutional investor toward company management is considered as important and it can be used to align management concern with the shareholders (Sekaradi, 2011).

The researches of Noviwawan & Septiani (2013) and Arifani (2013) states that institutional ownership has a positive impact on financial company. Because of the assumption which states that institutional ownership in corporate governance has influence the company's financial performance, the fifth hypothesis is:

H₅: The institutional ownership influences on company's financial performance.

3.6. The influence of Auditor Types on financial performance

Foroghi and Shahshahani (2012) suggest that the biggest accounting firms provides high quality service since they have a good reputation to maintain. Besides, this case also shows that Big4 public accounting firm provide high quality audit as like accounting firm measure which can support training programs,

standardized audit methodology, and more options for reviewing the appropriate second partner.

Auditor types show the size of public accounting firm that is used by the company. Accounting firm is an organization public accountant which has permission in accordance with the legislation. It strives in the field of providing professional services in the practice of public accountants. In delivering accurate and reliable financial reports, a company requires the services of a Public Accountant Firm that has a good reputation to increase the credibility of financial statements produced by the company so that it will improve financial performance.

Companies face high agency costs for high-quality audit company contracts. The Big 4 audit company is considered to have more resources than other companies and arguably provides higher audit quality. Large audit companies allow them to influence the company's financial statements to satisfy external users the need for reports, because their value as an auditor partly depends on how the user views the annual report on the audit (Andika, 2015). Based on the theory and previous research, the sixth hypothesis of this study is as follows:

H₆: The auditor type influences on intellectual capital.

4. Research method

4.1. Sample and Population

The population of this study is involving all of the Property and Real Estate Companies registered on BEI (Indonesian Stock Exchange) who published financial report and annual report last on December, 31th for 2013-2015 period. The sampling method used is purposive sampling. In this case, purposive sampling is a sample determining technique with certain consideration adjusted to some purposes or research's problem.

4.2. Data source and collecting data

The data used in this study are secondary data, in a form of financial annual report of company published on 2013-2015. Afterward, the source of data used is represented by the financial report publication on each company registered in Indonesian Stock Exchange and obtained from Indonesian Stock Exchange Corner: www.idx.co.id, Indonesian Capital Market Directory

(ICMD) as well as Corporate Governance Perception Index.

4.3. Variables and variable measure

Variables in the study are value from person, object, or activity which has certain variation determined by the research to be studied and drawn the conclusions (Sugiyono, 2012). Dealing with statistical analysis, the type of variable can be divided into:

Independent Variable

Independent variable can be described as variable that influences or causes the change of dependent variable (Sugiyono, 2012). Thus, in this study, the independent variables are good corporate governance, and audit types.

Dependent Variable

Dependent variable is described as a variable which is influenced or become consequence of the independent variable (Sugiyono, 2012). In this case, the dependent variable is financial performance.

Financial performance is defined as a measurement tool used by the user of financial report in measuring and determining company qualities. Furthermore, Kasmir (2012) said the return on asset is a ratio which shows return on assets used in company.

5. Data Analysis Method

5.1. Double Regression Test

The data analysis in this study uses double regression test, since it involves several independent variables and one dependent variable. Afterward, double regression test used is as follows:

$$FP = \alpha + \beta_1 BC + \beta_2 BICP + \beta_3 AC + \beta_4 MO + \beta_5 IO + \beta_6 AT + \varepsilon$$

Note:

- α = Intercept
- FP = Financial Performance
- BC = Board of Commissioners
- BICP = Board of Independent Commissioners Proportion
- AC = Audit Committee
- MO = Managerial Ownership

- IO = Institutional Ownership
- AT = Auditor Types
- ε = Error

5.2. Coefficient of Determination

The Coefficient of determination (R^2) is used to know the percentage of the influence of independent variable on the model that explain dependent variable (Ghozali, 2011). The value that estimates this coefficient indicates that independent variable give almost the information needed to predict the variation of dependent variable.

5.3. Hypothesis Test

5.3.1. T Test

Hypothesis testing in this study is using T Test. It has purpose to know the ability of each of independent variable in explaining dependent variable variation. The decision criteria in this study is the significance value < 0.05 which means that the independent variable has a significant influence on the dependent variable, while significance value > 0.05 means that independent variable does not significantly influence toward dependent variable.

5.3.2. F Test

Simultaneously, hypothesis testing is obtained using F-Test. Ghozali (2011:98) states that F statistical test basically shows all of independent variable influences simultaneously toward dependent variable.

The decision criteria in this study is that if the significance value < 0.05 means that independent variable influence simultaneously and significantly toward dependent variable, while if the significant > 0.05 means that independent variable has no influence simultaneously and significantly towards dependent variable.

6. Results

6.1. Double Linier Regression Analysis

This analysis is used to examine the influence of independent variables on the dependent variable that is company's financial performance. The result for double regression analysis can be seen in the **Table no. 1**.

Table no. 1. The result of double linier regression analysis

Independent variable	Regression coefficient	t-test	Sig.	Note
(Constant)	0.076	0.790	0.431	
BC	0.020	3.211	0.002	H ₁ supported
BICP	-0.133	-2.252	0.012	H ₂ unsupported
AC	-0,012	-0.358	0.721	H ₃ unsupported
MO	0.012	1.104	0.313	H ₄ unsupported
IO	0.055	1.965	0.052	H ₅ supported
AT	0.007	0.493	0.623	H ₆ unsupported
F-test			4.228	
Sig F			0.007	
R			0.372	
Adjusted R Square			0.094	

Dependent Variable: FP

Source: Own Processing

From the result of double linier regression analysis above, the regression equation model developed in this study is as follows:

$$FP = 0.076 + 0.020BC - 0.133BICP - 0.012AC + 0.012MO + 0.055IO + 0.007AT$$

1. The Constant intercept value is 0.076. This result can be interpreted that when the value of all independent variable is 0, then the value of the financial performance will be 0.076.
2. The variable regression coefficient value of the board of commissioners amounted to 0.020. The result can be interpreted that if the board of commissioners' value can be risen to be 1, then the company's financial performance will increase about 0.020 under assumption that all of independent variable are constant.
3. The variable regression coefficient of board of independent commissioners amounted to 0.133. The result can be interpreted that the variable value of the board of independent commissioners is about - 0.133 under assumption that all of independent variable are constant.
4. The variable regression coefficient value of audit committee amounted to -0.012. The result can be interpreted that the variable value of audit committed will rise to be 1, and then company's financial performance will decrease to 0.012 under assumption that all of other independent variable are constant.

5. The variable regression coefficient value of managerial ownership amounted to 0.012. The result can be interpreted that if variable value of managerial ownership rises to 1, then company's financial performance will rise to 0.012 under the assumption that all of others independent variable are constant.
6. The variable regression coefficient value of institutional ownership amounted to 0.055. The result can be interpreted that the variable value of institutional ownership rises to 1, so company's financial performance will be rise up to 0.055 under assumption that all of others variables are constant.
7. The variable regression coefficient value of auditor type amounted to 0.007. The result can be interpreted that institutional ownership variable value rise to 1, then company's financial performance will be rise up to 0.007, under assumption that all of the others independent variable are constant.

6.2. Coefficient of Determination Test

The Coefficient of Determination (R^2) is used to know the percentage of independent variable variation on model that can explain the dependent variable variation (Ghozali, 2011). The result associated to the coefficient of determination (adjusted R square) research model is about 0.094. Furthermore, it can be concluded that the amount of variable variation in influencing financial performance is about 9.4% and the rest is about 91.6%.

The result is influenced by other factors which are not included into regression model, such as liquidity, leverage, and other GCG mechanism.

6.3. Hypothesis Test

6.3.1. T-Test

The hypothesis test in this study uses T-Test Statistic. The results of hypothesis testing in this study include:

a. The first hypothesis testing

The first hypothesis in this study is that the amount of the Board of commissioners has a positive impact on financial performance. The amount of regression coefficient of the Board of commissioners' is about 0.020 and the significant value is about 0.002. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is significant since the significance value is $0.002 < 0.05$. Furthermore, it can be concluded that the amount of Board of commissioners has a positive influence on financial performance, and thus the first hypothesis can be supported.

b. The second hypothesis testing

The second hypothesis states that the board of independent commissioners has a positive influence on financial performance. The amount of regression coefficient of board of independent commissioners' is about -0.133 and the significant value is about 0.012. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is significant since the significance value is $0.002 < 0.05$. Furthermore, it can be concluded that the amount of board of independent commissioners has a positive influence on financial performance, and thus the second hypothesis can be supported.

c. The third hypothesis testing

The third hypothesis states that the audit committee has a positive influence on financial performance. The amount of regression coefficient of audit committee is about -0.012 and the significant value is about 0.721. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is not significant since the significance value is $0.721 > 0.05$. Furthermore, it can be concluded that the audit committee has no positive influence on financial performance, and thus the third hypothesis cannot be supported.

d. The fourth hypothesis testing

The fourth hypothesis states that the managerial ownership has a positive influence on financial performance. The amount of regression coefficient of board of managerial ownership is about 0.012 and the significant value is about 0.313. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is not significant since the significance value is $0.313 > 0.05$. Furthermore, it can be concluded that the managerial ownership has no positive influence on financial performance, and thus the third hypothesis cannot be supported.

e. The fifth hypothesis testing

The fifth hypothesis states that the institutional ownership has a positive influence on financial performance. The amount of regression coefficient of institutional ownership is about 0.055 and the significant value is about 0.052. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is significant since the significance value is $0.052 < 0.05$. Furthermore, it can be concluded that the amount of institutional ownership has a positive influence on financial performance, and thus the second hypothesis can be supported.

f. The sixth hypothesis testing

The sixth hypothesis states that the auditor types have a positive influence on financial performance. The amount of regression coefficient of auditor types is about 0.007 and the significant value is about 0.623. On significant level $\alpha = 5\%$, it can be said that the regression coefficient is not significant since the significance value is $0.623 > 0.05$. Furthermore, it can be concluded that the auditor types have no positive influence on financial performance, and thus the sixth hypothesis cannot be supported.

6.3.2. F-Test

Simultaneously, the hypotheses were tested using F-test. Ghozali (2011:98) states that F-test statistic basically shows whether the independent variables included into the model have influenced simultaneously the dependent variable. Based on the F-test, the result obtained is about 4.228 and the significant value is 0.007. Since the significance value is < 0.05 , it can be

concluded that the independent variables influence the dependent variable simultaneously and significantly. Thus, the model of research is appropriate to use.

7. Discussion

7.1. The Influence of the Board of Commissioners on financial performance

Agency theory state that the conflict of interest and asymmetry information which appeared can be decreased using appropriate control mechanism to coordinate the interest from any kind of parties in the company. Hence, it can be minimized the conflict of interest and agency cost. Then, a good corporate governance has generated various mechanisms which aimed to ensure management action being aligned with the interest of shareholders (Susiana & Herawaty, 2007 in Putra 2012).

One of corporate governance mechanism is the amount of board of commissioners, as a corporate component responsible collectively to control and giving advice to the directors as well as ensure that the company has obtained GCG. However, the board of commissioners does not allow intervening in taking operational decision. Each member of board of commissioners including the President of Commissioner is equal. The task of president of commissioner as *primus inter pares* is coordinating the activity of board of commissioners. Furthermore, Bukhori (2012) assert that by the increasing number of members of the board of commissioners, controlling the board of director, input as well as option can be better.

The result of this study relates with Noviawan and Septiani (2013), Ahmed and Hamdan (2015), Ahmed and Gabor (2012) which state the amount of board of commissioner has positive impact on good corporate governance level and also has effect on company performance. The result of this study has proved that the board of commissioners has positive and significant impact on financial performance. The bigger amount of board of commissioner will increase the financial performance.

7.2. The influence of the Board of independent commissioners on financial performance

In this study, it cannot be found the influence of corporate governance mechanism through the existence

of board of independent commissioner to the company's performance, although, the proportion of independent commissioner on average is about 30% from the total of board of commissioner in company. It indicates that the existence of board of independent commissioner is considered not effective enough to control and monitoring toward company's manager. Besides, it still found that several manufactures companies are included into Indonesian Stock Exchange list which is not applying rules from the BAPEPAM (Capital Market Supervisory Agency and Financial Institution).

According to the survey obtained by IICG, GCG considered merely as regulation. The companies still do not realize the benefit of GCG, since it is not clear yet. The result is in contradiction with Coleman and Biekpe's research (2014) that independent commissioner has no significant influence on financial performance.

7.3. The influence of Audit Committee on financial performance

Audit committee has an important role on controlling the company. However, the result of the study shows that BAPEPAM (Capital Market and Financial Institution Supervisory Agency) do not clarify the criteria for audit committee to have financial literacy, yet. Since every member of BAPEPAM (Capital Market and Financial Institution Supervisory Agency) has its own preference on choosing the audit committee, therefore it can cause prejudice that the amount of audit committee does not influence the company's financial performance.

The result of the study proves that audit committee has no significant influence on financial performance. It also relates with Noviawan and Septiani (2013) which state that audit committee do not have significant influence on financial performance.

7.4. The influence of managerial ownership on financial performance

Herawaty (2008) states that managerial ownership is include into media for effective controlling. Hence, it can reduce the use of management profit by the manager. Furthermore, Syarifuddin, (2006) hope that managerial ownership can bring the same interest between manager and shareholder so that it can be improved the company's performance. On the other hand, Arifani (2013) states that managerial ownership has no positive influence on financial performance. In line with Arifani's

statement, in this result of study, managerial ownership has no significant influence on financial performance.

