Are financial audit elements and corporate governance policies solutions for the economic crisis?

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Abstract. The implementation of high quality financial audit and the adoption of corporate governance policies are considered to be important factors that can contribute to the economic re-launch after the recent financial crises. It is expected that their existence should have a positive impact upon financial performance. As a fact, the present research underlies the dependencies between financial performance, financial audit and corporate governance elements for the companies that are listed on the Bucharest Stock of Exchange. The results of the research are mixt, showing in fact that the actual solutions are not enough for ensuring the ideas of overcoming upon the financial crisis.

Keywords: financial audit, corporate governance, financial performance, financial crisis.

JEL Classification: M42, G34, G10.
Introduction

The release of financial crisis imposed for a deeper analysis of financial statements both at national and international level. Moreover, there was an increase upon the need of certifying the financial performance by an accredited person. It is considered that financial auditor, especially if is one of the BIG 4 companies, can ensure higher credibility to the auditing process and to way financial statements are constructed. For example, when the auditor is from BIG 4 corporations, there is higher quality of information disclosure and the future uncertainly associated with cash flows is mitigated (Chang et al., 2009). This behavior is linked with the fact that BIG 4 auditors have much more resources in order to ensure integrity of possible disclosure financial information (DeAngelo, 1981). Consequently, the companies that have a high quality of their financial auditor (the audit is performed by a BIG 4 entity) have a higher degree of transparency of their financial auditors’ report (Khurana and Ratman, 2004). Other researches proved that the presence of financial auditor can positively influence the amount of foreign investment that companies can attract (Covrig et al., 2007; DeFond et al., 2011). Considering these, there is evidence that the performance of the company is correlated with the type of auditor (studies such as those conducted by Dimitropoulos et al., 2013; Ahmed et al., 2013 proved that there is less earnings management, more timely loss recognition and more value relevance when the financial auditor is from BIG 4).

On the other hand, the existence of corporate governance principles and their implementation at the company’s level can also significantly influence its evolution. The literature provides evidence that firms with weaker governance structures have higher agency problems, which result in lower financial performance compared with the one obtained by firms that have a stronger corporate governance structure (Core et al., 1999). Moreover, entities that are more inclined to fraud financial statements have in general a weaker corporate governance system (Farber, 2005).

Based on these aspects, the present research tries to reveal if the existence of high quality financial auditor and the existence of corporate governance principles can affect, in a positive way, the financial performance obtained by Romanian companies that are listed on the Bucharest Stock of Exchange. As a fact, the research tries to reveal if these elements are enough or not in order to ensure the re-launch after the financial crisis.

The rest of the paper is structured as follows: the first section presents some approaches related with financial crisis and corporate governance principles or financial auditor that are found in the literature, section two provides information about the database and the methodology of research upon which the study is conducted, section three focuses on the results and discuss the results of the research, while section four concludes and presents future possibilities of research.

Literature review

The main literature emphasizes that the role of financial auditors in the context of financial crisis was uncertain. The explanation is that they were not prepared to face huge financial problems such as those that were revealed when the financial crisis released (Sikka, 2009). In fact, it seems that during the financial crisis companies are more
inclined to change their non-BIG 4 auditor to a BIG 4 one rather than changing their BIG 4 auditor to a non-BIG 4 company. (Hubens, 2012). This situation is due to the fact that companies seek for new financial auditor when they want their financial performance not to be influenced by bad news. The change of financial auditor is also a phenomenon that takes place when the company has lower financial performance (William, 1988) or when it suffered losses in previous years (Francis, 1984). The reasons of choosing a BIG 4 company as financial auditor lies on the assumption that higher credibility and higher reliability is conferred to financial statements (Chia et al., 2007, Reichelt and Wang, 2010).

