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The Effect of the Auditors' Rotation on the Accounting Quality

in the Case of Romanian Listed Companies under the Transition to IFRS

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Abstract

In assuring the quality of the financial information issued by the listed companies, the role of the financial auditor is to express his own opinion regarding the compliance of the financial statements with a financial reporting framework. In order for this opinion to be a reliable one, the auditor has to develop it considering the specific requirements of competence, ethic judgment and professional ethics. Meeting these requirements supposes significant efforts from the auditors, and also from the professional organization they are affiliated to, as well as the audited companies. We appreciate that the financial auditors' financial independence and objectivity are also assured by their periodical rotation. The scope of this study is to analyze and evaluate the influence of the auditor's rotation on the information value relevance from the individual financial statements and from the consolidated statements that make the subject of financial auditing. The study was carried out on a number of 64 Romanian companies, listed on the Bucharest Stock Exchange, between 2006 and 2014. The research objectives considered the estimation of the auditor's rotation influence on the value relevance of the reported information of the Romanian BSE listed companies. The results of the study show the fact that the auditor's rotation significantly contributes to the change of the value relevance degree.

Keywords: *information quality, value relevance, independence, auditor's rotation, Big4 – Non Big 4, Bucharest Stock Exchange*

JEL Classification: C58, M41, M42

Introduction

The role of the financial auditor is fundamental in assuring the compliance of the information from the financial statements with a useful financial reporting framework (Jaba *et al.*, 2015). Based on the received engagement, the auditor expresses a reliable, objective and independent opinion regarding the quality of the information from the audited financial statements (IAASB, 2013).

The audit opinion can be though influenced by the quality of the financial audit engagement, supported by requirements of competence, ethics and professional behavior that the auditor must consider in conducting his received mandate. Competence is necessary during the entire mission and leads to the issuance of the opinion based on the reached audit evidence, guaranteed through the auditor's independence and objectivity. Maintaining an independent and objective attitude of the auditor also depends on his periodical rotation, with direct impact on the quality of the financial audit engagement, and, implicitly, on the audit opinion (Garcia-Blandon & Argiles-Bosch, 2013).

Auditor's rotation considers the limitation of the successive number of years when the same auditor can provide the mandatory financial auditing of financial statements for a certain client. Rotation can be mandatory or voluntarily. As for the mandatory rotation of the financial auditor, the main declared scope of its introduction is to reduce the risk of non-complying audits, to increase the auditors' independence and to reach a superior level of the investors' trust in the issued audit opinion and in the information from the financial statements (Barton, 2002).

Considering the significantly contrasting results in the literature regarding the effects of the auditor's rotation, the study proposes the assessment of the auditors' rotation influence on the quality of the information in the financial statements (individual and consolidated) of the companies listed on the Bucharest Stock Exchange (BSE), with direct impact on the investors' decisions. The study was carried out on the level of the Romanian BSE listed companies, between 2006 and 2014. The analyzed sample includes a number of 64 companies, which ensures a total observation number of 576 companies/ year.

In analyzing the influence of the auditor's rotation on the investors' decision, the study considered the assessment of the information value relevance from the financial statements that make the subject of financial auditing. Value relevance was evaluated based on the effects of the issuance of some information from the financial statements on the variation of the share price, under the influence of the auditor's rotation.

The main results of the study considered the estimation of the auditor's rotation influence on the value relevance of the information from the financial statements that make the subject of financial auditing. In the study, auditors were structured on two large categories, the Big4 (B4) and non-Big4 (NB4), and considered four types of rotation (from B4 to B4; from B4 to NB4; from NB4 to B4; from NB4 to NB4).

Literature review related to auditor's rotation

The literature regarding the voluntarily or mandatory rotation of auditors is wide and approaches numerous aspects of this type of action: the auditing costs, the opportunities of such a rule, the implications on the quality of the accounting information, the investors' reaction, the difference between voluntarily and mandatory rotation, the probability of frauds, the effects on the auditor's independence and objectivity, the effects on the financial market, the difference between the auditors affiliated to Big4 and the other auditors, the negotiation between the auditing companies with the clients.

As for **the costs** that are supported by the auditing company, and, implicitly, by the audited company, an accepted approach is that it ends up with their increase, justified by the efforts the auditing companies must make to understand the business and the organizational model of the audited company, as well as the effects of this initiation on the management of the audited company (PCAOB, 2011; Ho, 2010). GAO (2003) cites estimations of the auditing companies considering that the auditors' rotation will increase the auditing costs by 20%. Said & Khasharmeh (2014) propose a literature review and notice that, generally, one reaches an increase of costs, both for the audited companies and the auditors from 20% up to 50%. This, in fact, represents, a constant for the auditors that takes a company, irrespective of the fact that it is about rotation or about a mission received due to other reasons – the first audit year is always more expensive than the other years (GAO, 203). Also, the existence of an indirect relation between the period of the engagement and the auditing costs was proven. On the other side, mandatory rotation can also have an effect, namely the decrease of some auditing fees by the companies that wish to obtain a financial auditing mission (Barton, 2002 identifies such a situation for the Italian auditing companies).