7.5. The influence of institutional ownership on financial performance

Jensen and Meckling (1976) describes that managerial ownership and institutional ownership are the two primary corporate governance mechanisms which help to control agency conflict. The institutional investor is able to show strong corporate governance mechanism to monitor company's management. The influence of institutional investor toward company's management becomes quite important to align the management interest with the shareholders (Sekaredi, 2011). This, also, correlates with Noviawan and Septiani (2013) as well as Arifani (2013) which state that institutional ownership has positive influence on financial performance. Hence, the result of study also proves that institutional ownership has positive impact and will lead into financial performance.

7.6. The influence of auditor type on financial performance

Auditor type has no significance influence on financial performance. The amount of auditor type whether in a big or even small company will not influence financial performance. Therefore, there is no guarantee if the

company who has been audited by a Big4 public accounting firm can improve financial performance compare with non-big four public accounting firm. Instead of depend on the image of public accounting firm, the quality of Big4 public accounting firm is seen from the professionalism, independency, and integrity point of view. Hence, by the three components which owned by the auditor, the auditor will finish the report professionally as well as by the independency and integrity. That is why the reputation of auditor do not influence financial performance.

8. Conclusions

Regarding the result and the analysis, this study conclude that the board of commissioners and institutional ownership has positive impact on financial performance. Thus, the bigger the amount of board of commissioner and institutional ownership is will lead to a better financial performance. The board of independent commissioners, audit committee, managerial ownership and auditor type have negative influence on financial performance. Hence, the bigger amount of board of independent commissioners, audit committee, managerial ownership, and auditor type will not lead to improve the financial performance.

REFERENCES

1. Ahmed, E, & Hamdan, A. (2015). The Impact of Corporate Governance on Firm Performance: Evidence From Bahrain Bourse. *International Management Review* 11(2).
2. Ahmed, H & Gábor, A. (2012). An Examination of the Relationship of Governance Structure and Performance: Evidence from Banking Companies in Bangladesh. *International Management Review*, 11(2).
3. Arifani, R. (2013). Pengaruh Good Corporate Governance Terhadap Kinerja Keuangan Perusahaan. *Malang: Universitas Brawijaya*.
4. Bukhori, I. (2012). Pengaruh Good Governance dan Ukuran Perusahaan Terhadap Kinerja Perusahaan. *Universitas Diponegoro*.
5. DeAngelo, Linda Elizabeth. (1981). Auditor Size and Audit Quality. *Journal of Accounting and Economics*, 3, 183-199.
6. Fahmi, I. (2013). Analisis Laporan Keuangan. *Bandung: Alfabeta*.
7. Ferreira, A. M., Branco, M. C., and Moreira, J A. (2012). Factors influencing intellectual capital disclosure by Portuguese companies. *International Journal of Accounting and Financial Reporting*, 2(2).
8. Foroghi, D and Shahshahani, A. M. (2012). Audit Firm Size and Going-Concern Reporting Accuracy. *Interdisciplinary Journal of Contemporary Research in Business* 3, 1093-1098.
9. Ghozali, Imam. (2011). Aplikasi Analisis Multivariate Dengan Program SPSS. *Semarang: Badan Penerbit Universitas Diponegoro*.

10. Herawaty, V. (2008). Peran Praktik Corporate Governance sebagai Moderating Variable dari Pengaruh Earning Management terhadap Nilai Perusahaan. *Jurnal Simposium Nasional Akuntansi XI Pontianak*.
11. Jensen, M. and Meckling, W. (1976). Theory of the Firm: Managerial Behavior Agency Cost, and Ownership Structure. *Journal of Finance Economics*, 3, 305-360
12. Kasmir. (2012). Analisis Laporan Keuangan. Jakarta: PT. Raja Grafindo Persada.
13. Kusumawati, D. N & Riyanto. (2005). Corporate Governance dan Kinerja: Analisis Pengaruh Compliance Reporting dan Struktur Dewan terhadap Kinerja. *Makalah SNA VIII*.
14. Martono & Harjito, A. (2013). Manajemen Keuangan. Yogyakarta
15. Martsila, Ika Surya dan Meiranto, Wahyu. (2013). Pengaruh Corporate Governance Terhadap Kinerja Keuangan Perusahaan. *Diponegoro Journal of Accounting*, 2(4).
16. Moeljono, Djokosantoso. (2005). Budaya Organisasi dalam Tantangan. Jakarta: PT. Elex Media Komputindo.
17. Noviawan, R. A., & Septiani, A. (2013). Pengaruh Good Corporate Governance dan Struktur Kepemilikan terhadap Kinerja Keuangan. *Diponegoro Journal of Accounting*, 1-10.
18. Putra, D.S.T. (2012). Pengaruh Independensi, Mekanisme Corporate Governance, Kualitas Audit, dan Manajemen Laba terhadap Integritas Laporan Keuangan. *Universitas Diponegoro*.
19. Rachman, Arief Nour, Rahayu, Sri Mangesti & Topowijono. (2015). Pengaruh Good Corporate Governance Dan Financial Leverage Terhadap Kinerja Keuangan Dan Nilai Perusahaan (Studi Pada Perusahaan Yang Terdaftar Di Indeks Sri Kehati Selama Periode 2011-2014). *Jurnal Administrasi Bisnis (JAB)*, 27(1).
20. Rustriani, N.W. (2010). Pengaruh Corporate Governance Pada Hubungan Corporate Social Responsibility Dan Nilai Perusahaan. SNA XII.
21. Savitri, Roswita. (2010). Pengaruh Mekanisme Corporate Governance terhadap Ketepatan Waktu Pelaporan Keuangan. *Universitas Diponegoro*.
22. Sekaredi, Sawitri. (2011). Pengaruh Corporate Governance Terhadap Kinerja Keuangan Perusahaan. *Universitas Diponegoro*.
23. Sugiyono. (2012). Metode Penelitian Bisnis. Bandung: Alfabeta
24. Weisbach, M. S. (1988). Outside Directors and CEO Turnover. *Journal of Financial Economics* 20, 431 - 460.
25. Weston, J.F & Copeland. (2010). Dasar-Dasar Manajemen Keuangan Jilid II. Jakarta: Erlangga.
26. Whiting, Rosalind H. and James Woodcock. (2011). Firm characteristics and intellectual capital disclosure by Australian companies. *Journal of Human Resource Costing & Accounting*, 15(2), 102-126. Emerald Group Publishing Limited.

The Influence of Cryptocurrency Bitcoin over the Romanian Capital Market

Ștefan-Cosmin DĂNILĂ,

Master Student, "Alexandru Ioan Cuza" University of Iasi, Faculty of Economics and Business Administration, e-mail: danila.stefan96@gmail.com

Ioan-Bogdan ROBU,

Lecturer, PhD., "Alexandru Ioan Cuza" University of Iasi, Faculty of Economics and Business Administration, e-mail: bogdan.robust@feaa.uaic.ro

Abstract

Within the decision-making process, investors are interested in finding the most effective solutions that will allow them to obtain short-term benefits. Current economic environment is characterized by the emergence of new financial instruments that can assist investors to diversify their investment portfolio. Cryptocurrencies represents a category of financial assets that can be used by investors to reduce risk and achieve significant returns. Therefore, the study intends to analyze the financial behavior of investors in the moment of publishing the financial statements. Financial statements could have a positive or negative influence on the investment portfolio and structure.

The issue analyzed by this study is represented by the ability of the cryptocurrency Bitcoin to be considered as an alternative investment asset. The study is divided into two parts. In the first part, the study presents the review of literature about value-relevance, cryptocurrency term and speculative bubble. The second part presents the research methodology and results. The results of the study validate the hypothesis of this study, cryptocurrency Bitcoin being a financial asset that can be used as an alternative investment asset for diversification of investment portfolio.

Keywords: capital market, crypto-currency, Bitcoin, financial information, value relevance, conservatism accounting

JEL Classification: C58, M41, O16

To cite this article:

Dănilă, S-C., Robu, I.-B. (2019), The Influence of Cryptocurrency Bitcoin over the Romanian Capital Market, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 507-519, DOI: 10.20869/AUDITF/2019/155/020

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/020>

Received: 20.05.2019

Revised: 25.05.2019

Accepted: 18.06.2019

1. Introduction

For the economic environment, financial market represents a mean of mobilizing the capital towards profitable areas for the participants. Depending on the time horizon used, the financial market has two components: the monetary market (short term) and the capital market (long-term). The capital market represents the meeting place between the demand for securities from investors seeking diversification of their investment portfolio and the supply of securities of companies. Investors, seen as participants to the capital market, are looking for financial instruments to reduce investment risks and increase returns. The annual financial statements represent for the modern investor a credible source that could help them in the decision-making process (IASB, 2015). The value relevance of the information presented in the financial statements is a subject approached in the literature by many researchers. The concept of relevance is defined as the impact that a financial information may have on decision-making process (Barth, 2001).

Cryptocurrencies are financial instruments that are used by investors to diversify their investment portfolio, and this concept is growing with the insertion of Bitcoin cryptocurrency. Following the success of Bitcoin, other virtual coins also appeared, known as *altcoins* in the specialized literature, expanding the area in terms of investment opportunities (Krafft et al., 2018). Many researchers have drawn attention to the fact that Bitcoin is a financial instrument not regulated by any financial institution, making it possible for the speculative bubble to emerge. The current study aims to analyze the impact of the virtual Bitcoin currency on companies listed on Bucharest Stock Exchange.

The analyzed companies have been selected on the basis of the availability of exchange price data and published annual financial statements. The study proposes to analyze the value relevance of financial information through positive or negative news, starting from Basu (1997). The market price of the listed companies will be calculated as a ratio between $P_{31.12}$ and $P_{01.01}$. The analysis will be based on a multiple linear regression between the stock market price seen as dependent variable and the main return ratios and financial leverage, seen as independent variables. The standardization of the first relationship will make it possible to analyze the correlations between the virtual

Bitcoin stock market price and the stock price of firms influenced by financial information.

The current study is structured in three sections. The first part presents the review of the literature on the concept of value-relevance, the concept of speculative bubble and the definition of the Bitcoin cryptocurrency. The second section presents the research methodology used to obtain the results, showing the significant models for analyzing the value-relevance, the Bitcoin cryptocurrency evaluation model, as well as the model used to study the correlation between the price of the stocks and the price of Bitcoin cryptocurrency. The last part of the study presents the results of the empirical model and the conclusion based on the results obtained.

2. Literature review and hypothesis development

In the current section, the study proposes to analyze the concept of value-relevance together with an example of how to measure it. Also, the cryptocurrency market seen as an emerging market will be explained in terms of its evolution. In the last part, the study will formulate the research hypothesis that will be used to test the correlation between the stock market price and the cryptocurrency market price.

2.1. The value-relevance of financial information on the stock market

Financial information represents, for the modern investor, a fundamental resource for the investment process, for its processing and decision-making regarding the maintenance, supplementation or, as the case may be, the decrease of the participations in a particular company. Companies report their financial position and performance to current and potential investors through both annual and quarterly financial statements. The financial statements are intended to provide relevant information on financial position, financial performance, and the cash flow statement for large categories of stakeholders (Toma, 2018), but their preparation requires certain qualitative and fundamental characteristics and compliance with certain accounting principles. The framework of the IASB (2015) concept displays the two fundamental qualitative characteristics that annual financial statements must meet, respectively: relevance and faithful representation.

The value relevance of financial information refers to the impact it may have on decision-making through the projected value of the company's financial position and future performance (IASB, 2015). A financial information is relevant if it is able to influence the decisions of its user (Jianu et al., 2018). The value relevance of financial information can be analyzed through the correlation between the capital market and the financial information published by companies (Barth, 2001). The value relevance of financial information has been a widely discussed topic for the academic environment, starting with Miller & Modigliani (1966), the first scientific paper in which the term value-relevance of information was published for the first time by Amir *et al.* (1993).

Faithful representation or credibility (IASB, 2015) can be defined as a true and a fair representation of the financial position and performance of a company, based on the conservatism accounting principle. This principle, which, on one hand, considers avoiding the overvaluation of assets as well as the underevaluation of the debt elements and, on the other hand, takes into account the possible write-downs of an asset, write-downs evidenced by the adjustments accounts for the items of temporarily impaired assets and depreciation in the case of irreversibly depreciated assets and the rise in debt items (Toma, 2018). According to the literature, the conservatism principle forbids the overvaluation of the assets and proposes a pessimistic attitude towards the future benefits of company (Toma, 2018).

The conservatism principle implies an economic approach according to which: at the close of the financial year, only profits earned in that financial year are taken into consideration, account shall be taken of all foreseeable and potential liabilities occurring in the current and also previous years and shall be taken into account of all value adjustments regardless of whether the result of the exercise is profit or loss (Toma, 2018). Toma & Robu (2014) describes the involvement of the accounting conservatism principle in financial reporting, as an increase in depreciation, loss, and a decrease in the value of assets and economic benefits generated. Lev & Zarowin (1999), by studying the relationship between equity and the stock price, concluded that firms that have intangible assets that have a high proportion in the firm's structure can see differences between the times of recognizing the costs and revenues of these assets. The IASB concept (2015) defines the intangible asset as a non-monetary, identifiable but non-physical

resource. Srivastava (2014) has shown that with the changes in the economy, the number of companies focused on activities involving the use of intangible assets has increased. Barth (2017) by analyzing the stock price and financial information based on the CART, estimates an increase in relevance to data on the intangible assets situation.