Another element that is related with financial auditor is the amount paid for the auditing process. At such, an indicator for financial auditor is conferred by the audit fees. The auditor’s remuneration is influenced by individual characteristics of audited company, such as indebtedness ratio, size, complexity of its activity and the risk that is associated with the auditing process. Due to this, it seems that BIG 4 auditors perceive higher remuneration for their entire activity (Campa, 2013). On the other hand, the amount request by financial auditor can be a reason to change him due to different audit fees level (Craswell et al., 2002) or due to the law balling effect (Simon and Francis, 1988).

When it comes to corporate governance and financial crisis, failure of several companies and banks is associated with weaknesses in corporate governance regarding the safeguard of the entity, the risks correlated with it and the remuneration system that was not reliable for the entity (Kirkpatrick, 2009). The independence of the board of directors is considered to be essential in order to ensure proper governance polities and the supervision of managers’s activities (Cohen and Hanno, 2000). Prior research has link the deficiencies on corporate governance with the release of Asian Economic Crisis and with the low enforcement of it (Wong and Fan, 2005). Another research proves that when CEO is similar with the chairman of the board of directors, when the percentage of the external board members is below the percentage of internal board members, when there are fewer experts on the audit committee and when they have fewer meetings the company has a low quality of corporate governance system and its more inclined to manipulate its financial statements (Farber, 2005).

The literature also establishes a relationship between auditor’s remuneration and corporate governance elements. While some studies reveal that the auditor’s fees are positively correlated with the independence of the board of directors (Carcello et al., 2002), other researches present that there is no correlation between the corporate governance variables and financial auditor’s ones (Ditmann et al., 2008). In fact, the CEO/chair duality influences in a negative way the amount that is paid to financial auditor. Mixt results are also found when the company is having an audit committee. Positive results were detected between auditor’s remuneration and the existence of the audit committee (Voller et al., 2013). Other research (Cohen and Hanno, 2000) emphasize that a negative relationship exist among auditor’s fees and the existence of the audit committee due to the fact that the risk related with the auditing process are mitigated.

Another important issue upon which the literature presents information is the link between financial performance and the corporate governance principles. While higher performance is expected to be obtained when there the principle of corporate governance
are properly applied, when the company is having a financial auditor from BIG 4, no relevant assumptions can be made.

Regarding the Romanian market, there are few studies that search for the correlation between financial performance, financial auditor and corporate governance variables. One of them found no relevance of the CEO/Chair duality and the high quality financial auditor when financial performance is encountered (Brad et al., 2014). The authors based their explanations of the fact that Romanian market is characterized by a lack of transparency in financial reporting.

**Methodology of research**

The present research tries to provide evidence about the relationship between financial performance, financial auditor’s characteristics and corporate governance indicators. In order to achieve the objective of research, data regarding the companies that have to report using IFRS from 2012 were collected. The reason of choosing this sample lies on the fact that once the new accounting approach is implemented, higher degree of transparency in accounting reporting is expected (Daske, 2006). The number of companies that have to comply with reporting individual financial statements using the International accounting measure was, at the end of 2012, 71. From this sample, we have eliminated the companies that have a negative value of their shareholder’s capital, the companies that had opened their insolvency procedure in transition period or in the year of adoption.

From the remaining sample, data regarding the financial audit remuneration (which was coded by \( \text{LOGAF} \)) was also collected. As a fact, the entities that have not provided information about this aspect were also excluded from the analysis. Thus, we had data only for 41 companies. These entities are listed on the Bucharest Stock of Exchange, both art first and the second category. The data is collected using both financial information and information related with corporate governance elements from individual company’s site. The information is collected for year 2011 as in 2012 and 2013 the information regarding auditors’ fees was not found after checking the financial statements of each company. Regarding the information collected, data about the return on assets of each company, which represent the measure of financial performance, (coded \( \text{ROA} \)), the indebtedness ratio computed by dividing the total amount of debts to own capital (coded \( \text{LEV} \)) and the numbers of executive members (\( \text{EXB} \)) was collected.