Main **referred arguments** supporting the auditor's rotation are (Barton, 2002; Ho, 2010): the improvement of the auditing independence and quality, the new air a new auditor comes with compared to the possible inertness of a long mandate, the higher probability of detecting errors that the previous auditor wouldn't have detected, the increase of the competition between the auditing companies and the increase in the number of auditors involved in the financial auditing missions, preventing the use of the company leading staff of the closeness to the end of the engagement as a influencing leverage of the auditor. Arguments supporting the auditing partner rotation are also provided by Garcia-Blandon & Argiles-Bosch (2013) who, analyzing the data corresponding to the listed companies on the Spanish stock exchange, and conclude that a length of the auditor's mandate that is too big can affect its independence and thus, rotation could favor the auditor's independence and the quality of auditing.

From **the opponents of mandatory rotation**, PwC (2013) emphasizes the fact that the opportunity to adopt a regulation that imposes that rotation is contested in studies issued in Europe (only 17% of the answers that accept mandatory rotation) and in the USA (only 10% of the respondents accept this rule). The opinions of one auditing companies about mandatory rotation must though be carefully seen, considering the fact that the company is directly influenced by the rotation. PwC arguments (2013) against mandatory rotation of auditors are: it reduces the quality of auditing, it limits the competition on the audit market and restrictions are set to the functioning of the free market, additional costs appear and auditing becomes more complex, it is a position against the market consensus, it has unfavorable consequences on some types of activities (the complex ones, such as the ones in the oil industry or financial activities). Barton (2002) also adds the fact that there might not be enough auditors from which to choose (considering the mergers on this market and the required competences for a correct mission), the probability of appearance of more unreliable auditing, redundancy of some regulation that insure the auditor's independence. Choi *et al.* (2015) also mentions the effects of the auditor's changing from the perspective of opinion shopping. Kim *et al*. (2015) conclude that the effect of mandatory change of the auditor can lead to a discouraging of the clients to manage the earnings and to a better accruals quality. Another aspect that can negatively feature the auditor's rotation is that this rule slows down the auditing process through the time the new auditor takes to get used to the activities and the features of the audited company (Asthana, 2014). Said & Khasharmeh (2014) review several negative reactions to the mandatory feature of the auditors' rotation and claim that the effects will take shape in a decrease of the auditing services quality (PwC, 2013), alongside the auditing costs.

A skeptical opinion regarding the role of financial auditors is generally provided by Sikka (2015), who says that auditors' rotation (as well as other measures regarding the improvement of the auditing quality) can have favorable effects on some stakeholders that are more skeptical and can lead to the improvement of the auditing practice, but wouldn't lead to a fundamental change of any type.

The auditor's rotation and the increase of information' quality from the financial statements that make the subject of auditing

Studies on the effects of the auditor's rotation on the quality of **accounting information** have divergent conclusions. Kwon *et al*. (2010) find out that in South Korea, the auditor's rotation leads to the increase of the number of hours dedicated to the engagement and to the increase of the associated costs, while the quality of the audit engagements (evaluated through discretionary accruals) remains the same or has a slight decrease. Choi *et al*. (2015) claims that, ex ante, it is uncertain if the frequent changes of the auditor improve the quality of the audit, but that, in the case of Korea, listed companies that changed their auditor had a low level of liquidity of the shares compared to the ones that did not make such a change (especially in the case of the transition from a Big 4 to a non-Big4). In a different context (listed companies in Iran), Abdoli *et al*. (2014) do not find a significant association between the dimension of the auditor and the type of the auditor, on one side, and the variable that evaluates the rotation of the auditors, on the other side. Blouin *et al*. (2007), using adjusted discretionary accruals, as a variable for the quality of financial reporting, do not find significant improvement of the mandatory rotation of the auditor.

Heliodoro *et al*. (2015) refer to the change of the auditor as an intentioned behavior of listed companies, in order to avoid an unfavorable opinion from the auditor. In the case of the listed Portuguese companies, they conclude that a qualified opinion leads to the change of the auditor in 50% of the cases. For Spain, the auditors' rotation was mandatory between 1988 and 1995, which allowed the carrying on of studies that evaluate the differences in the quality of the audit between the mandatory transition period and the voluntary transition period (Ruiz-Barbadillo *et al*., 2009); the authors did not find proofs regarding an increase in the quality of the audit and which to justify the auditor's mandatory rotation. In Italy, the auditor's mandatory change has been in force for more than 20 years. Cameran *et al*. (2014) use the accounting conservatism as a proxy for the quality of financial reporting (a higher level of conservatism means a better quality of the audit). Thus, in Italy, where the engagement lasts three years, renewable for two times, Cameran *et al*. (2014) conclude that the conservatism in accounting numbers (and thus the quality of the audit) tend to increase during the last part of the engagement, namely when it cannot be renewed.

Velte & Freidank (2015) analyze the effects of the main regulation regarding the auditors' rotation, focusing on the internal rotation (of the auditing partners), compared to the external rotation (of the auditors themselves); authors notice that the relation between the auditors' rotation and the quality of the audit and the reported accounting numbers is controversial as long as the European Commission has not provided a theoretical framework or empirical evidence which are to justify the reform measures proposed in this field. The empirical data and the analyses provided by Velte & Freidank (2015) show that the auditors' external rotation does not lead to an increase in the accounting quality and in the audit, while for the internal rotation, the effects over quality cannot be determined.