The relationship between financial information and the stock price could be explained through the market efficiency concept. An efficient market describes how financial instruments react when a positive or negative news is published, and there is a direct correlation between the two. Basu (1997) analyzed the impact of the conservatism principle on the results of a company. In his assessment, he analyzed the financial news and classified them as: positive news ($P_{31.12} > P_{01.01}$) or negative news ($P_{31.12} < P_{01.01}$) on the market. His analysis of the influence of the prudence principle on the results of a company concluded that negative events had an impact of two to six times greater than in the case of positive events. Thus, given the implications that news may have on stock market prices, investors will be more reticent in investing in a company providing negative news.

Robu & Toma (2014) analyzed Basu's (1997) relationship with the impact of the conservatism principle on the stock price of companies listed on Bucharest Stock Exchange. The variables used in the model are: total assets, total liabilities, equity, net result and stock price. On the basis of the results obtained, the study determined the significant influence that the total assets variables and total debts have on the stock price. Therefore, investors will be interested in the publication of financial statements and increases or decreases in the structure of assets and liabilities, based on which specific profitability rates are calculated, such as the return of assets, return on equity and the financial leverage. Filip & Raffournier (2010) analyzed the value relevance of financial information according to the two categories of companies listed on the Bucharest Stock Exchange: standard and premium. The link between financial information and the stock price variation is explained at a rate of 40% under a transition economy. After adjusting the data, the stock price variation according to financial information is explained in a proportion of 19.9%. The analysis presented the investment behavior at the time of publication of the financial statements. Investors at the time of publication

of positive results have a negative attitude, while negative changes can positively influence their behavior, this result being a consequence of the relatively inefficient market (Filip & Raffournier, 2010).

2.2. Cryptocurrencies and their evolution on the financial market

Cryptocurrency market has recorded an increase in investor interest over the last few years due to the high returns that these financial instruments provide, but also to the potential they display. Venter (2016) presents the difference between the term of *electronic money* used in commercial bank transactions and the term of *cryptocurrencies*. The electronic money gives us the equivalent of money in physical form and expressed in a particular currency (e.g. USD) placed in a bank account. On the other hand, the term cryptocurrency does not refer to any form of physical money, but only a form of transactions that take place in the digital environment. The most used example is Bitcoin, which will be analyzed within this study.

2.2.1. Concept of Bitcoin cryptocurrency

Officially introduced in 2009, Bitcoin digital currency (BTC) has enjoyed real success in the financial markets, gaining value that has brought tremendous returns to investors, many of them being convinced that Bitcoin is the currency that will bring a new perspective on what concerns the term "money". F.M. Ametrano (2016) said that Bitcoin created a competitive environment between digital coins and money circulating on the fiduciary principle, or money that runs on a trustworthy basis, which puts virtual Bitcoin money in the position of the future internationally accepted payment means. Although, Bitcoin is currently rated as the most traded virtual currency with a market capitalization of 216 billion US dollars at the end of 2017 (www.coinmarketcap.com, accessed on February 25, 2018), its main objective remains the electronic commerce. Malhora (2014) asserted the fact that Satoshi Nakamoto, presumed "the creator of Bitcoin", conceived this currency as an autonomous monetary system, simultaneously fulfilling the function of money and the means of online payment, the novelty element being related to the parties involved in the transaction accomplishment, because e-commerce is traditionally done through an intermediary, but with the emergence of Blockchain technology,

transactions are made between partners without the intervention of an intermediary (*peer-to-peer*).

The value of a financial asset can be measured by various methods, but fundamentally, a financial asset (shares, bonds, etc.) can also be expressed by a fundamental value, this being the market value of a supported asset based on credible information that supports price dynamics. Such information may be generated in the case of shares, mainly by the financial statements of that company, including half-yearly and quarterly financial statements. In case of bitcoin, it is made up of nothing more than bits (Alstyne, 2014). Alstyne (2014) provides an answer related to the reason why Bitcoin has market value, as long as it is not backed by any support, such as sovereign bonds that are covered by treasury certificates issued by to the US Treasury.

First of all, even if Bitcoin has no fundamental value (Cheah et al., 2015), Bitcoin still has a technical value represented by the problem-solving algorithm, each virtual coin having a public key that can record a transaction highlighting the three components (buyer, seller, and quantity), the amount of bitcoin not being able to be copied with the software key that does not allow the use of coins but that of their owner. The initial purpose of this e-commerce support coin allowed the use of bitcoin at a zero transaction cost, which led to an increase in its use especially by low-activity traders with a profit of around 5% -10% of the transaction.

Since its launch in 2009, the virtual currency price has seen significant increases overtaking the yields of companies' shares and national indices. Since the beginning of 2013, the virtual currency has seen massive increases, with the end of the year characterized by a fall in the stock market price. The study divides the price dynamics during 2013 into four moments, which have had an impact on the future developments of Bitcoin. In March 2013, Cyprus decided to increase bank deposit taxes, which created a panic at European level, many European citizens looking for a solution to protect themselves against the fall of the Euro. Therefore, they decided to convert the Euro into the virtual Bitcoin currency (Warner, 2013). The United States' financial debt limitation was an investment issue, a global financial problem, the moment when the attention of many turned to the decentralized monetary system, making the virtual Bitcoin currency a possible candidate, so the demand for this currency is rising

(Fontevicchia, 2013). In November of the same year, the interest shown by the Chinese in Bitcoin, as well as rising demand, was a determinant of Bitcoin growth (Hill, 2014).

The rapid rise in the virtual currency drew the attention of the Chinese government that decided to suspend transactions and its acceptance as a means of payment in December 2013, which led to a 50% fall in the stock price from \$ 1,132 to \$ 542 (Hill, 2014). Bitcoin is traded at roughly \$ 7,000, the historic maximum being set on December 17, 2017, when the value of a Bitcoin reached approximately \$ 19,665.

Growing interest from investors looking for new financial instruments to diversify their investment portfolio as well as accepting Bitcoin as the means of payment has attracted the attention of financial authorities. The first step towards regulation in the area of cryptocurrency was represented by the legislative framework drawn up by the Belarusian authorities (Lubomir Tassev, 2018). Thus, the virtual currency could be accounted for its destination as a financial asset acquired for the purpose of maintaining the long-term or short-term income that generates income for the person holding it or as a commodity that can be sold further. Venter (2016) presented the need to develop a new legal framework in the IASB for the presentation and accounting of virtual currencies. Currently, the current company's approach to accounting for Bitcoin's assets is the following standards: IAS 7, "Cash Flow Statement", IAS 39, "Financial Instruments: Recognition and Measurement", IAS 2, "Inventories", and IAS 38, "Intangible Assets".

2.2.2. Bitcoin's evolution in the context of speculative bubbles

The speculative bubbles represent a financial cycle characterized by a price increase determined by the interest of the participants who trade the asset and generate an imbalance between the fundamental value and the value at the actual moment, giving rise to the speculative bubble. After the rising trend of growth, there is a period of decline, a drop that creates a shock on the world's biggest financial markets. Rosser (1997) classifies the term „speculative bubble” into two broad categories: rational bubbles, at which time investors know about its existence and can make a decision in this regard and irrational bubbles, when investors are driven by the market feeling, feeling not correlated to the

fundamental value of that asset. Cheung (2013) exemplifies the causes through which these financial imbalances can arise, among which are listed cases that refer to regulatory elements such as: inadequate market infrastructure in terms of information flow (Taipalus, 2012), inadequate regulation (Sornette, 2003), overestimation of some information or growth prospects (Shiller, 2000) and over-selling of that element (Vogel, 2010). The largest speculative bubbles that have remained in history were: the *Tulipmania* crisis (Holland, 1637-1638), the *Mississippi* bubble and the *South Sea Company* bubble. In the first case, investors bought and sold tulip bulbs, considered at the time a symbol, this "asset" being an element that was speculated until 1637, when the speculative bubble burst, many traders who purchased significant quantities of tulips having suffered significant losses. The other two bubbles were characterized by investment of large amounts of cash in the capital of some monopolistic companies that led to the increase in the value of that company until the public discovery that the companies were overvalued, their value being higher than the fundamental value that led to the collapse in 1720.

Cheah & Fry (2015) studied the virtual Bitcoin currency price between July 2010 and December 2012 and November 2012 to November 2013, respectively, and concluded that the Bitcoin price is overvalued, which determines the presence of a speculative bubble, more important being Cheah & Fry's (2015) discovery of the emergence of a speculative bubble at the beginning of 2013. In order to analyze the hypothesis that Bitcoin is a speculative vehicle, Baek & Elbeck (2015) used an econometric regression model in which the price fluctuation of Bitcoin was the dependent variable, while the main macroeconomic indicators as well as the spread between the maximum price and the minimum of the day of the virtual currency were the independent variables, the significant element of the regression being the maximum and minimum price of the Bitcoin, from which the study concludes that the profitability of the Bitcoin market is driven by investors, with the other indicators not having a significant influence. The most recent speculative bubble was recorded on February 2, 2018, when the DJIA index fell by 666 points, a phenomenon due to higher yields on the bond market, many investors wondering whether this increase in returns provided by bonds and wage increases can also trigger inflation. As for Bitcoin, the study can identify similar factors that could determine that the virtual

currency is in a speculative bubble: inadequate regulation, overselling, and overestimation of growth prospects. As mentioned in section 2.1.1. Bitcoin has no fundamental value, but buy-in buyers rely on the computer algorithm, considered indestructible, with a limitation in the number of virtual currencies and operating on an unregulated market.

2.3. The development of research hypothesis

For the modern investor, diversification of the investments' portfolio represents a way of reducing the risk associated with depreciation of the component assets. Bitcoin, viewed from the position of a financial instrument represents another asset used in the investment process. Also, along with the literature which has been presented above, the present paper wants to test the following hypothesis:

H1: The cryptocurrencies prices are inverse correlated with the evolution of the companies' stock prices listed on Bucharest Stock Exchange, at the time of publication of the financial statements.

3. Research methodology

The present paper proposes to study the correlation between the stock prices, for the companies which are listed on Bucharest Stock Exchange, and the cryptocurrency market price, represented by the digital currency Bitcoin, in the context in which investors present a high investment tendency for the cryptocurrencies field. Hence, the paper has an empirical character through the factors that are analyzed: rate of returns, stock prices and Bitcoin price.

3.1. The estimation of the financial information influence over the market

The influence of the financial information represents for many researchers, a starting point in terms of providing an answer about the position and performance of a particular company or about an index which is available for trading purposes. Therefore, among the most representative models for value relevance measures is the Ohlson model (1995).

Ohlson model (1995) represents a valuation model for the relevance of financial information, which is presented in relation number 1.

$$P_t = \beta_0 + \beta_1 ANCPSt + \beta_2 EPS_t + \varepsilon_t \quad (1)$$

The variable presented in the model are:

P_t – the stock price at the half of the fiscal year t+1;

$ANCPSt$ – book value per share at the end of the year t;

EPS_t – earnings per share at the end of the fiscal year t;

$\beta_{0;1;2}$; – regression coefficients;

ε_t – error term, a random variable;

The value relevance is measured by using R square (R^2), where elements such as earnings per share and book value per share are measured in order to explain the changes in the stock price.

Basu (1997) has analyzed the relation between positive and negative results of a company and their stock prices. The results concluded that the persistence of the negative changes in the structure of results is more pronounced than in the case of the positive changes that occur in the structure of results. The equation is presented in relation number 2.

$$\frac{X_{it}}{P_{it-1}} = \gamma_0 + \gamma_1 DR_{it} + \gamma_0 R_{it} + \gamma_1 R_{it} * DR_{it} \quad (2)$$

The variables presented in the model are:

$\frac{X_{it}}{P_{it-1}}$ – earnings per share during the fiscal year T and the share price at the beginning of the fiscal year;

DR_{it} – dummy variable which sets out the condition of $R_{it} < 0$, whose value is 1, failing this, its value is 0;

R_{it} represents the profitability of the firm.

The same way as the Ohlson model, the value relevance is measured by using R square (R^2), in order to explain the variation of the stock prices through the earnings per share element and those two dummy variables.

3.2. Testing the influence of Bitcoin over the financial market

Bitcoin as an international financial instrument came into the attention of academic sector in 2013, at the moment when Bitcoin has exceeded the returns provided by other financial instruments such as: bonds, stocks,

options and others. The first country which reacted in this context was China, which in December 2013 decided to suspend Bitcoin transactions, which caused a drop in the price of the virtual currency of approximately 50%. The academic sector decided to analyze the international consequences that this unregulated asset could have after this violent drop at an international level.

Baek & Elbeck (2014) analyzed the cryptocurrency price between July 2010 and February 2014, by examining data regarding the main macroeconomic indexes. The equation is presented in relation no.3.

$$R_t = \beta_0 + \beta_1 \Delta cpi + \beta_2 \Delta ip_t + \beta_3 \Delta rpce_t + \beta_4 \Delta sp500_t + \beta_5 \Delta TN_t + \beta_6 \Delta euro_t + \beta_7 \Delta unemployment_t + \beta_8 \Delta spread_t + \varepsilon_t \quad (3)$$

Where:

R_t represents the monthly changes in the Bitcoin price;

Δcpi represents the monthly changes of the consumer price index;

Δip_t represents the monthly changes of industrial production;

$\Delta rpce_t$ represents the monthly changes of the real personal consumption expenditures;

$\Delta sp500_t$ represents the monthly changes of Standard & Poor's 500 index;

ΔTN_t represents the monthly variation in the 10-year Treasury notes;

$\Delta euro_t$ represents the monthly changes of the euro exchange rate;

$\Delta unemployment_t$ represents the monthly changes in national average unemployment rate;

$\Delta spread_t$ represents the monthly changes in the spread between daily high and low Bitcoin prices;

In order to confirm the analyzed hypothesis, R square has been used, the result of the econometric regression presented that the monthly changes variation can be explained by the difference between daily maximum and minimum Bitcoin prices, as a significant element at an alfa risk of 0.01. Therefore, the study has concluded that Bitcoin price is not influenced by the external factors represented by macroeconomics indexes, on the contrary Bitcoin price is influenced by the participants involved in the virtual currency selling-buying process.