In the study, other dummy variables have also been used. The first one refers to CEO/chair duality and is coded \( \text{DCEO} \). The variable takes 1 if the CEO is different from the chairman of the board of directors. The second dummy variable that we used is the type of management system that the company has. As a fact, if a company has a one-tier management system then the variable took 1, otherwise it took 0. The variable is coded by \( \text{DSYST} \). The third dummy variable refers to the auditor type. If the financial auditor is part from BIG 4 corporations then the value 1 was given to the financial auditor variable, which was coded \( \text{DBIG4} \). In all other cases, the variable took 0. The forth dummy variable that was encountered into the analysis is the existence of the audit committee. The variable was coded \( \text{DCOMT} \) and took value 1 if the company had declared in its corporate governance document that is having an audit committee. The last dummy variable that was incorporated into the analysis is the variable that provides evidence
about the financial auditor’s change. The variable took 1 if there is a difference between the financial auditor that the company had in 2010 and the financial auditor that the entity reported in 2011. The value 1 does not depend on the quality of financial auditor that the entity has. The variable was coded \(DCHG\).

In order to obtain a correlation among financial performance, financial auditor and corporate governance, a model of simultaneous equation was conducted. The model is presented into system (1) formed from equation (1) and (2)

\[
\begin{align*}
\text{LOGAF} &= \alpha_0 + \alpha_1 \times DCEQ + \alpha_2 \times DSYST + \alpha_3 \times DBIG_4 + \alpha_4 \times DCOMT + \alpha_5 \times \\
\times ROA + \alpha_6 \times EXR + \varepsilon_i \\
\text{ROA} &= \beta_0 + \beta_1 \times DCEQ + \beta_2 \times DCHG + \beta_3 \times DBIG_4 + \beta_4 \times DCOMT + \beta_5 \times \\
\times LEV_i + \beta_6 \times LOGAF + \nu_i \\
\end{align*}
\]

Where \(\varepsilon_i\) and \(\nu_i\) are the error terms and \(i\) refers to each company that is included into the sample.

In order to solve the structural equations found in system (1), firstly the type of each equation has to be identified. As two variables are missing from each equation and considering the fact that the number of endogenous variable is two, each equation is exactly identified (Gujarati, p. 762).

The solution of the equation is based on estimating the reduce form of each equation and after that on estimating the standard equations considering the fitted values. The reduce form of our equations is presented in system (2) form from equation (3) and (4)

\[
\begin{align*}
(1 - \alpha_5 \times \beta_6) \times \text{LOGAF}_i &= \alpha_0 + \alpha_5 \times \beta_0 + (\alpha_1 + \alpha_5 \times \beta_1) \times DCEQ_i + \alpha_2 \times DSYST_i + \alpha_3 \times \\
\times \beta_2 \times DCHG_i + (\alpha_4 + \alpha_5 \times \beta_3) \times DBIG_4_i + (\alpha_4 + \alpha_5 \times \beta_4) \times DCOMT_i + \alpha_5 \times \beta_5 \times \\
\times LEV_i + \alpha_6 \times EXB_i + \alpha_5 \times \nu_i + \varepsilon_i \\
(1 - \alpha_6 \times \beta_5) \times \text{ROA}_i &= \beta_0 + \beta_6 \times \alpha_0 + (\beta_1 + \beta_6 \times \alpha_1) \times DCEQ_i + \beta_2 \times DCHG_i + \beta_3 \times \\
\times \alpha_2 \times DSYST_i + (\beta_4 + \beta_6 \times \alpha_4) \times DBIG_4_i + (\beta_4 + \beta_6 \times \alpha_5) \times DCOMT_i + \beta_5 \times LEV_i + \\
+ \beta_6 \times \alpha_6 \times EXB_i + \beta_6 \times \varepsilon_i + \nu_i \\
\end{align*}
\]