In an extremely comprehensive study regarding the independence and quality of the audit, subsequently to the analysis of an impressing number of issued articles between 1976 and 2013 in nine top journals in the field of auditing, Tepalagul & Lin (2015) notice that, within the literature, the most frequent conclusion is that the long term of an auditor's mandate does not affect the quality of the audit. Another conclusion of the two authors is that the users of financial statements have the same conception about the length of the audit – a long period is not associated to a poor audit quality. Another study that analyzes the reported results in the literature (73 papers) regarding the audit opinions (Habib, 2013) concludes that: a longer period of the engagement is associated to a better quality of the audit and to a lower orientation towards qualified reports. Ho (2013) analyzes a long period (1996-2003) and concludes that a longer period of the mandate leads to a lower probability to meet the earnings management to the extent of their increase.

In China, Firth *et al*. (2012) analyze the audit opinions and find, in certain conditions, a positive effect of the auditing partners' rotation on the quality of the audit, without being very clear if the rotation of the auditing companies provides any benefit. In the case of listed companies in Taiwan, for which the auditing partner's rotation has been mandatory since 2004, the results reported by Chi *et al* (2009) show that the level of the auditing quality is not significantly different in the case of the companies mandated to rotate their auditors compared to the ones that were not mandated to do so or to the ones whose rotation was voluntary.

Schmidt & Cross (2014) conclude that the auditing partners' rotation requested by the SOX in the USA and by the European Commission does influence not only the auditor's behavior and independence, but also the customers' behavior, to the extent to which the last ones are less conflictual and make more concessions towards new auditors.

The standard setters and some investors groups justify the need to rotate the auditors especially through the increase of their independence reported to the audited company. GAO (2003) concludes that the auditing partners' rotation leads to the strengthening of the auditor's independence to the same extent reported to the rotation of the auditing company, but that the perception on different categories of users (institutional investors, occasional investors, other users) does not always converge. In fact, most of the studies evaluate the perception of some categories of users about the auditors' independence and not the independence itself. By analyzing the non-professional investors' behavior, Kaplan & Mauldin (2008) conclude that, compared to the rotation of the partners of the audit company in the relation with the same client, the auditors' rotation does not lead to an apparent strengthening of their independence. Lu & Sivaramakrishnan (2009) reach results that show that, in the absence of opinion shopping, the mandatory rotation of the auditor always affects negatively the efficiency of the investment. In turn, Daniels & Booker (2011) notice that the credit officers see the auditors' rotation as generating an increase in their independence, but without changing the perception about the quality of the audit (we are talking about creditors in the USA).

Cameran *et al.* (2014) claims that the **mandatory rotation** of the auditor is significantly different from the voluntary rotation, from the perspective of the framework where it happens and of the effects on the quality of the audit.

European regulations regarding the auditors' rotation

The European directive in the field of auditing (Directive 2006/43/CE) – in force since 2008 – mandated the member states to ensure that the auditor or the key partner who is responsible with the mandatory auditing (in 2006, the expression "legal audit" was used), are rotating within the audit mission in maximum seven years from the date when they are made auditors of an entity and can take part again in the auditing of the same client after a period of at least two years. We notice that, at the level of 2006, European regulations did not mandated a rotation of the auditing company, but they allowed either the rotation of the auditing company, the key partner, named by the auditing company as the main responsible for the audit as its representative.

The provisions of the European Directive were also transposed in the national regulations (OUG no. 90/2008), but in a modified version. Namely, within the article called: "The independence in the case of auditing the public interest entities", it is claimed that a rotation of the key partner is mandatory, responsible for the statutory auditing of the public interest entities, in maximum seven years since his designing and that he can take part in a new auditing of the same entity after a period of at least two years.

We thus notice that, at the national level, the provisions of the European Directive in the field of financial auditing were partly transposed. In other words, we are only talking about an internal rotation of key partners, without changing the auditing company with whom the client entity made the agreement. All these aspects were available at the moment when the previously mentioned normative documents came into force.

Now, things seem to have changed somehow. The affirmation is based on the fact that the European Parliament, the European Commission and the member states reached an agreement to increase the competition in the auditing sector, which requires the mandatory feature for the listed companies to change the auditing companies once in ten years, period that can be extended only once. This mandatory feature was imposed through the EU Regulation no 537/2014, which will be directly applied in all member states of the EU starting with June 17th 2016. Though, the Regulation mentions that the member states can even set a maximum length which is less than ten years. Moreover, the auditing company could take part in the auditing of the same public interest entity after a period of only four years. Like almost any rule, it also has exceptions. Thus, member states can set that the maximum established periods (ten or less years) to be extended even at 24 years, when more auditing companies have carried out simultaneous missions after the expiration of the maximum periods, conditioned by the fact that the statutory audit to lead to the presentation of the common auditing report.

It is important that, despite the fact that the rotation of the auditing company has to be theoretically made at every ten years, the auditing key partners though must stop their participation in the mandatory auditing of the audited company in maximum seven years since their designing or even less. Later, they can participate again in the mandatory audit of the audited entity after three years from the previous engagement.

On these aspects, some sources claim that the new rules will end the oligopoly that is owned by the Big4 companies (Business24, 2013). On the contrary, opponents see these law provisions as "an unfavorable business for investors, an unfavorable initiative for business and for work places, an unfavorable business for the European and global economy" (Tudor, Ziarul Financiar, 2014).