3.3. Population, sample and data source

The current section wants to present the total population, as well as the criteria used in the selection of the sample from the total population of BET companies. The variables used in the empirical analyze will be presented, as well as the source of data.

3.3.1. Sample data

The population studied in the present paper is represented by the companies listed on the Bucharest Stock Exchange, component companies of the national Bucharest Stock Exchange index (BET Index). From the total of 12 companies operating in different areas of activity such as: banking sector, oil sector, medical sector and so on, which constitute the BET index, a number of 6 companies has been extracted, the availability of the financial statements and stock prices being the selection criteria. The financial data which have been processed and used in the empirical analyze have been taken over from the financial statements of the companies during the period 2012-2016. The elements from the financial statements which are of interest for the study have been: Operating Result, Total Assets, Total Debts, Owner's Equity and Net Result. The elements previously mentioned have allowed calculation of the three of the most important rate of returns. The prices of Bitcoin and firms which constitute the sample, have been taken over from www.investing.com, the prices which were used in the model being the daily open prices. The data and econometric models have been processed using SPSS 20.0.

3.3.2. The econometric models used in the research

The variables used to develop the econometric models are represented, on one hand, by the companies' stock prices and the Bitcoin price, both being expressed in logarithmic scale and, on the other hand, by the return on equities, return on assets and financial leverage. The empirical models used in the present paper are represented by two multiple regression models, through which the study is going to analyze, as a first step, the influence of rate of returns on companies' stock price.

$$\begin{aligned} \text{Company_Price} &= \beta_0 + \beta_1 ROE + \beta_2 ROA \\ &+ \beta_3 FL + \varepsilon \end{aligned} \quad (4)$$

where:

$$\text{Company_Price} = \ln \left(\frac{P_1 - P_0}{P_0} \right);$$

P_1 – represents the stock price on 31.12.N;

P_0 – represents the stock price on 01.01.N;

$(P_1 - P_0)$ – represents the difference between the stock price on 31.12.N and the stock price on 01.01.N;

ROE – return on equity;

ROA – return on assets;

FL – financial leverage;

$\beta_i, i = \overline{1,3}$ - represents the regression coefficients;

ε = error random variable;

The next step of the empirical approach is represented by the standardization of equation number 4 and analyzing the relation with the Bitcoin price. The equation is presented in relation number 5.

$$\text{Standard_Company} = \beta_0 + \beta_1 \text{Bitcoin_Price} + \varepsilon \quad (5)$$

Where:

Standard_Company - represents the standardized equation of the econometric model presented in relation number 4.

Bitcoin Price – $\ln(P_1/P_0)$

$\ln(P_1/P_0)$ – represents the logarithmic changes in the Bitcoin price;

β_i - represents the regression coefficients;

ε = residual component;

4. Results and discussions

Starting from the proposed objectives, the study aims to present the influence of return ratios and financial leverage on companies' stock prices. The standardization of the first econometric relationship to allow us to study the influence that Bitcoin's virtual currency has on the investors' investment behavior. The equations used are shown in **Table no. 4**, respectively relationship no 5.

4.1. Descriptive statistics

The results of the descriptive statistics are presented in **Table no. 2** and indicate for the total sample (n) a number of 30 observations, where are presented the averages of the return ratios and financial leverage, calculated on the basis of the items included in the financial statements. The mean of the analyzed variables is positive, ROE presenting that companies which are included in the sample, in terms of net result and owner's equity are positive which have a positive impact over the stock price. The use of assets efficiency' value being 0,0795 is reflecting the operating income and total assets as being positive in the analyzed period. The financial leverage has the highest value comparing to other variables, because the companies present in their financial statements a value of total debts higher than owner's equity. The companies' stock price presents a positive value, which can represent that companies based on the financial statements have recorded a positive trend on the market.

Table no.1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	30	-0,0747	0,1850	0,0734	0,0650
ROA	30	-0,0429	0,6232	0,0795	0,1130
FL	30	0,0000	8,1200	1,5513	2,7030
Company Price	30	-0,3410	0,6180	0,0494	0,2356
Valid N	30				

Source: Own processing in SPSS 22.0

The results of the descriptive statistics are presented in **Table no. 2** and indicate for the total sample (n) a number of 30 observations, where are presented the company's stock prices and the Bitcoin averages. The mean of standardized equation of companies' stock

prices are positive, while the mean of Bitcoin price is negative. Based on these results, the difference between the positive sign of stock prices and the negative sign of Bitcoin price could present the backward correlation in the analyzed period.

Table no. 2. Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Standard_Company	30	-0,2045	0,3664	0,0494	0,1247
Bitcoin_Price	30	-0,0090	0,003	-0,0018	0,0046
Valid N (listwise)	30				

Source: Own processing in SPSS 22.0

4.2. Results on the impact of financial statements on the financial market

Table no. 3 presents the correlation and determination coefficients calculated on the basis of the econometric equation no. 4, where we can see the direct average intensity link between the company's stock price and the company's profitability ratios, calculated on the basis of the elements taken from the financial statements of the

company. The relation between the two types of variables demonstrates the value relevance of financial data provided by the companies, with positive and negative events being found in the stock price of the shares. By analyzing the determination coefficient (R square), we can present the fact that the shown items, on return rates basis, explains the variation of the stock price fluctuation for approximately 28%.

Table no. 3. Statistics regarding model no. 4				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,529 ^a	0,280	0,197	0,2111

a. Predictors: (Constant), FL, ROA, ROE

Source: Own processing in SPSS 22.0

The parameters estimates for the econometric model are presented in **Table no. 4**, where each parameter is explained by its relation to the market price of the listed companies. The positive sign of the parameters of the analyzed model indicate the direct link with the stock price, but significant for the analyzed model is the return on equity and return on assets, as the financial leverage has no significant influence on the model. Depending on their influence on the dependent variable, we can say that the return on equity has the greatest influence on the price, because the investors are interested, on the one hand, of the net result of the company, viewed as an indicator of performance, but also as an opportunity of increase of the own financial sources by dividends

collecting, and on the other hand the size of the own equities may influence the decision-taking process on the number of shares issued by the company. A company that has issued a large number of shares can influence the net earnings per share in a negative sense, investors being interested in a bigger gain. Tracking the moment when the company distributes dividends may be another opportunity that investors can exploit to diversify their investment portfolio by engaging in short selling operations that will allow the coverage of the stock price decrease, when dividends are distributed. The operating result, component of the return on assets, influences the stock price by measuring the efficiency of the use of financial resources in the exploitation activity.

Table no. 4. Parameters estimates for model no.4

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0,134	0,077		-1,731	0,095
ROE	1,443	0,692	0,398	2,084	0,047*
ROA	0,658	0,367	0,315	1,791	0,085*
FL	0,016	0,016	0,186	1,001	0,326

Dependent Variable: Company_Price

* significant at a risk of 0.05, respectively 0.1

Source: Own processing in SPSS 22.0

The correlations of the analyzed model are presented in **Table no. 5**, where we can see the significant link between the stock price and the financial ratios. However, we can observe the positive correlations between the return on equity and the return on assets, which can explain the efficiency of the activity valued by the operating result, whose value is 0.658, explaining the increase in the net result, on the basis of which the shareholders are remunerated. Also, the financial leverage has a positive correlation with the

return on equity, which is explained through the own equities, its size being the one that determines the maximum level of debt that companies can achieve without putting their exploitation activity at risk. The literature recommends that the total debts should not exceed twice the amount of the Company's equity. The debt contracting attracts the increase of the borrowing cost, through interest, penalties and commissions, which will then be reflected in the net result of the company.

Table no. 5. The correlations between the variables included in model no.4

		Company Price	ROE	ROA	FL
Person Correlation	Company_Price	1,000	0,415	0,399	-0,059
	ROE	0,415	1,000	0,314	-0,438
	ROA	0,399	0,314	1,000	-0,223
	FL	-0,059	-0,438	-0,223	1,000
Sig. (1-tailed)	Company_Price	0,00	0,011*	0,015*	0,379
	ROE	0,011*	0,00	0,046*	0,008*
	ROA	0,015*	0,046*	0,00	0,118
	FL	0,379	0,008*	0,118	0,00
N	Company_Price	30	30	30	30
	ROE	30	30	30	30
	ROA	30	30	30	30
	FL	30	30	30	30

* significant at a risk of 0.01, respectively 0.05

Source: Own processing in SPSS 22.0

4.3. Results on Bitcoin's influence on the standardized stock price of listed companies

Table no. 6 shows the direct link of weak intensity between the Bitcoin stock price and the stock price that includes the influence of the main rates of returns. The study presents that the exchange rate fluctuation of listed companies only influences the change of the Bitcoin in the

proportion of 5.6%. The securities quoted on the Bucharest Stock Exchange are characterized by a low level of volatility, unlike Bitcoin, which is characterized by a high level of volatility. Investors, in order to better manage their risks, are tempted to diversify their investment portfolio by adding uncorrelated or inversely correlated financial instruments that will allow them, in the event of a fall of a security, to cover the loss of other securities, which are part of the investment portfolio.

Table no. 6. Statistics regarding model no. 5

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,237 ^a	0,056	0,022	0,123

^a Predictors: (Constant), Bitcoin Price

Source: Own processing in SPSS 22.0

Table no. 7 shows the correlations between the stock price of listed companies and the Bitcoin exchange rate. On the basis of the results obtained, we can sustain that the investors, depending on the capital they hold, will be tempted, during the publication of the favorable financial statements, to invest their funds in the shares of the listed companies, otherwise they will be interested in investing the capital in Bitcoin. The investors are interested, on the one hand, in the long-term investment,

but also from earning some income from speculation on the Bitcoin currency. Hence, hiring a long-term position to buy securities and diversifying the portfolio through short-term sell-purchase operations could be key to a meaningful investment portfolio. Therefore, the result obtained in Table 7 validates the hypothesis formulated at the beginning of the study on the reverse correlation between the companies' stock price and the Bitcoin exchange rate.

Table no. 7. The correlations between the variables of model no. 5

		Company_ Standard	Bitcoin Price
Person Correlation	Company_ Standard	1,000	-0,237
	Bitcoin Price	-0,237	1,000
Sig. (1-tailed)	Company_ Standard	0.00	0,104*
	Bitcoin Price	,104*	0.00
N	Company_ Standard	30	30
	Bitcoin Price	30	30

* significant at an associated risk of 0.11

Source: Own processing in SPSS 22.0

From the above presented through Tables no. 6 and no. 7, we can also add the negative sign of the coefficient β_1 , indicating the inverse relation between the two variables and the investment behavior at the time of

publishing the financial statements. The Bitcoin price is significant, so at an increase of one unit of the company's stock price, the Bitcoin price tends to depreciate by 6.41 lei.

Table no. 8. The parameters estimates for model no. 5

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0,038	0,024		1,564	0,129
Bitcoin Price	-6,408	4,967	-0,237	-1,290	0,208*

Dependent Variable: Companies Standard

* significant at an associated risk of 0.21

Source: Own processing in SPSS 22.0

If we are looking at the obtained results, we can observe that Bitcoin could be used by investors through speculation. These quick earnings that the virtual currency registers have contributed to the increase in the number of transactions, the market value becoming higher sooner than the fundamental value. Thus, the fundamental value being 0 (Cheah et al., 2015), and the Bitcoin price being influenced by the sale-purchase transactions (Baek & Elbeck, 2014), without the presence of a legal framework, may lead to the emergence of speculative bubbles. This investor interest towards the virtual currency could be likened to the Dutch tulip crisis (Shiller, 2018). Therefore, to hedge the risk of a possible speculative bubble, investors could mitigate this risk through hedging operations, which involve investing capital in a wide range of low-risk assets (bonds, treasury bills, etc.). Scaramucci (2015) showed the impact of the 2008-2009 financial crisis on hedging funds, these registering the lowest loss on the market, with an average of 21.37%, while the S&P 500 Total Return index registered decreases of approximately 36.99%, the investment portfolio being based on the investment profile and the risk tolerance of the investor.

5. Conclusions

With the purpose of diversifying the investment portfolio, the investors are interested in finding the best solutions that can guarantee the increase of the invested capital both in the short and the long term. Cheung (2013) drew attention to the fact that the price of the Bitcoin virtual currency is overvalued, the objective of this study being to study the correlation between the stock market price

of the companies and the Bitcoin exchange rate as published in the annual financial statements. Return rates used as variables of the empirical model demonstrated the influence of financial statements on the stock market price of the companies, the direct correlation between the independent variables and the dependent variable explaining the fluctuation of the stock price.