For an easily understanding, both equation (3) and (4) is divided by \((1 - \alpha_5 \times \beta_6)\). Each coefficient is replaced by another variable and thus, the structured form is obtained. This is presented in system (3) composed from the equations (5) and (6)

\[
\begin{align*}
\text{LOGAF} &= \gamma_0 + \gamma_1 \times DCEQ + \gamma_2 \times DSYST + \gamma_3 \times DCHG + \gamma_4 \times DBIG_4 + \gamma_5 \times DCOMT \\
+ \gamma_6 \times LEV + \gamma_7 \times EXR + \sigma_i \\
\text{ROA} &= \lambda_0 + \lambda_1 \times DCEQ + \lambda_2 \times DCHG + \lambda_3 \times DSYST + \lambda_4 \times DBIG_4 + \lambda_5 \times DCOMT \\
+ \lambda_6 \times LEV + \lambda_7 \times EXB + \alpha_1 \\
\end{align*}
\]
Based on the model presented in equations (1)-(6), the research was conducted considering some hypotheses of research. These are:

H1: Higher financial performance is expected if there is a difference between the CEO of the company and the chairman of the board of directors. (Veprauskaitė and Adams, 2013)
H2: Higher performance is expected if there is a change in financial auditor (Hubens, 2012)
H3: Higher performance should be obtained if the financial auditor is part of BIG Corporation (Reichelt and Wang, 2010)
H4: Higher performance should be obtained if the company reports the existence of an audit committee (Bouaziz, 2012)
H5: Higher the indebtedness ratio is, lower the financial performance is.
H6: Higher the audit fees are, higher the financial performance is.

Results and discussions

The purpose of research was to reveal if there is any correlation among financial performance, financial auditor and corporate governance principles considering Romanian market. In order to provide evidence about it, firstly the correlation matrix was constructed. It is presented in Table 1.

Table 1. Correlation matrix

<table>
<thead>
<tr>
<th>Element</th>
<th>ROA</th>
<th>LOGAF</th>
<th>DCEO</th>
<th>DSYST</th>
<th>DBIG4</th>
<th>DCOMT</th>
<th>DCHG</th>
<th>LEV</th>
<th>EXB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td>0.2147</td>
<td>1</td>
<td>0.1588</td>
<td>0.1670</td>
<td>0.0300</td>
<td>0.0421</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGAF</td>
<td>0.2147</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCEO</td>
<td>-0.1588</td>
<td>0.0653</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSYST</td>
<td>-0.0129</td>
<td>-0.3465**</td>
<td>-0.2497</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBIG4</td>
<td>0.1670</td>
<td>0.1578</td>
<td>0.0777</td>
<td>0.1961</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCOMT</td>
<td>-0.0300</td>
<td>-0.0474</td>
<td>0.1394</td>
<td>0.3369**</td>
<td>0.0139</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCHG</td>
<td>0.0421</td>
<td>0.1213</td>
<td>0.2101</td>
<td>-0.2877**</td>
<td>0.0442</td>
<td>0.0759</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.1796</td>
<td>-0.1910</td>
<td>0.2983***</td>
<td>0.1250</td>
<td>0.1936</td>
<td>-0.1050</td>
<td>0.0947</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EXB</td>
<td>0.1778</td>
<td>0.0706</td>
<td>0.1953</td>
<td>0.1276</td>
<td>0.425*</td>
<td>0.1866</td>
<td>0.0259</td>
<td>0.059</td>
<td>1</td>
</tr>
</tbody>
</table>

Where *, **, *** states for the level of significance at 1%, 5% and 10%.

From table 1 it can be seen that the highest correlation can be detected between the number of executive members from the board of directors and the type of financial auditor. According to this result, it can be said that larger the number of executive directors a company has, the larger is the probability that that company is going to choose a BIG4 company as financial auditor. As this value is closer to 0.4 and smaller than 0.5, all variables were included into the analysis. Consequently, in order to solve the simultaneous equation model, a summary statistics for the variables encountered into the analysis is presented in Table 2.

Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Element</th>
<th>ROA</th>
<th>LOGAF</th>
<th>DCEO</th>
<th>DSYST</th>
<th>DBIG4</th>
<th>DCOMT</th>
<th>DCHG</th>
<th>LEV</th>
<th>EXB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.027</td>
<td>4.754</td>
<td>0.6341</td>
<td>0.902</td>
<td>0.487</td>
<td>0.1707</td>
<td>0.670</td>
<td>4.658</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>0.157</td>
<td>5.521</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3.882</td>
<td>9</td>
</tr>
<tr>
<td>Min</td>
<td>-0.110</td>
<td>4.079</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.032</td>
<td>3</td>
</tr>
<tr>
<td>Std. D.</td>
<td>0.055</td>
<td>0.382</td>
<td>0.487</td>
<td>0.300</td>
<td>0.506</td>
<td>0.480</td>
<td>0.280</td>
<td>0.912</td>
<td>1.542</td>
</tr>
<tr>
<td>Skew</td>
<td>-0.169</td>
<td>0.153</td>
<td>-0.557</td>
<td>-2.712</td>
<td>1.192</td>
<td>0.448</td>
<td>1.750</td>
<td>2.182</td>
<td>1.041</td>
</tr>
<tr>
<td>Prob</td>
<td>0.567</td>
<td>0.500</td>
<td>0.0302</td>
<td>0</td>
<td>0.005</td>
<td>0.032</td>
<td>0.0001</td>
<td>0</td>
<td>0.009</td>
</tr>
</tbody>
</table>
From Table 2 it can be seen that more than a half of the companies from our analysis have the CEO different from the chairman of the board of directors. It can be seen that almost 90% of the entities have a one tier management system. Less than a quarter of the companies included into the analysis have a financial auditor from BIG 4 companies. Only 7 companies changed their financial auditor between 2010 and 2011. Considering the mean of LEV indicator, it can be observed that the companies that we have included into the analysis are higher indebted as the mean ration of total debts divided by own shareholder is up then 50%. The average number is around 67%. That means that the amount of debts is around 40% from all the resources that the company has. Regarding the number of executive members from the board of directors, in general there are up to 3 members. It had to be mentioned that where the number of executive directors from the board was provided by an interval, the average value was taken into consideration for the present research.

By analyzing the variables encountered into the analysis, it can be observed that they do not follow a Gaussian distribution due to the fact that the null hypothesis of Jacques Bera test is based on the fact that the variable is having a normal distribution.

Regarding the financial performance, there are companies which had a negative performance during 2011. As a fact, the minimum value is -11%, while the maxim value is around 15.7%.

After presenting both the correlation matrix and some particular features of each variable, the reduced form of the equations was established and after that the structured form of it (which is found on system (1) –composed by equation (1) and (2)) was estimated. The results are presented in table 3.

| Table 3. The results of simultaneous equation model |
|-----------------|------------------|----------|
| Element         | Coefficient      | P Value  |
| Constant        | 0.0229           | 0.6896   |
| DCEO            | -0.0127          | 0.0001*  |
| DCHG            | -0.0015          | 0.5626   |
| DBIG4           | 0.0268           | 0.0000*  |
| DCOMF           | -0.0039          | 0.1436   |
| LEV             | -0.0113          | 0.0000*  |
| LOGAF_FIT       | 0.0032           | 0.7890   |
| Rs squared      | 80.73%           |          |
| DW              | 1.99             |          |

Where * states for the level of significance at 1%.
The results are estimated using White test adjustment for heteroskedasticity.

The LOGAF_FIT consists on the variable that has fitted values for LOGAF (auditor’s fees) and that were estimated using the reduced form of the simultaneous equation model.