The research hypothesis proposed for testing and the objectives of the study

The present study follows a statistic approach, deductive-inductive demarche, in formulating, testing and validation of the proposed research hypothesis. In the study, the quality of the financial information is evaluated through its value relevance degree to investors.

The **value relevance** of the information considers its ability to significantly influence the investors' decisions. The value relevance refers to the causality relation between the share price on the financial market (or the changes in the prices) on one side, and certain accounting information, on the other side (Robu, 2015). At the same time, value relevance represents an important component of the studies regarding the quality of the information reported by companies, including the quality of the financial auditing that joins financial reporting.

Starting from the facts presented in the literature regarding the factors that determine the auditors' rotation, as well as the effects of the rotation of the quality of the auditing mission and implicitly on the value relevance of the reported financial information, the study proposes the following research hypothesis to be tested and validated:

H: In the case of Romanian BSE listed companies, the auditors' rotation has a significant influence on the value relevance of the financial information addressed to the investors.

Thus, in this study, we propose the estimation and testing of the extent to which the auditor's rotation contributes to an increase/decrease of the value relevance degree of financial information from the reported statements which make the subject of financial auditing.

The main research objectives are to present some descriptive statistics regarding the rotation number of the auditors in the analyzed period (on the whole, and also on the different types of rotation), as well as the estimation of the rotation influence on the value relevance of financial information and, implicitly, on the quality of the financial reporting quality.

Research methodology

Once the research hypothesis proposed for validation is developed, the study follows a statistic demarche in order to test it: the identification of the target population, choosing the analyzed sample, the identification of the variables to be analyzed and the establishment of the econometric model, the establishment of the data sources and the choice of the data analysis methods, using the specific instruments.

Target population and analyzed sample

The studied population is represented by all the Romanian listed companies on the Bucharest Stock Exchange (BSE). These companies use the IFRS in financial reporting and make the subject of mandatory financial auditing. Now, on the BSE section – the regulated market, 82 Romanian companies are listed.

The analyzed sample includes only the companies listed on the BSE section (the regulated market), for which individual and consolidated financial statement were considered. Of the 82 listed companies, we removed four of them for which no information regarding the auditors' rotation was not found, the ones representing financial intermediates, banks, investment funds and insurance institutions, as well as the suspended companies. Thus, the analyzed sample includes a number of 64 listed companies between 2006 and 2014, which insures a number of 576 observations (company/year).

Analyzed variables, proposed models for testing and data sources

To choose the analyzed variables, the study starts from the model proposed by Feltham & Ohlson (1995) to assess the value relevance:

$$P_{i,t+1} = \beta_0 + \beta_1 \cdot BVPS_{i,t} + \beta_2 \cdot EPS_{i,t} + \varepsilon_{1,t} \quad (1)$$

where:

- $P_{i,t+1}$ represents the share price of company *i* at *t+1* moment, reported to the share price at *31.12.t*;
- $BVPS_{i,t}$ represents the value of the owners' equity of company *i* at moment *t* (reported to the number of issued shares), reported to the share price at *31.12.t*;
- $EPS_{i,t}$ represents the net result per share for company *i* at moment *t*, reported to the share price at *31.12.t*;
- $\varepsilon_{i,t}$ ~ N(0, 1) represents the error component of the proposed model;
- β_1 and β_2 represent the parameters of the model, whose significant estimations show the influence of the financial information on the market value.

Considering these variables and their calculus mode, we can consider that the market value of a share is a (*f*) function as:

$$P = f(EQ; Net\ result) + \varepsilon \quad (2)$$

and,

$$EQ = At - TL \quad (3)$$

which leads to a new function (*g*):

$$P = g(TL; Net\ result) + \varepsilon \quad (4)$$

For which we will divide each variable with *EQ*:

$$PBR = g(FL; ROE) + \varepsilon \quad (5)$$

where: *At* – total assets; *TL* – value of total liabilities; *Net result* – net result; *EQ* – value of owners' total equity; and *PBR* - price to book value, *FL* (financial leverage: *Total liabilities/Total Equities*) and *Net results/Q* = *ROE* (return on equities).

Based on these variables, the study proposes the analysis of the following econometric model:

$$PBR_{i,t+1} = \delta_0 + \delta_1 \cdot FL_{i,t} + \delta_2 \cdot ROE_{i,t} + \varepsilon_{1,t} \quad (6)$$

where δ_1 and δ_2 represent the model's parameters, whose significant estimations show the existence of the financial information on the market value.

To test the influence of the audit rotation on the value relevance of financial information, we start from the model in equation (6) to which we add a new variable, *AR* (auditor's rotation), a dummy one, which has value *1* if there is any rotation in the audited financial exercise (the passing from a new auditor in the actual financial exercise, compared to the one in the previous financial exercise), and value *0*, on the opposite case:

$$PBR_{i,t+1} = \delta_0 + \delta_1 \cdot FL_{i,t} + \delta_2 \cdot ROE_{i,t} + \delta_3 \cdot AR + \delta_4 \cdot AR \cdot FL_{i,t} + \delta_5 \cdot AR \cdot ROE_{i,t} + \varepsilon_{1,t} \quad (7)$$

where significant estimations of δ_3, δ_4 and δ_5 parameters emphasize the existence of the influence of the auditor's rotation on the investors' decision and implicitly on the value relevance of the audited financial information.