The results of the empirical study validated the initial formulated hypothesis regarding the backward correlation between the stock price of quoted companies and the Bitcoin price. This correlation between the two instruments also highlights the emergence of speculative bubbles, which can occur due to massive investments in an asset whose underlying value is lower than the traded price. Basu (1997) concluded that negative events have an impact of two to six times greater than positive events on the stock market price of the companies, the investor being interested in the financial instruments offering the highest returns.

Thus, negative market news influences investment behavior, which leads to a high interest of investors when negative news is published. The limits of this study were represented by the relatively low sample of only 6 listed companies that were selected based on the availability of annual financial statements and daily stock prices. Baek & Elbeck (2014) concluded that the investors directly influence the price of the virtual currency through sale-purchase operations, the fundamental value of the Bitcoin being zero (Cheah et al, 2015), the study propose in future to investigate through time series, the price of the Bitcoin cryptocurrency, in order to determine the existence or the absence of speculative bubbles.

REFERENCES

1. Alstyne, M.V. (2014). Economic and Business Dimensions Why Bitcoin Has Value, *Communication of the ACM*, vol. 57, no. 5, pp 30-32
2. Barth, M. E., Beaver, W. H., Landsman W. R. (2001), The relevance of the value relevance literature for financial accounting standard setting: another view, *Journal of Accounting and Economics*, Vol. 31, Issue 1-3, 77-104
3. Barth, M. Li, K. McClure, C. (2017). Evolution in Value Relevance of Accounting Information, *Stanford University Graduate School of Business Research Paper*, No. 17-24
4. Baek, C., Elbeck, M. (2014). Bitcoins as an investment or speculative vehicle? A first look, *Applied Economics Letters*, vol. 22, no.1. pp. 30-34
5. Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings, *Journal of Accounting and Economics*, 24, pp. 3-37
6. Chohan, U. (2017). Cryptocurrencies: A Brief Thematic Review, *Notes on the 21th Century*, pp. 1-8
7. Filip, A. Raffournier, B. (2010). The value relevance of earnings in a transition economy: The case of Romania, *The International Journal of Accounting*, 45, pp 77-103
8. Fry, J. & Cheah, E. (2015). Speculative bubbles in Bitcoin markets? An empirical investigation into the fundamental value of Bitcoin, *Economics Letters*, 130, pp 32-36
9. Gunji, H. (2016). Are Bitcoin Prices Rational Bubbles, *The Empirical Economics Letter*, vol. 15, no.9, pp. 819-824
10. IASB (2015). Financial Reporting Standards for the World Economy. 1st ed. London: IFRS Foundation.
11. Jaba, E., Robu, I. B., Istrate, C., Balan, C. B., Roman, M., (2016). Statistical assessment of the value relevance of financial information reported by Romanian listed companies, *Romanian Journal of Economic Forecasting – XIX*, vol. 2, pp 27-42
12. Jianu, I., Ileanu, B., Nedelcu, M., Herteliu, C., (2018). The value relevance of financial reporting in Romania, *Economic computation and economic cybernetics studies and research*, vol. 4, no.48, pp. 167-182
13. Kraftt, P., Penna, N., Pentland, A., (2018). An experimental study of Cryptocurrency Market Dynamics, *CHI 2018*
14. Kaizoji, T. (2000). Speculative bubbles and crashes in stock markets: an interacting-agent model of speculative activity, *Physica A* 287, pp. 493-506
15. Malhora, A. Maloo, M. (2014) „Bitcoin – Is it a Bubble? Evidence from unit root tests”
16. Robu, I.B., Toma, C. (2015). The use of accounting conservatism in order to reflect the true and the fair view of financial statements in the case of Romanian listed companies, *Global Journal on Humanites & Social Sciences*, 02, pp. 99-109
17. Rosser, B. (1997). Speculations on Nonlinear Speculative Bubbles, *Nonlinear Dynamics, Psychology and Life Sciences*, vol. 1, no.4, pp. 275-300
18. Scaramucci, A. (2015). The Little Book of Hedge Funds, *Ed. SkyBridge Capital*
19. Tassev, L., (2018). Crypto Business is now legal in Belarus, accessed at: <https://news.bitcoin.com/belarus-adopts-crypto-accounting-standard>.
20. Toma, E. (2018). Contabilitate financiară, *Ed. TipoMoldova*, Iași, Romania
21. Venter, H. (2016). Digital currency – A case for standard setting activity, *ASAF meeting*, no.5, pp. 1-24
22. Wang, J. (2014). A simple macroeconomic model of bitcoin, *Bitquant Research Laboratories*, pp. 1-3

Analysis of the Relationship between Accounting and Sustainable Development.

The Role of Accounting and Accounting Profession on Sustainable Development

Elena NECHITA,
PhD, Assistant Professor,
Bucharest University of Economic Studies,
e-mail: elena.nechita@cig.ase.ro

Abstract

Since the publication of the Brundtland Report (WCED, 1987), the literature in the field of accounting engaged in covering the need for research on sustainable development through several approaches. The paper aims to present the current context of sustainable development worldwide, as well as to conduct a qualitative analysis of the efforts made by standard-setting bodies, representatives of accounting profession and professionals in the field, based on the public reports prepared and the studies conducted by the latter on sustainable development, with the purpose of emphasizing the influence of accounting and accounting profession on sustainable development. This research paper contributes to enriching literature in the field of accounting for sustainable development, by highlighting the important role of accounting, as well as the initiatives undertaken by stakeholders in this area to meet the 2030 Agenda for a better world (UN, 2015).

Keywords: sustainable development, accounting, Sustainable Development Goals (SDG), accounting profession, non-financial reporting

JEL Classification: M40, M41, Q56

To cite this article:

Nechita, E. (2019), Analysis of the Relationship between Accounting and Sustainable Development. The Role of Accounting and Accounting Profession on Sustainable Development, *Audit Financiar*, vol. XVII, no. 3(155)/2019, pp. 520-536, DOI: 10.20869/AUDITF/2019/155/XXX

To link this article:

<http://dx.doi.org/10.20869/AUDITF/2019/155/XXX>

Received: 10.07.2019

Revised: 19.07.2019

Accepted: 26.07.2019

Introduction

Sustainable development implies the need to make changes to accounting with the aim of meeting users' needs for financial-accounting information (Dumitrana *et al.*, 2009). Although the concept of sustainable development is becoming more and more widespread in the accounting and management literature, there is a need to clarify what this concept refers to in the different contexts in which it is used (Godemann *et al.*, 2014). Particularly, researchers are concerned about the fact that sustainable development could remain only a matter of interest for empirical research in the field of accounting and finance, rather than a distinct and coherent research area. This concern comes as a consequence of the fact that, apart from the repeated presentation of the definition given in the Brundtland Report (WCED, 1987), many of the studies neglect the complexity of the issues that sustainable development implies (Bebbington and Thompson, 2013, cited by Bebbington and Unerman, 2018).

The 17 sustainable development goals proposed by UN (SDG) aim to promote activities and actions in areas of critical importance to humanity and the planet (UN, 2015; Bebbington and Unerman, 2018). Representatives of the accounting profession are among those who have enthusiastically embraced the SDGs, understanding the role played by accountants and accounting in meeting these goals. Although in the academic environment, research based on the subject of SDGs is developing more and more in various disciplines, particularly in business and management, examining the implications and the potential of SDGs is at an early stage from the perspective of accounting literature (Bebbington and Unerman, 2018).

The study conducted by PricewaterhouseCoopers (PwC) in 2015 on the basis of a questionnaire applied between June and July 2015, which received responses from 986 companies and 2,015 stakeholders, shows a high level of awareness of SDGs in the business community, and highlights the opportunity to turn this awareness into actions aimed at achieving these goals. For the same PwC research, Peter Bakker, president and CEO of the World Business Council for Sustainable Development (WBCSD), states that the UN post-2015 agenda consists in a historical opportunity for companies to engage in exerting a strong and positive influence on society. Moreover, top businesses can generate a major

input in achieving SDGs through innovation, investment, a significant customer base and global workforce. SDGs instead can enhance business opportunities for success by improving the business environment and providing inspiration and guidance (PwC, 2015).

The field of sustainable development offers unlimited research opportunities that have not yet been exploited and which require the exploration of various academic disciplines. Accounting practices and accounting professionals are on the edge of many of the above, hence raising the issue of an analysis of their role and impact (Bebbington *et al.*, 2017).

At the same time, studies indicate that literature is limited in terms of results based on empirical studies proving the existence of a direct causal link between accounting and economic development (Venter *et al.*, 2018; Bebbington and Unerman, 2018). Furthermore, the International Federation of Accountants (IFAC) highlights the contribution of accounting and accounting profession in meeting at least 8 of the 17 UN goals (including quality education, gender equality, working conditions and economic growth, industry, innovation and infrastructure, responsible consumption of resources etc.). The objective of our research consists in addressing the need to determine to what extent accounting influences the current trend characterized by concerted efforts made at an international level to ensure economic sustainability. To this respect, the paper aims to present the current context of sustainable development worldwide, as well as to conduct a qualitative analysis of the efforts made by standard-setting bodies, representatives of accounting profession and professionals in the field, based on the public reports prepared and the studies conducted by the latter on sustainable development.

The paper further highlights the current international context regarding sustainable development (definition of the concept, main stages of development and presentation of goals for sustainable development, progress of the regulatory process for sustainability reporting and the role of capital markets in the field of sustainability), qualitative analysis on the contribution of accounting and accounting profession to sustainable development with an emphasis on the influence of accounting regulatory bodies on sustainability, as well as the role of accounting as a tool for assessing sustainability, ending with research findings.

1. The current international background of sustainable development

1.1. Defining the concept of sustainable development

The current international background is characterized by the focus on sustainable development, manifested through the joint efforts of the world organizations and institutions working towards global sustainability. In this regard, an important first step that is to be mentioned consists in the release of the World Commission on Environment and Development (WCED) report, titled "Our Common Future" and also known as the Brundtland Report, which defines the concept of sustainable development and draws the guidelines for the actions aimed to improve living conditions worldwide. Sustainable development represents the type of development that meets present needs without compromising the ability of future generations to meet their own needs. According to WCED, this concept is based on two key elements: the idea of necessity, with particular reference to the basic needs of the poor populations, which benefit from priority attention, as well as the idea of limitation, imposed by the state of technology and social organization, closely linked to environment's capacity to meet present and future needs (WCED, 1987).

Essentially, sustainable development is a process of change through which resource exploitation, investment direction, technological development orientation, and institutional changes are in harmony and lead to the enhancement of the potential to meet present and future human needs and aspirations. In this respect, the international economy plays an important role, and major changes are needed at the level of international economic relations in order to ensure sustainability. At the same time, WCED mentions two conditions that must be met in order to consider international economic exchanges beneficial for all parties involved. A first condition is to ensure the sustainability of the ecosystems on which the global economy depends, and the second condition is to ensure fair exchanges between economic partners.

Regarding the concept of sustainable development from an accounting perspective, in 1989 the World Bank (WB)

draws attention to the need to develop a complex system of national accounts (System of National Accounts – SNA), in order to capture and highlight the impact of environmental and natural resources on income and asset variation. The main argument for the development of such a system is determined by the fact that Gross Domestic Product (GDP) does not adequately assess actual sustainable incomes, due to two shortcomings it implies. The two deficiencies relate to the treatment of environmental protection costs and the consumption of natural resources, not included in the calculation of GDP (WB, 1989). In this context, the concept of environmental accounting is being developed, a conceptual framework of environmental accounts being drawn up and proposed with the aim to be included in the system of national accounts for the reliable and accurate assessment of the influence of natural resources on sustainable incomes.

In order to meet the above-mentioned needs to achieve a real indicator of social welfare beyond GDP, the United Nations (UN) proposes an evaluation method based on the Inclusive Wealth Index (IWI), which involves the inclusion of three capital categories: productive, human and natural (United Nations Inclusive Wealth Report, 2018). The UN also develops a set of 17 Sustainable Development Goals (SDGs) to address current global challenges such as poverty, inequality, climate change, environmental degradation, prosperity, peace and justice, with deadline by 2030.

An alternative to IWI and GDP is represented by the Inclusive Development Index (IDI), developed by the World Economic Forum (WEF), which includes in the form of key performance indicators the main criteria based on which economic progress is assessed (WEF, 2018).

Although the various wealth assessment models (IDI, IWI etc.) have been examined comparatively from the perspective of their inherent advantages and limitations, no empirical research reflecting the impact of these models has been conducted so far (Engelbrecht, 2016). Engelbrecht (2016) presents the results of a comparative analysis between OECD countries and non-OECD countries, highlighting that alternatives for estimating wealth for the first category are complementary, but for countries outside the OECD, data are less relevant. Thus, such results must be interpreted with caution, since no method is an absolute measure of economic sustainability, but a combination of

different indices may lead to a method for an exhaustive evaluation of sustainable development.

1.2. The main stages of the Sustainable Development Goals (SDGs) development

The development of sustainable development goals was based on the involvement, for several decades, of participating countries and the United Nations (UN), including the UN Department of Economic and Social Affairs.

Since the United Nations Conference on the Human Environment held in Stockholm in 1972, the spread of governance for sustainable development has increased significantly at local, national, regional and international levels. The need to integrate economic development, natural resource management, security and social equity was first formulated in the Brundtland Report of 1987 (Our Common Future) and constituted the key decision-making role of the UN Conference on Environment and Development (UNCED), organized in 1992 and also known as the Earth Summit or the Rio Summit. At this event, more than 178 countries have adopted Agenda 21, a detailed action plan aimed to create a global partnership for sustainable development with the role of improving living standards and protecting the environment. In 1993, the UN General Assembly established the Commission on Sustainable Development (CSD), representing a high-level political body charged with monitoring and promoting the implementation of the Rio Summit results, including Agenda 21.