Considering the results, it can be seen that the existence of CEO and of the chairman of the company as two different persons influence in a negative way the financial performance. The explanation is related with the fact this variable is correlated with the type of management system that the company has. On the other hand, it has to be considered that the difference among CEO and the chairman of the company reflects in fact higher transparency of financial statements, which could be translated in reliable information about financial performance (less earnings management, more timely loss
recognition and more value relevance). Thus, based on the assumptions that were made, H1 is rejected as no correlation with the transparency principle was encountered.

The change of financial auditor seems to have no influence upon the financial performance, measured to the value of return on assets. This is due to the fact that the coefficient associated with the change of financial auditor is not statistically significant from zero. As a consequence, H2 is also rejected.

On the other hand, it can be observed that there is a positive correlation between the financial performance obtained by a company and the type of financial auditor that the entity has. Due to this, the following assumption can be made: a high quality financial audit implies higher financial performance as high quoted auditors are more trustworthy than the others. Considering this, H3 is accepted.

Regarding the existence of the audit committee, the results are ambiguous. Besides the assumption that higher financial performance should be obtained once the existence of audit committee is reported, the results prove that there is actually a decrease of financial performance if the level of significance is increased at 14.36%. This can be done as the dimension of our sample is quite small (only 41 companies). The results are opposed with our expectations (H4 is rejected) and also contrary to the results found on main literature.

As we have expected, the results of indebtedness influence negatively the financial performance. Thus, higher the indebtedness ratio is, lower the financial performance is. Consequently, the results prove that H5 is valid.

The last hypothesis of research was also rejected as there is no statistically significance of the coefficient associated with auditor’s fees even though the fitted value from the reduced form of simultaneous equation model was used in the analysis.

Summarizing, the results of the research prove that there is no enough relevance for financial audit elements and for corporate governance ones that they are important features that can contribute to financial re-launch even though the goodness of the model is revealed by having a R-squared of 80.73% and by having no autocorrelation between variables and the residual terms.

**Conclusions**

The present research tried to reveal if the elements related with financial audit and those related with corporate governance principles are solutions that can ensure the financial re-launch of Romanian companies considering the recent financial crisis. The research is conducted using a sample of 41 companies from the Bucharest Stock of Exchange that provide evidence about the remuneration of their financial auditor. The study is conducted using financial information from 2011 and the results are provided considering a simultaneous equation model, where both equations are exactly identified. They are presented considering the reduced form of the model encountered and by including the fitted variables of endogenous variables.

The results are ambiguous considering what the main literature provides to us. As a fact, it seems that there is a negative correlation between the financial performance and the difference between CEO and the chairman of the board of directors. The explanation is
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due to the fact that once the CEO/chair duality is not found at company level, higher degree of transparency of financial statements is expected. Considering this approach, the results provide evidence that there are less earnings management, more timely loss recognition and higher value relevance for Romanian companies if there is a difference between CEO and chairman of the company. The conclusion is based on the fact that the managers have fewer ways to manipulate financial statements in order to gain private benefit. Negative influence is also found for the indebtedness ratio, result that is in accordance with the one found by Opler and Titman, 1994. The existence of the audit committee seems to provide evidence of a negative influence upon financial performance if the level upon which we reject the null hypothesis is increased around 15%. The results are contrary with the results found into main literature (Hubens, 2012).

Regarding the type of financial auditor that the company has, it can be concluded that higher the quality of financial auditor is, higher the financial performance is or in other words, we expect higher financial performance if the company is audited by a BIG 4 entity. The second variable that is related to auditing process and which is proxy by financial auditor’s fees is not statistically significant in the relationship with financial performance (measured by return on assets).

Based on the estimation, it can be concluded that there is no enough relevance that the existence of financial auditor’s variables and the implementation of corporate governance principles are solutions for Romanian entities for the re-launch upon financial crisis. In order to improve the results, we consider that several other corporate governance indicators can be included in future research. Moreover, further research should be done on a larger sample (the small dimension of our sample- only 41 entities represents one problem of the research conducted), should avoid the lack of transparency that is found on Romanian market and should include other estimation techniques in order to provide better results.

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