Data corresponding to the analyzed variables, included in the proposed models was manually collected from the financial statements of the companies included in the sample. For the financial variables for which absent values were registered, we used *the expectation maximization algorithm* process (Do & Batzoglou, 2008) in SPSS, to complete the data base.

Results and discussions

Subsequently to the collected data analysis at the level of the considered sample, main results regard: the presentation of the auditors' rotations number (at the level of the analyzed period), the display of some descriptive statistics at the level of the financial variables used in the analysis, as well as the presentation of the parameters estimates for the analyzed econometric model.

Information regarding the number of BSE listed companies that have changed their auditor at least one time, at the level of the analyzed period, is displayed in **Table 1**.

Table 1. The number of BSE listed companies that have changed their auditor between 2006 and 2014

Rotation	Year:									Total
	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Yes	1	8	8	7	9	14	12	8	5	72
No	63	56	56	57	55	50	52	56	59	504
Total	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**576**

Source: own processing in SPSS 20.0

From the data in **Table 1**, we can see that most auditors' rotations were registered at the level of the 2011 financial exercise. For the financial statements in 2011, 14 companies of the ones included in the analyzed sample decided to rotate the auditor and replace the one in 2010. Also, the same tendency to change the auditor is maintained in 2012, possibly determined by the mandatory introduction of financial reporting from the financial statements according to the IFRS.

Depending on the rotation type (we consider the type of the changed auditor and the type of the new auditor) **Table 2** presents a series of information regarding the number of rotations for each separate type.

Table 2. The number of rotations depending on the changed auditor's type, for the BSE listed companies between 2006 and 2014

Rotation type	Year:									Total
	2006	2007	2008	2009	2010	2011	2012	2013	2014	
B4→B4	0	1	2	0	1	4	2	1	1	12
B4→NB4	0	0	1	0	2	0	2	1	0	6
NB4→B4	0	1	1	3	2	2	3	2	0	14
NB4→NB4	1	6	4	4	4	8	5	4	4	40
Total	**1**	**8**	**8**	**7**	**9**	**14**	**12**	**8**	**5**	**72**

Source: own processing in SPSS 20.0

From the data in Table 2, we can see that most rotations were made in order to change a non-Big4 auditor with another one from non-Big4, between 2006 and 2014. To this extent, a dominance of the companies in the non-Big4 is maintained at the level of the audit market in Romania. Moreover, we can conclude that the rotation is not necessarily determined by professional competence, but by the requirements of maintain the auditor's independence and objectivity.

But, alongside with the transition to the IFRS (mandatory since 2012), we notice an increase in the number of rotations where the new auditor is affiliated to the Big4. In this case, the rotation can also be determined by the previous experience of using the IFRS – companies in the Big4 could have an advantage to this regard.

As for the auditors' rotation number, made by the BSE listed companies, *Table 3* shows the number of companies that have had at least one rotation at the level of the analyzed period.

Table 3. The number of rotations in which BSE listed companies were involved during 2006 and 2014

Rotations number	At least one rotation	At least two rotations	At least three rotations	At least four rotations
Number of companies	56	18	5	2

Source: own processing in SPSS 20.0

From the data in Table 3, we can notice that between 2006 and 2014, most of the companies (87% of the total number of companies included in the analyzed sample), reported at least a rotation of the auditor. To this regard, the average period of the auditor's mandate until the rotation is displayed in Table 4.

Table 4. The average duration of one auditor's engagement during 2006 and 2014, for the BSE listed companies

Changed category of auditor	Total	From B4 to B4	From B4 to non-B4	From non-B4 to B4	From non-B4 to non-B4
Period (in years)	4.18	4.85	3.30	3.94	4.18
	max: 10 years; min: 1 year; average: 4 years				

Source: own processing in SPSS 20.0

Depending on the emergence or not of the auditor's rotation, Table 5 presents a series of descriptive statistics (on the whole and on categories), of the variables included in the analysis.

Table 5. Descriptive statistics regarding the analyzed variables							
Variables	**N**	**Average**	**Std. Deviation**	**Min.**	**Max.**	**ANOVA**
PBR	With rotation	0.7583	0.7428	-0.1500	3.6100	
	Without rotation	0.9124	0.7779	-0.2800	3.6100	Sig.*
	Total	**0.8931**	**0.7746**	**-0.2800**	**3.6100**	**0.114**
FL	With rotation	0.8711	1.0536	-1.3600	3.5200	
	Without rotation	0.7671	1.0052	-1.3600	3.5200	Sig.
	Total	**0.7801**	**1.0514**	**-1.3600**	**3.5200**	**0.433**
ROE	With rotation	-0.0312	0.1826	-0.5300	0.1900	
	Without rotation	-0.0005	0.1658	-0.5300	0.1900	Sig.*
	Total	**-0.0043**	**0.1681**	**-0.5300**	**0.1900**	**0.147**

* Significant differences for a 15% threshold

Source: own processing in SPSS 20.0

From the data in Table 5, we can see that companies that did not used auditors' rotations have averagely registered lower market values (*PBR*) compared to the companies that did not do any rotations of the auditors. This can be explained by the fact that the investors' perceptions about the auditors' rotation is determined by the executive's desire to "buy" a certain type of audit opinion. At the same time, the investors' mistrust appears on the quality of the realized auditing missions, frequent changes leading the auditor towards a more poor knowledge of the company environment and to the impossibility of identifying all the risks (inherent, control and non-detection), with direct impact on the calculated audit risk and implicitly on the audit opinion.