In 2002, at the World Summit on Sustainable Development, the three dimensions of sustainable development were exposed for dissemination by including them in development policies for all levels through the adoption of the Johannesburg Plan of Implementation (JPOI). Therefore, the commitment of the global community to eradicating poverty and assuring environmental protection has been reaffirmed, focusing especially on multilateral partnerships.

Following the Rio+20 Conference held in 2012, the international community has decided to set up a High-Level Political Forum on Sustainable Development (HLPF) to replace the Commission on Sustainable Development. At the same time, the member countries have agreed to start a process of

developing a set of Sustainable Development Goals (SDGs), to be established based on the Millennium Development Goals (MDGs). SDGs have replaced the MDGs in the Millennium Declaration adopted by the UN in September 2000. UN member states, including Romania, reunited in 2000 around a commitment to reduce global poverty and save millions of lives. During the period 2000-2015, the Millennium Declaration consisted in the only global agenda for development subjected to high-level agreement, and which included the following precise targets:

- Reduce extreme poverty and hunger;
- Ensure universal access to primary education;
- Promote gender equality and women empowerment;
- Reduce infant mortality;
- Improve maternal health;
- Mitigate HIV/AIDS, malaria and other diseases;
- Ensure environmental sustainability;
- Create a global partnership for development.

The process leading to the development of the post-2015 agenda for sustainability was controlled by the involved Member States with the participation of major interest groups, as well as other civil society stakeholders. On September 25, 2015, the UN General Assembly formally adopted the 2030 Agenda for Sustainable Development together with the set of 17 sustainable development goals and 169 associated objectives (UN, 2015).

At present, the High-Level Political Forum (HLPF), which is organized annually, serves as the central platform of the UN for tracking results and reviewing the 17 SDGs. Furthermore, the Division for Sustainable Development Goals (DSDG) of the United Nations Department of Economic and Social Affairs (UNDESA) provides substantial support in consolidating the capacity to achieve the SDGs. At the same time, DSDG plays a key role in assessing the global implementation of the UN 2030 Agenda. In this respect, the need for a firm commitment of all stakeholders to implement global targets is being highlighted, and DSDG aims to facilitate such commitment.

Figure no. 1 schematically illustrates the stages of the sustainable development goals implementation.

Figure no. 1. Stages of the development and implementation of sustainable development goals



Source: Author processing based on the SDG Knowledge Platform (2019)

1.3. Presenting the Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development (UN, 2015) adopted by all UN member states in 2015 is a global action program in the field of universal development and promotes the balance between the three dimensions of sustainable development -

economic, social, and environmental. The proposed actions are equally aimed at both developed and developing countries.

At the heart of the 2030 Agenda the 17 sustainable development goals are found, which are disclosed in **Figure no. 2** and which outline ambitious action steps for the next 15 years aimed to eradicate extreme poverty, combat inequalities and injustice and protect the planet by 2030.

Figure no. 2. Sustainable Development Goals (SDGs)



Source: Author processing based on the SDG Knowledge Platform (2019)

According to the PwC study (2018), SDGs can be a driving force in helping organizations to identify significant risks and opportunities, to build business models adaptable to unfavorable conditions, and implement effective strategies for economic growth, but all these goals will only happen if each part of the organization contributes to their achievement.

At present, many key global bodies such as regulatory bodies, organizations and industry representatives are working together to create a consistent set of indicators that are necessary to entities for assessing performance in

achieving the SDGs. Such a set of performance indicators would be a key step, especially if the indicators could be expressed in monetary terms, allowing for comparability and a better understanding of the contribution of enterprises to the achievement of SDGs. Also, current international trends highlight an increase in the credibility of reporting through obtaining third-party external assurance. WBCSD and PwC (2018) emphasize the distinction between the different levels of assurance, the main delimitation being made between reasonable assurance and limited assurance, as shown in **Table no. 1**.

Table no. 1. Comparison of reporting levels	
Reasonable assurance	Limited assurance
Specific to the audit of financial statements.	Assurance level lower than that provided by the audit - procedures usually involve investigation and analysis.
Provides an opinion on the extent to which financial statements disclose a true and fair view, in all relevant aspects, in accordance with the applicable regulations.	Provides an affirmation of the fact that no significant evidence has been identified indicating that the information submitted is not prepared in accordance with the applicable regulatory framework.

Source: Author processing based on WBCSD and PwC (2018)

Investors requesting non-financial reporting prefer the level of assurance provided to be reasonable, underlining the increasing importance of non-financial reporting in the decision-making process (WBCSD and PwC, 2018). However, the most frequently encountered level of assurance provided for non-financial reporting is the limited assurance. The research results showed that out of a total of 158 sustainability reports, 60% had a limited level of assurance, 13% presented a mixture of the two levels of assurance, 6% provided a reasonable level of assurance, and for 22% of the reports that were subject of the research companies did not request any assurance from an external supplier (WBCSD, 2018).

The main directions of the action plan for the use of SDGs for the development of sustainable business, according to PwC (2018), consist of the following:

- each structure within an organization plays a role in the process of achieving the SDGs - it is not just a matter of CSR;
- leadership involvement is a key aspect – parties occupying key positions in the company must show an active interest in the implementation process;

- establishing meaningful performance indicators to apply the action steps and to report the progress;
- targeting the same level of quality for both financial and non-financial reporting.

As part of the monitoring and review mechanisms, the 2030 Agenda for sustainable development “encourages Member States to conduct regular and inclusive reviews of progress at the national and subnational levels which are country led and country driven” (UN, 2015, par. 79, p. 38). These national reports are expected to serve as the basis for the periodic reviews of the High Level Policy Forum for Sustainable Development (HLPF). At the same time, periodic reviews “will be voluntary, while encouraging reporting, and include developed and developing countries as well as relevant United Nations entities and other stakeholders, including civil society and the private sector” (UN, 2015, par. 84, p. 38).

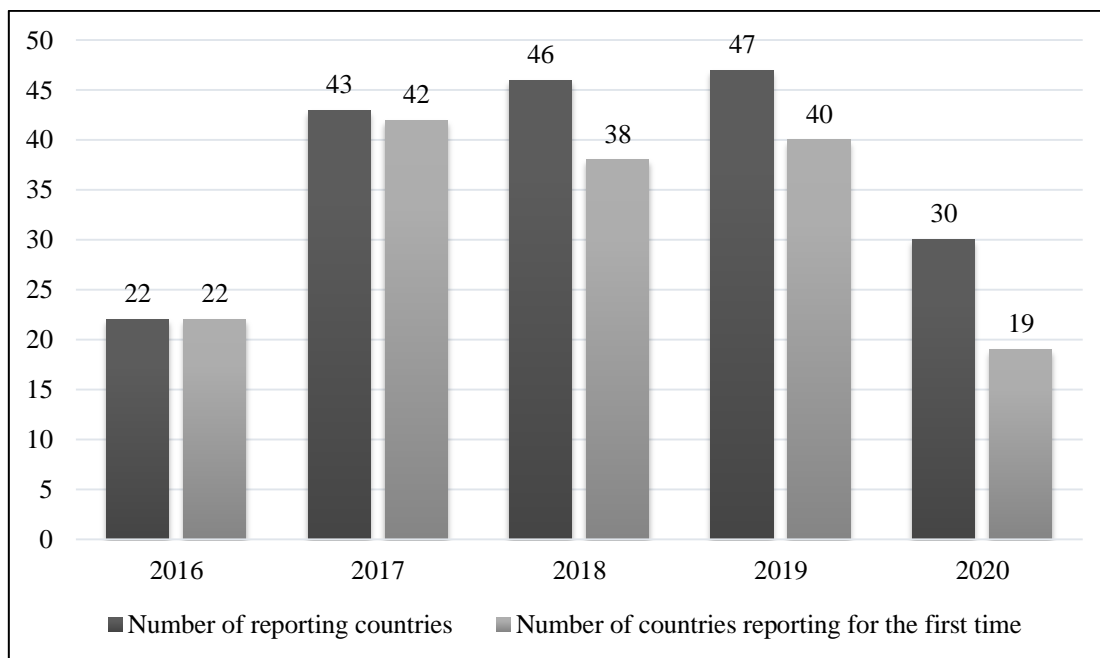
Voluntary National Reviews (VNR) are aimed at facilitating the exchange of experiences, including successes, challenges and lessons learned, in order to accelerate the implementation of 2030 Agenda. The VNR also seek to strengthen government

policies and institutions, as well as mobilize support and partnerships with stakeholders to implement sustainable development goals.

According to the database of voluntary national reports available on the Sustainable Development Knowledge Platform of the UN, 161 UN member states that joined the Sustainable Development Goals initiative of the 2030 Agenda volunteered to provide national reports on the state of the SDGs' achievement, out of which 26 states are reporting for the second time, and 1 country for the third time.

Regarding the annual progress of the number of countries that voluntarily reported the stage of achievement of SDGs, the chart presented in **Figure no. 3** highlights an increase in the number of reporting countries over the period 2016-2019, with a significant decrease in 2020, when the number will drop to 30, of which 19 will be reporting for the first time. Romania is also among the members that chose to provide information on the state of the SDGs' implementation, the first and only reporting year to date being 2018. However, Romania is also not in the list of countries that will present such a report in 2020.

Figure no. 3. The annual evolution of the number of countries that voluntarily reported the stage of achieving SDGs



Source: Own projection

1.4. The evolution of the regulatory process of reporting in the area of sustainability

The Financial Times (2019) signals that there are at least 230 initiatives on corporate sustainability standards in over 80 sectors of activity. According to Albu *et al.* (2013), the most commonly used sustainability reporting frameworks are the Global Reporting Initiative (GRI) and the United Nations Global Compact (UNGC), GRI being used mainly by multinational companies and UNGC by

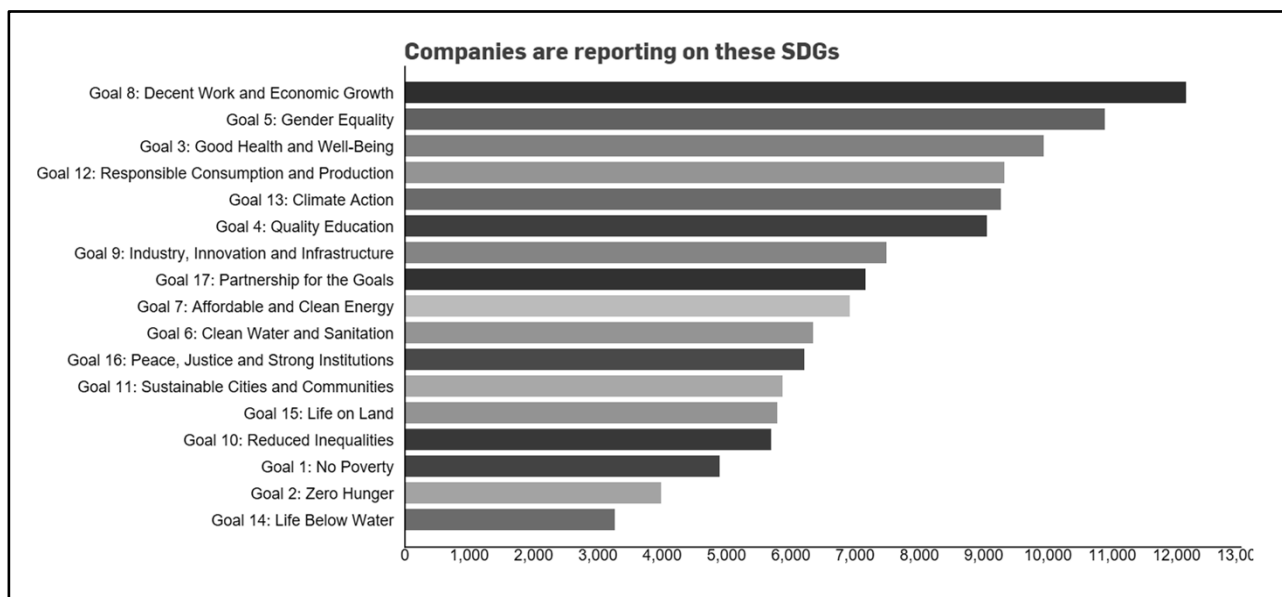
small and medium-sized enterprises in view of the fact that the latter is characterized by a more simplistic approach (Albu *et al.*, 2013, according to Wensen *et al.*, 2011). However, the same study indicates that many entities do not use a set of standards or develop their own reporting framework based on existing standards.

At international level, the set of GRI standards for sustainable development are issued Global Sustainability Standards Board (GSSB), within the Global Reporting

Initiative (GRI). The Global Reporting Initiative was set up in 1997 with the aim of developing a conceptual framework for environmental reporting, thus creating an evaluation mechanism to ensure that companies apply the principles of responsible environmental conduct. In October 2016, GRI launches the first set of globally accepted standards for sustainability reporting - GRI Sustainability Reporting Standards, developed by the GSSB - the board that is solely responsible for the development of these standards, being set up as an independent entity under GRI auspices and composed of 15 members with expertise in different areas and multilateral perspectives on sustainability reporting. GRI standards offer companies the opportunity to report for public interest their economic, social and environmental impact, highlighting their contribution to sustainable development. At the same time, GRI standards are a reliable reference for standard-setting bodies and regulatory bodies, with a modular structure that facilitates frequent updating in order to ensure relevancy. From an international perspective, GRI standards are currently mentioned and recommended in the policies of 48 capital markets across 40 countries and regions. In this respect, GRI is collaborating with stock exchanges, providing them with support in the development and implementation of sustainability reporting policies.

The alternative to GRI standards is the United Nations Global Compact (UNGC), which establishes a set of 10 principles to be applied by companies alongside this initiative with the objective of meeting basic responsibilities towards people and the planet. Companies applying UNGC regulations have the obligation to report an annual Communication on Progress (CoP) that highlights how the ten principles have been integrated into the strategy and operational activity of the entity, as well as the efforts made by them in the direction of social and environmental priorities. At present, 13,602 companies from over 160 countries (including 20 Romanian companies) report according to UNGC, as the organization provides an interactive online platform for consulting information about the participants (country, type / size, industry, current status of reporting etc.), as well as information on the SDGs reported within the CoPs. The chart presented in *Figure no. 4* was generated on this platform and highlights the number of companies that are reporting activities to achieve the SDGs under UNGC principles. In the top three goals of the reporting companies we can find Goal 8 - Decent Work and Economic Growth with 12,154 companies, Goal 5 - Gender Equality with 10,894 companies and Goal 3 – Good Health and Well-Being, respectively, with 9,940 companies.

Figure 4. Number of companies reporting activities carried out to achieve SDGs



Source: UNGC (2019): <https://www.unglobalcompact.org/interactive/sdgs/global>

Similar to the international accounting convergence process, when the International Accounting Standards Board (IASB) and the American Financial Accounting Standards Board (FASB) signed the Norwalk agreement (Memorandum of Understanding- MoU), a MoU was signed in 2010 by GRI and UNGC at the third edition of the Global Conference on Sustainability and Transparency that gathered 1,200 participants from 77 countries. According to the agreement, GRI centrally integrates the 10 principles of UNGC into the next reviewed version of the GRI Sustainability Reporting Guidelines, and UNGC adopts the GRI Guidelines as the reporting framework used by companies to develop communications on progress (CoPs).

In view of the rules applicable to the Member States of the European Union, Directive 2014/95/EU amending Directive 2013/34/EU as regards the presentation of non-financial and diversity information by certain enterprises and large groups states, mentions that “the European Parliament acknowledged the importance of businesses divulging information on sustainability such as social and environmental factors, with a view to identifying sustainability risks and increasing investor and consumer trust” (EU, 2014, par. (3), p. 1). Moreover, European regulations recommend the reporting frameworks companies can choose from in order to disclose non-financial information, which include “national frameworks, Union-based frameworks such as the Eco-Management and Audit Scheme (EMAS), or international frameworks such as the United Nations (UN) Global Compact, the Guiding Principles on Business and Human Rights implementing the UN ‘Protect, Respect and Remedy’ Framework, the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, the International Organisation for Standardisation's ISO 26000, the International Labour Organisation's Tripartite Declaration of principles concerning multinational enterprises and social policy, the Global

Reporting Initiative, or other recognized international frameworks” (EU, 2014, par. (9), p. 2).

Albu *et al.* (2013) investigates the issues of plurality and convergence of sustainability reporting standards, pointing out that regulations in this field are characterized by the existence of different reporting frameworks, resulting in a diversity of reporting practices and, consequently, a low level of comparability. However, by analogy with the convergence of financial reporting standards, a single set of rules for sustainability reporting does not guarantee the improvement of reporting practices and the comparability of the reported non-financial information.

1.5. Role and involvement of capital markets in sustainable development

According to GRI, capital market regulators play a key role in fostering good corporate governance and transparency, requiring listed companies to meet sustainability reporting regulations. Both companies and investors need greater awareness and better guidance on how to use sustainability reporting frameworks effectively. Since GRI standards are the common language for reporting on sustainable development, 40 countries and regions refer to GRI standards in their listing requirements or reporting guidelines.

In 2009, the UN is launching the Sustainable Stock Exchanges Initiative (SSE), which invites partner stock exchanges around the world to join the initiative by signing a public voluntary agreement. SSE focuses on three interdependent pillars of activity: research, consolidation of the agreement and technical assistance, performing its activity in the field of collaboration and partnership to achieve a significant level of impact. SSE aims at including representatives of all stakeholders in the capital markets in all its business flows and benefits from a network of stock exchanges, capital market regulators,

investors, companies and other experts who periodically communicate with the SSE.

Like many UN initiatives, the activity of SSE also takes into account the sustainable development goals (SDGs). Among them, SSE focuses on four SDGs of significant value for the stock exchanges, while contributing to a fifth goal, SDG 17 Partnership for goals, as an adjacent topic. Therefore, SSE organizes its activity around

the following key topics: SDG 5 Gender equality, SDG 8 Decent work and economic growth, SDG 12 Responsible consumption and production and SDG 13 Climate action.

The Sustainable Stock Exchanges Initiative regroups a number of 90 partner stock exchanges, including the Bucharest Stock Exchange, with a total of 51,073 listed companies, thus being characterized by a significant level of international coverage, as showed by *Figure no. 5*.

Figure no. 5. SSE coverage on an international level through partner stock exchanges

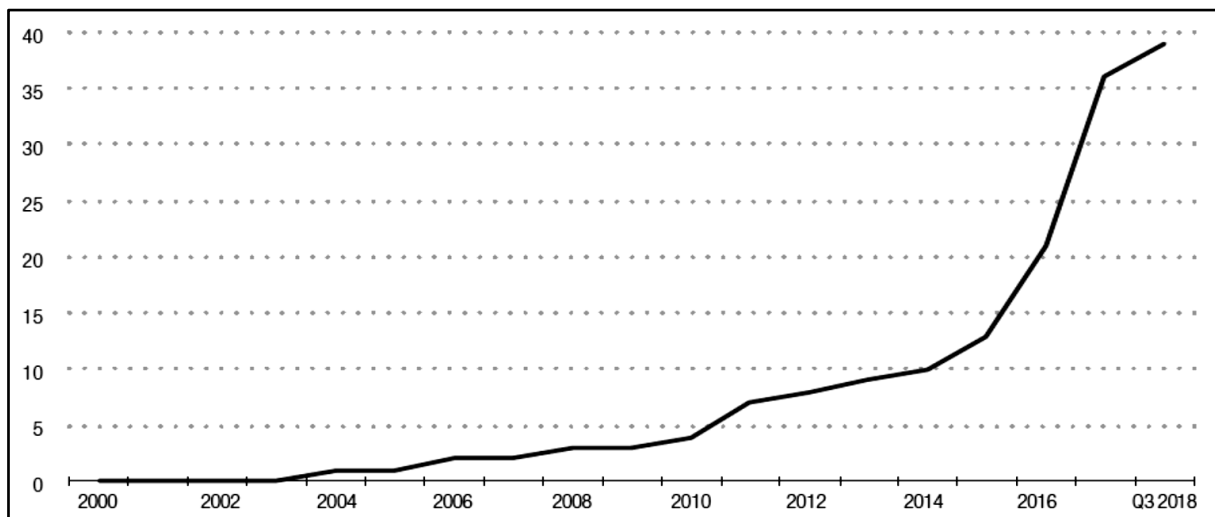


Source: SSE (2019), <https://sseinitiative.org/sse-partner-exchanges/list-of-partner-exchanges/>

According to the SSE progress report for 2018 (SSE, 2018), capital markets play an important role in helping companies find a balance between sustainability reporting and management requirements. At the end of

Q3, 2018, the number of stock exchanges providing written guidance for sustainable development reporting reached 39, compared to only 13 in 2015 (see *Figure no. 6*).

Figure no. 6. Evolution of the number of stock exchanges providing written guidance on sustainability reporting

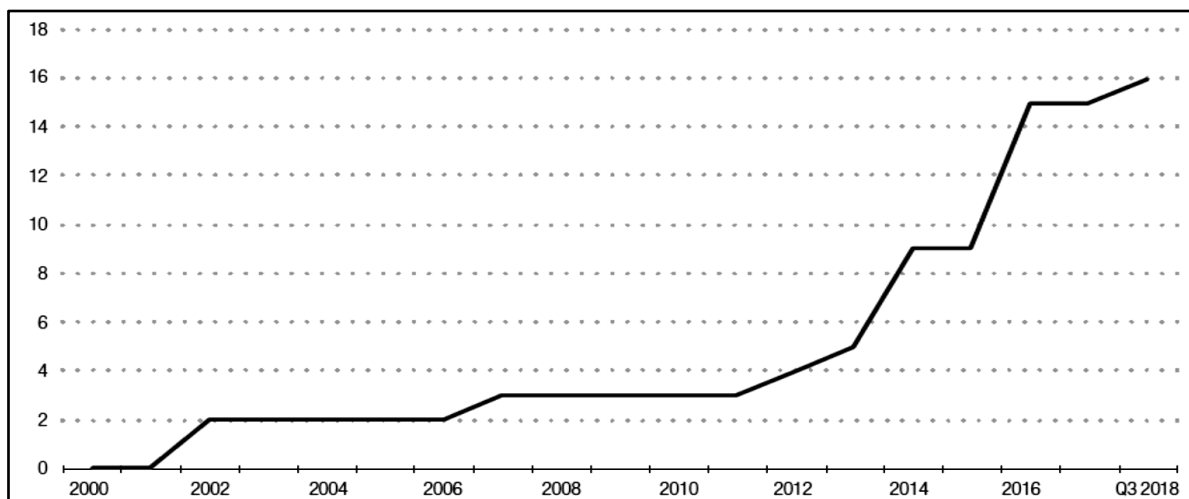


Source: SSE (2018), p. 16

Also, according to the same report, at the end of Q3, 2018 a number of 16 capital markets on 4 continents mandatory require listed companies to submit reports on sustainability (8 in Asia, 3 in Africa, 3 in South America and 2 in Europe). **Figure no.7** highlights the evolution of

the number of capital markets with mandatory reporting requirements in the field of sustainable development since 2002, when Euronext France and the Johannesburg Stock Exchange have adopted this practice.

Figure 7. Evolution of the number of stock exchanges with mandatory reporting requirements in the field of sustainable development



Source: SSE (2018), p. 17

2. Qualitative analysis on the role of accounting and accounting profession on sustainable development

Since the publication of the Brundtland Report (WCED, 1987), the literature in the field of accounting has attempted to cover the need for research on sustainable development through several directions, outlining the following perspectives (Bebbington and Unerman, 2018):

- reviewing the history, possible meanings, implications and expansion of sustainable development;
- the identification of techniques and accounting practices that are or could be used to support sustainable development;
- considering particular aspects of the sustainable development agenda in close connection with accounting;
- exploring the ontological, epistemological and methodological ramifications of the concept of sustainable development.

2.1. Research methodology

In order to determine the contribution of accounting and accounting profession to sustainable development and the achievement of SDGs, a methodological approach based on the qualitative analysis of the efforts made by standard setters, accountants and accounting professionals was applied as follows, based on public reports drawn up and studies conducted on the same topic.

2.2. The influence of accounting regulatory bodies on sustainability

Hans Hoogervorst, the president of IASB, in his speech at the Climate-Related Financial Reporting Conference, held at Cambridge University, United Kingdom on April 2, 2019, mentions two major directions of sustainability initiatives. A primary direction is corporate social responsibility reporting (CSR), focused on promoting behavioural change, asking companies to provide information on their contribution to a “better world” by engaging them in environmental sustainability activities.

This direction is oriented towards the common good and considers society to be the general public of this type of reporting. However, there is also a sustainability reporting perspective that is gaining importance, which focuses more on the impact of sustainability issues on the company itself, rather than on the public good. This bottom line aims to provide investors information on how sustainability issues could impact the company’s future financial performance.

Regarding the role played by the IASB and the link between sustainability reporting and financial reporting, Hans Hoogervorst states: “I do not think the IASB is equipped to enter the field of sustainability reporting directly. Setting sustainability reporting standards requires expertise that we simply do not have. Moreover, there are already more than enough standard-setters active in this field” (Hoogervorst, 2019). Although classical financial reporting remains the cornerstone of the IASB, the body recognizes its limitations, particularly as financial statements reveal a small amount of forward-looking information on emerging sustainability issues. In this context, the IASB meets the needs of investors by publishing in 2010 the Management Commentary Practice Statement, an optional guide that includes a set of good practices and guidance on how to draft the first component of the annual financial reports. This good practice guide to preparing management reports has the role of supporting management in providing an extensive picture of the financial statements.

In 2011, the Sustainability Accounting Standards Board (SASB) is being set up to develop and disseminate sustainability accounting standards, the application of which enables companies across the world to identify, manage and provide investors with sustainability information significant from a financial perspective. Thus, the SASB has developed a complete set of 77 industry-specific standards, published in November 2018, identifying and providing the minimum set of specific sustainability elements with increased materiality from the financial point of view, as well as accounting metrics that are to be used in assessing these elements and to be computed by entities operating in a particular industry. At the same time, SASB provides a database of reports submitted by more than 4,000 companies applying SASB standards.

It is important to note that with regard to the analysis of the influence exerted on sustainability reporting by

accounting standard setters and the accounting profession, their representation in the SASB councils is significant. Thus, out of the total of 19 members of the SASB Foundation's Board of Directors - responsible for financing, supervision, management and appointment of SASB members - 2 members (including the Vice President of the Board) are Deloitte partners, 1 member is PwC partner, and one member was president of the FASB in 2002-2010, a member of the IASB and PwC partner. At the same time, the current SASB president holds a PhD in Accounting, being also an accountant professor, as well as a FASB fellow researcher. Another member of the SASB, out of a total of 9, is an Ernst&Young partner.