At the same time, we can see that the companies with less favorable economic results (losses reported at the level of the net result and increases in the indebtedness degree), have used the auditor's rotation at least one time. Thus, we can conclude that, in order to obtain a certain type of auditing opinion, BSE listed companies, with unfavorable economic results tended to change the auditors more frequently, compared to the companies with more favorable results.

As for the influence of the auditor's rotation on the relevance of the information in the annual financial statements on the investors, Table 6 presents the parameters estimates of the regression models proposed in the analysis. Thus, model 1 corresponds to the econometric model in equation (6). Models 2 and 3 start from equation (7), but individually analyze the influence of the *FL* and *ROE* on the *PBR*. Model 4 corresponds to the regression equation (7), where the influence of the auditor's rotation on the value relevance of the information reported to investors is analyzed.

Table 6. Parameters estimates of the regression models proposed in the analysis								
Variables	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
	Coef.	**Sig.**	**Coef.**	**Sig.**	**Coef.**	**Sig.**	**Coef.**	**Sig.**
Intercept	0.739	0.000	0.767	0.000	0,913	0,000	0,754	0,000
FL	0.205	0.000	0.189	0.000	-	-	0,208	0,000
ROE	1.403	0.000	-	-	1,396	0,000	1,502	0,000
AR	-	-	0.159	0.194	-1,370	0,148	-0,138	0,237
AR·FL	-	-	-0.017	0.848	-	-	-0,019	0,825
AR·ROE	-	-	-	-	-0,837	0,110	-0,791	0,118
Observations	576		576		576		576	
R^2	0.155		0.069		0.085		0.162	

Dependent variable: *PBR*

Source: own processing in SPSS 20.0

From the data in Table 6, we can see that the information regarding the position (FL) and the financial performance (ROE) are relevant to investors on the BSE and have a significant influence on the market value of the listed companies (Model 1).

As for the auditor's rotation, through models 2, 3 and 4, we will test the influence of the emergence of the rotation on the relevance of the financial information. Thus, from model 2, we can see that for the companies that have registered at least one rotation of the auditor, in the financial exercise that assumed the new auditor, the information regarding the indebtedness degree do not present a high value relevance compared to the companies that did not use the auditor's rotation. From model 3, we can see that for the companies that have registered at least one rotation of the auditor, in the financial exercise that assumed the new auditor, the information regarding the financial profitableness has presented a high relevance (though insignificant) compared to the companies that haven't used the auditor's rotation.

If models 2 and 3 analyze in a separate manner the influence of the auditor's rotation on the relevance of the financial position and performance, model 4 analyzes them on the whole. Based on the (R^2) coefficient of determination, we can see an increase in the relevance of the auditor's rotation emergence at the level of the reported information to the investors (for the case when there is no information regarding the auditor's rotation: $R^2 = 0.155$; in the case when there are information regarding the auditor's rotation: $R^2 = 0.162$). Such a rotation can transmit information regarding the independence, objectivity and competence of both the new auditor and the replaced one to the market. Based on the estimations of the regression parameters in model 4, we can appreciate that the information regarding the financial position (*FL*), reported by the companies that have reported at least a rotation of the auditor, does not lead to a change in its relevance to the investors. But, with a 15% risk, we can appreciate that the information regarding the financial performance (*ROE*), reported by companies that have registered at least one rotation of the auditor, lead to a change in its relevance to the investors and implicitly to the lowering of the company's market value. To this extend, we can conclude that the emergence of the rotation results from the executive's desire to "purchase" a certain type of auditing opinion, choosing a certain auditor.

Conclusions

Based on the reached results subsequently to the analysis of the collected data at the level of the companies included in the sample, during 2006 and 2014, the research hypothesis has been validated and the research results were reached.

Thus, we can appreciate that at the level of the Romanian BSE listed companies, the auditors' rotation has a significant influence on the relevance of the financial information for the investors. Such information is useful to investors in order to evaluate the quality of the auditing mission and also the quality of the reported information. At the same time, information regarding the auditor's rotation (depending on the four directions of the rotation: from B4 to B; from B4 to NB4; from NB4 to B4; from NB4 to NB4) are useful to investors when evaluating the auditor's objectivity, independence and competence.

To this regard, the auditor's rotation can be determined both from the transition to a new referential (2012, once with the transition to the IFRS) due to reasons of professional experience, and from the desire of the listed companies to reach a certain type of the auditing opinion (with direct impact on the influence of the independence).

From the reached results, the most important ones regard the existence of a significant influence of the information regarding the auditor's rotation on the relevance of the information in the financial statements designed for investors. But, taken individually, the relevance of the information regarding the position (*FL*) and the financial performance (*ROE*) are not significantly influenced by the auditor's rotation.