SASB's use of accounting techniques to build sustainability performance indicators signals the role of accounting as a tool for measuring and quantifying sustainable development and achieving the SDGs.

2.3. The role of accounting and the accounting profession in terms of sustainable development

Following the formal adoption of the SDGs at the UN summit in 2015 and their entry into force as of January 2016, the International Federation of Accountants (IFAC) identified 8 goals to which the accountancy profession and professionals working in this field can bring a significant contribution in the context of the new global sustainable development agenda. IFAC's first step towards discovering the role of the accounting profession in achieving the SDGs was to organize working sessions at two meetings held in 2016, in order to discuss how the international accounting profession can contribute to the success of SDGs and what is the significance of SDGs for professional accountants, especially those involved in helping companies

understand their contribution to the global sustainable development agenda (IFAC, 2016).

Following the meetings and discussions, IFAC's 2030 Agenda is published, outlining the debates that have taken place, the resulting agreement, the issues under clarification, and the path to be followed by all professionals concerned to promote commitment to the SDGs for the benefit of the society and the sustainability of their own companies. In the same IFAC report, Charles Tilley, president of IFAC Professional Accountants in Business Committee, states that IFAC and its member organizations, with about 3 million accountants around the world, must consider their mission, strategies and plans in the context of SDGs. As members of the profession "we need to reflect, and articulate, how we contribute to the achievement of SDGs and the benefits they bring to society" (IFAC, 2016, p. 3). On the same topic, IFAC's chief financial officer, Fayez Choudhury, states that precisely because the body collects 3 million professionals, "the skillset, experience, and influence professional accountants possess gives them enormous scope to shape solutions to sustainable development challenges" (Wilson, 2017, p. 41, cited by Bebbington and Unerman, 2018, p. 11). Once the accounting profession identifies its role, the academic environment in the accounting field has the opportunity to help ensure that SDG interventions in accounting are advancing the achievement of SDGs (Bebbington and Unerman, 2018).

Table no. 2 includes the centralization of the main SDGs and the adjacent objectives to which IFAC considers that the accounting profession can make a contribution to and outlines both the key issues to be addressed and the number of actions or initiatives undertaken internationally by various stakeholders in the field of accounting.

Table no. 2. Examination of the SDGs that the accounting profession can influence according to IFAC

Main SDG	Adjacent goals	Number of initiatives or actions taken
SDG 4: Quality education	SDG 4.3: Ensuring access for all women and all men equally to affordable and quality technical, vocational, and tertiary education, including university; SDG 4.6: Ensure that all young people, as well as a substantial proportion of adults (both men and women), reach an appropriate level of literacy.	9
SDG 5: Gender equality	SDG 5.5: Ensure full and effective participation of women in leadership positions as well as equal opportunities for all levels of decision-making in political, economic and public life.	8

Main SDG	Adjacent goals	Number of initiatives or actions taken
SDG 8: Decent work and economic growth	SDG 8.1: Supporting per capita economic growth in line with national standards and, in particular, an increase of at least 7% of GDP per year in the least developed countries; SDG 8.3: Promoting development-oriented policies to support productive activities, creating decent jobs, entrepreneurship, creativity and innovation, and encouraging the formation and growth of micro, small and medium-sized enterprises, including through access to financial services.	4
SDG 9: Industry, innovation and infrastructure	SDG 9.4: Upgrading infrastructure and industries to enhance their sustainability through increased resource use efficiency and the widespread adoption of clean and environmentally friendly technologies and industrial processes; SDG 9.5a: Facilitating the sustainable and adaptable development of infrastructure in developing countries through financial, technological and technical support to African, least developed, landlocked, and small island developing countries.	4
SDG 12: Responsible consumption and production	SDG 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and integrate sustainability information into their reporting cycle.	4
SDG 13: Climate action	SDG 13.1: Increase resilience and adaptability to natural disasters across countries; SDG 13.2: Integrate measures to assess the effects of climate change into national policies, strategies and plans; SDG 13.3: Improving the quality of education, awareness, and human and institutional capacities to mitigate climate change, adaptation, and early warning.	4
SDG 16: Peace, justice and strong institutions	SDG 16.5: Substantially reduce corruption and bribery in all their forms; SDG 16.6: Develop effective, responsible and transparent institutions at all levels.	3
SDG 17: Partnerships to meet the goals	SDG 17.1: Strengthen domestic resource mobilization, including through international support to developing countries to improve domestic capacity for tax and other revenue collection; SDG 17.3: Mobilizing additional financial resources for developing countries, coming from multiple sources; SDG 17.9: Provide additional international support for enhancing the capacity to implement national plans to achieve SDGs; SDG 17.13: Consolidate global macroeconomic stability, including through policy coordination and coherence; SDG 17.14: Strengthen policy coherence for sustainable development; SDG 17.16: Enhance the Global Partnership for Sustainable Development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technologies and financial resources to support the achievement of sustainable development goals in all countries, particularly developing countries.	10
Total main goals: 8	Total adjacent goals: 19	46

Source: Author processing based on IFAC (2016)

By examining the information disclosed in **Table no. 2**, results show that the representatives of the accounting profession are actively involved and take significant steps to achieve at least 8 SDGs, particularly by focusing on the 19 adjacent objectives. The

actions that have been carried out so far include, in particular, the assurance of quality education (9 actions for SDG 4), gender equality (8 actions for SDG 5), and building partnerships to achieve the objectives (10 initiatives for SDG 17).

Conclusions

The field of sustainable development is characterized by a high complexity in terms of implications and issues to be addressed for an exhaustive understanding of the phenomenon, especially as sustainability is targeted and stimulates interest regardless of the area of activity or industry. Therefore, the coverage of all branches and influences related to sustainable development, especially those that intersect with the accounting area, consists in a challenge for researchers, but also for all stakeholders in general. In this context, examining the contribution of accounting to the achievement of UN SDGs within the 2030 Agenda opens new horizons and research directions, among which the development of indicators to measure sustainability performance based on accounting techniques, rediscovery of or refocus on

some topics of relevance to sustainability (for example, ecological responsibility, responsibilities of the higher education institutions, economic equity), re-examination of conceptual frameworks (Bebbington and Unerman, 2018).

Results show that taking steps to ensure sustainability for future generations is a necessity and concern for bodies and organizations that exert influence at an international level, and accounting through all its stakeholders – higher education institutions, researchers, accountants, standard setting bodies - can significantly support this goal. In this respect, the paper contributes to enriching literature in the field of accounting for sustainable development, highlighting the important role of accounting, as well as the initiatives undertaken by the stakeholders in this field in order to fulfil the 2030 Agenda for a better world.

REFERENCES

1. Albu, N., Albu, C.N., Dumitru, M., Dumitru, V.F. (2013), Pluralitate sau convergență în standardele de raportare a sustenabilității, *Amfiteatru Economic*, vol. XV, nr. 7, pp. 513-527
2. Bebbington, J., Unerman, J. (2018), Achieving the United Nations Sustainable Development Goals An enabling role for accounting research, *Accounting, Auditing and Accountability Journal*, vol. 31, no. 1, pp. 2-24
3. Bebbington, J., Russell, S. & Thomson, I. (2017), Accounting and sustainable development: Reflections and propositions, *Critical Perspectives on Accounting*, no. 48, pp. 21-34
4. Bebbington, J. & Thomson, I. (2013), Sustainable development, management and accounting: boundary crossing, *Management Accounting Research*, vol. 24, no. 4, pp. 277-283
5. Dumitrana, M., Jianu, I., Lapteș, R., Popa, A. F. (2009), Sustainable development and environmental accounting: concepts, trends and quality of accounting information, *Journal of Accounting and Management Information Systems*, vol. 8, no. 1, pp. 27-39
6. Engelbrecht, H.-J. (2016), Comprehensive versus inclusive wealth accounting and the assessment of sustainable development: An empirical comparison, *Ecological Economics*, no. 129, pp. 12-20
7. European Union (2014), Directive 2014/95/UE amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, *Official Journal of the European Union*, available online at <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:32014L0095&from=EN>, accessed June 2019
8. Financial Times (2019), *Defective data is a big problem for sustainable investing*, available online at <https://www.ft.com/content/c742edfa-30be-328e-8bd2-a7f8870171e4>, accessed June 2019
9. Godemann, J., Bebbington, J., Herzig, C., Moon, J. (2014), Higher education and sustainable development. Exploring possibilities for organisational change, *Accounting, Auditing and Accountability Journal*, vol. 27, no. 2, pp. 218-233
10. Hoogervorst, H. (2019), Speech of the IASB President held at the *Climate-Related Financial Reporting Conference*, Cambridge University, United Kingdom, in 04.02.2019, available online at <https://www.ifrs.org/news-and-events/2019/04/speech-iasb-chair-on-sustainability-reporting/>, accessed June 2019
11. International Federation of Accountants (2016), *The 2030 Agenda for Sustainable Development: A Snapshot of the Accountancy Profession's Contribution*, available online at <http://www.ifac.org/publications-resources/2030->

- agenda-sustainable-development, accessed 20.09.2018
12. PricewaterhouseCoopers (2018), *SDG Reporting Challenge 2018 – From promise to reality: does business really care about SDGs? And what needs to happen to turn words into action*, available online at <https://www.pwc.com/gx/en/sustainability/SDG/sdg-reporting-2018.pdf>, accessed June 2019
 13. PricewaterhouseCoopers (2015), *Make it your business: Engaging with the Sustainable Development Goals*, available online at https://www.pwc.com/gx/en/sustainability/SDG/SDG%20Research_FINAL.pdf, accessed 27.06.2019
 14. Sustainability Accounting Standards Board – SASB (2018), *SASB Materiality Map*, available online at <https://materiality.sasb.org/>, accessed July 2019
 15. Sustainable Development Goals Knowledge Platform (2019), *Main Milestones*, available online at <https://sustainabledevelopment.un.org/resourcelibrary>, accessed July 2019
 16. Sustainable Development Knowledge Platform (2019), *Voluntary National Reviews Database*, available online at <https://sustainabledevelopment.un.org/vnrs/>, accessed July 2019
 17. Sustainable Stock Exchanges Initiative (SSE) (2018), *2018 Report on Progress*, available online at https://www.sseinitiative.org/wp-content/uploads/2018/10/SSE_On_Progress_Report_FINAL.pdf, accessed June 2019
 18. United Nations, ed. Managi, S. & Kumar, P. (2018), *Inclusive Wealth Report 2018: Measuring progress towards sustainability*, *Routledge, Taylor & Francis Group*, available online at <https://www.taylorfrancis.com/books/e/9781351002073>, accessed 20.09.2018
 19. United Nations (2015), *Transforming our world: the 2030 Agenda for Sustainable Development*, available online at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>, accessed June 2019
 20. Venter, E.R., Gordon, E.A. & Street, D.L. (2018), *The role of accounting and the accountancy profession in economic development: A research agenda*, *Journal of International Financial Management and Accounting*, vol. 29, no. 2, pp. 195-218
 21. Wensen, K. van Broer, W., Klein, J. & Knopf, J. (2011), *The state of play in sustainability reporting in the EU*, European Union
 22. Wilson, P. (2017), *Goal setters*, *Economia*, no. 57, pp. 40-44
 23. World Bank (1989), *Environmental Accounting for Sustainable Development*, *UNEP-World Bank Symposium*, The International Bank for Reconstruction and Development, available online at <http://documents.worldbank.org/curated/en/156521468767069279/Environmental-accounting-for-sustainable-development>, accessed 20.09.2018
 24. World Business Council for Sustainable Development & PricewaterhouseCoopers (2018), *Enhancing the credibility of non-financial information - the investor perspective*, available at <https://www.wbcsd.org/Programs/Redefining-Value/External-Disclosure/Assurance-Internal-Controls/Resources/Enhancing-the-credibility-of-non-financial-information-the-investor-perspective>, accessed July 2019
 25. World Business Council for Sustainable Development (2018), *Reporting Matters - Six years on: the state of play*, available online at <https://www.wbcsd.org/Programs/Redefining-Value/External-Disclosure/Reporting-matters/Resources/Reporting-matters-2018>, accessed July 2019
 26. World Commission on Environment and Development (1987), *Report of the World Commission on Environment and Development: Our Common Future*, available online at <http://www.un-documents.net/our-common-future.pdf>, accessed 20.09.2018
 27. World Economic Forum (2018), *The Inclusive Development Index 2018: Summary and Data Highlights*, available online at http://www3.weforum.org/docs/WEF_Forum_IncGrwth_2018.pdf, accessed 20.09.2018
 28. *** <https://www.accaglobal.com/gb/en/student/sa/features/sustainability.html>
 29. *** <https://www.globalreporting.org/network/capitalmarketsengagement/Pages/Stock-Exchange-and-Market-Regulators.aspx>
 30. *** <https://www.mae.ro/node/35919>
 31. *** <https://sseinitiative.org/about/about-the-sse/>
 32. *** <https://www.sasb.org/governance/foundation-board/>
 33. *** <https://www.unglobalcompact.org/participation/report>
 34. *** <https://www.unglobalcompact.org/interactive>
 35. *** <https://www.wbcsd.org/Overview/Our-members>

Camera Auditorilor Financiari
af
din România



64226571000013