The results reached subsequently to the analysis emphasize the fact that, averagely, there are significant differences between the market value of the companies that have reported at least one rotation and the market value of the companies that haven't reported a rotation. Averagely, the market value of the companies that reported the auditor's rotation is lower than the market value of the companies with no rotation. The emergence of the rotation can, in this case, have a negative impact on the quality of the mission, as a result of the new auditor's impossibility to know, on the whole and fast, the environment in which the company operates, as well as to identify all the risks with negative impacts on the auditing risk, and implicitly, on the auditing opinion.

Moreover, information regarding the financial position reported by the companies that have registered at least one rotation of the auditor do not lead to a change in its relevance to the investors, but the information regarding the financial performance reported by the companies that have registered at least one rotation of the auditor lead to a change in its relevance to investors and implicitly to the lowering of the company's market value.

The limits of the study are mainly determined by the low volume of the analyzed sample, by only including the Romanian BSE listed companies. Future directions will pursue the carrying on of comparative studies, at European level, to evaluate the influence of the auditor's rotation on the relevance of the reported information of the companies on different financial markets. At the same time, the study did not consider (at least in the modeling stage) the rotation type and direction, depending on the 4 proposed frames. To this regard, in a future study, we will analyze the influence of the transition from a certain type of audit to another one (B4/NB4) on the quality of the financial information and on the quality of the auditing mission. Not the last, the use of statistical methods within financial auditing, and also its interrelation with financial analysis and accounting can open a new research direction. This new field proposes the analysis of the financial-economic phenomena within financial auditing based on some indicators in the financial analysis, using advanced statistical and econometric methods, being hypothetically called **auditometrics**.

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References

1. Abdoli, M. R., Mahmoudzadeh, A., Darvishan, M. (2014), *Assessing the Effects of Auditing Institutions' Size and Type of Auditors' Opinion on Auditing Institutions' Rotation*, Journal of Educational and Management Studies, vol. 4, no. 2, pp 182-185
2. Asthana, S. (2014), *Abnormal audit delays, earnings quality and firm value in the USA*, Journal of Financial Reporting and Accounting, Vol. 12, No. 1, 2014, pp. 21-44
3. Barton, M. T. (2002), *Analysis of the Mandatory Auditor Rotation Debate*, University of Tennessee Knoxville, available on *http://trace.tennessee.edu/cgi/viewcontent.cgi?article=1512&context=utk_chanhonoproj* (accessed at 14.09.2015)
4. Blouin, J., Murray Grein, B., Rountree, B. R (2007), *An Analysis of Forced Auditor Change: The Case of Former Arthur Andersen Clients*, The Accounting Review, Vol. 82, No. 3, pp. 621-650.
5. Cameran, M., Prencipe, A, Trombetta, M. (2014), *Mandatory Audit Firm Rotation and Audit Quality*, European Accounting Review, available on http://dx.doi.org/10.1080/09638180.2014.921446
6. Choi, S., Choi, Y-S., Gul, F. Lee, W.-J. (2015), *The impact of mandatory versus voluntary auditor switches on stock liquidity: Some Korean evidence*, The British Accounting Review, vol. 47, no. 1, pp. 100-116
7. Daniels, B. W., Booker, Q. (2011), *The effects of audit firm rotation on perceived auditor independence and audit quality*, Research in Accounting Regulation, vol. 23, no. 1, pp. 78–82
8. Do, C.B.; Batzoglou. S. (2008), *What is the expectation maximization algorithm?,* Nature Biotechnology, Vol. 26. No. 8. pp. 897-899.
9. Feltham, G., Ohlson, J.A. (1995), *Valuation and Clean Surplus Accounting for Operating and Financial Activities,* Contemporary Accounting Research (spring 1995), pp: 689-731.
10. Firth, M., Rui, O. M., & Wu, X. (2012), *How do various forms of auditor rotation affect audit quality? Evidence from China*, The International Journal of Accounting, vol. 47, no. 1, pp. 109–138.
11. Garcia Blandon, J, Argiles Bosch, J. M. (2013), *Audit tenure and audit Qualifications in a low litigation risk setting: Analysis of the Spanish*

market, Estudios de Economia, Vol. 40, no. 2, pp. 133-156

12. Habib, A. (2013), *A meta-analysis of the determinants of modified audit opinion decisions*, Managerial Auditing Journal, vol. 28, no. 3, pp. 184-216
13. Heliodoro, P. A., Alegria Carreira, F., Mouta Lopes, M. (2015), *The change of auditor: The Portuguese case*, Revista de Contabilidad - Spanish Accounting Review, http://dx.doi.org/10.1016/j.rcsar.2015.05.001 (accessed at 18.09.2015)
14. Ho, L.-C. J., Liu, C.-S, Schaefer, T. (2013), *Audit tenure and earnings surprise management*, Review of Accounting and Finance, Vol. 9 No. 2, 2010, pp. 116-138
15. Jaba, E., Robu, I.B., Balan, C.B. (2015), *Statistical Evidence on the Selection Decision of Financial Auditors, in the Case of the Romanian Listed Companies,* "Audit Financiar" Journal, Volume 13, No. 4 (124), pp. 3-14; 59-71
16. Kaplan, S. E., Mauldin, E. G. (2008), *Auditor rotation and the appearance of independence: Evidence from non-professional investors,* Journal of Accounting and Public Policy, vol. 27, no. 2, pp. 177-192
17. Kim, H., Lee, H., Lee, J. E. (2015), *Mandatory Audit Firm Rotation and Audit Quality,* The Journal of Applied Business Research, vol. 31, no. 3, pp.1089-1106
18. Kwon, K. S.; Lim Y. D.; Simmnett R. (2010), *Mandatory audit firm rotation and audit quality: Evidence from the Korean audit market*, available on https://www.researchgate.net/profile/Roger_Simnett/publication/228309948_Mandatory_Audit_Firm_Rotation_and_Audit_Quality_Evidence_from_the_Korean_Audit_Market/links/02e7e527eafc0c5c40000000.pdf (accessed at 12.09.2015)
19. Lu, T., Sivaramakrishnan, K. (2009), *Mandatory audit firm rotation: Fresh look versus poor knowledge*, Journal of Accounting and Public Policy, vol. 28, no. 2, pp. 71-91
20. Robu, M.A. (2015), *Study on Increasing Value Relevance of Accounting Information by IFRS. The Case of the Romanian Companies Listed at Stock Exchange,* "Audit Financiar" Journal, Vol. 13, No. 3(123), pp. 42-52; 100-110
21. Ruiz-Barbadillo, E., Gomez-Aguilar, N., Carrera, N. (2009), *Does Mandatory Audit Firm Rotation Enhance Auditor Independence? Evidence from Spain*, Auditing: A Journal of Practice &Theory, Vol. 28, No. 1, pp. 113-135
22. Said, K. M., Khasharmeh, H. A. (2014), *Mandatory audit firm rotation and audit costs: A survey of auditing firms in Bahrain*, Journal of Finance and Accounting, vol. 2, no. 6, pp. 116-128
23. Schmidt, R. M., Cross, B. E. (2014), *The effects of auditor rotation on client management's negotiation strategies*, Managerial Auditing Journal, Vol. 29,no. 2 pp. 110 - 130
24. Sikka, P. (2015), *The corrosive effects of neoliberalism on the UK financial crises and auditing practices: A dead-end for reforms*, Accounting Forum, vol. 39, no. 1, pp. 1-18
25. Tepalagul, N., Lin, L. (2015), *Auditor Independence and Audit Quality: A Literature Review*, Journal of Accounting, Auditing & Finance, vol. 30, no. 1, pp. 101-121
26. Tudor, I. (2014), *Monopolul firmelor de audit. PwC, Deloitte, KPMG şi EY şi-au dublat veniturile în ultimii zece ani, în pofida crizei şi a scandalurilor*, Ziarul Financiar, 14.02.2014, available on: http://www.zf.ro/business-international/monopolul-firmelor-de-audit-pwc-deloitte-kpmg-si-ey-si-a-dublat-veniturile-in-ultimii-zece-ani-in-pofida-crizei-si-a-scandalurilor-12079972
27. Velte, P., Freidank, C.-C. (2015), *The link between in- and external rotation of the auditor and the quality of financial accounting and external audit*, European Journal of Law and Economics, vol. 40, no. 2, pp. 225-246
28. Business 24, *Companiile listate din UE obligate să schimbe firmele de audit la fiecare zece ani*, Decembrie 18, 2013, available on: *http://www.business24.ro/companii/stiri-companii/companiile-listate-din-ue-obligate-sa-schimbe-firmele-de-audit-la-fiecare-zece-ani-1539456*
29. Directiva 2006/43/CE din 17 mai 2006 privind auditul legal al conturilor anuale şi al conturilor consolidate, Jurnalul Oficial al Uniunii Europene nr. L 157 din 9 iunie 2006, p. 87-107

30. GAO (General Accounting Office), (2003), *Required study in the potential effects of mandatory audit firm rotation*, Report to the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Financial Services, available on http://www.gao.gov/new.items/d04216.pdf (accessed at 16.09.2015)
31. International Auditing and Assurance Standards Board - IAASB (2013), *International Standards on Auditing*, International Federation of Accountants, New York
32. OUG nr. 90 din 24 iunie 2008 privind auditul statutar al situațiilor financiare anuale şi al situațiilor financiare anuale consolidate şi supravegherea în interes public a profesiei contabile, Monitorul Oficial al României, Partea I, nr. 481 din 30 iunie 2008, aprobată prin Legea nr. 278 din 7 noiembrie 2008, Monitorul Oficial nr. 768 din 14 noiembrie 2008, cu modificările şi completările ulterioare
33. PCAOB (Public Company Accounting Oversight Board) (2011*), Concept release on auditor independence and audit firm rotation* (PCAOB Release No. 2011-006, August 16, 2001; PCAOB Rule making Docket Matter 37), Available on http://pcaobus.org/rules/rulemaking/docket037/release_2011-006.pdf (accessed at 17.09.2015).
34. PwC (2013), *Point of View. Mandatory audit firm rotation – other changes would be better for investors*, available on https://www.pwc.com/gx/en/audit-services/publications/assets/pwc-pointofview-mandatoryrotation.pdf (accessed at 17.09.2015)
35. Regulamentul (UE) nr. 537/2014 al Parlamentului European şi al Consiliului din 16 aprilie 2014 privind cerințe specifice referitoare la auditul statutar al entităților de interes public, Jurnalul Oficial al UE, L 158 din 27 mai 2014