

THE RELATIONSHIP BETWEEN THE QUALITY OF EXTERNAL AUDIT AND THE FINANCIAL PERFORMANCE, THE ASSET QUALITY AND THE SOLVENCY OF BANKS FROM ROMANIA

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Abstract

The audit function plays a key role in the corporate mechanism, particularly through value addition provided the governance process, so who, over time, this issue was discussed in a series of assiduous studies and analysis on information transparency at the company level. The purpose of this article is to provide an analysis of possible relationships between external audit quality (assessed by membership the Big Four) and financial performance, asset quality and solvency of the banking system in Romania. Thus, we tried to find answers substantiated by empirical analysis results to the questions: "Influences and if so then what affect your performance affects the quality of external audit in the banking system? How is the quality of the external audit capital gains recorded in the credit institutions? "

In order to test the hypotheses formulated, the research methodology used is predominantly quantitative, based on a statistical analysis deductive, whose starting point agency theory, aimed at testing and possible cause-effect links, and also deals significance level thereof.

Keywords

quality audit, external audit, corporate governance, financial performance, solvency, banking system.

JEL Classification

M40 , G20, G30

1. Introduction

The audit function plays an important role in the corporate mechanism, in particular through its power to add value to the process of government, becoming over time subject to the various studies focused on the issue of transparency of information. Very often analyzed from the perspective of the audit committee appreciated in terms of number of members in its composition and in particular independent but equally important and legally perceived audit quality external, the audit function has proved most times to be positively correlated with the level of disclosed information.

In terms of the audit committee, it is viewed from the perspective of agency theory as a "tool" that improves the quality of monitoring information flow between the owners of the entity and its management (Forker, 1992; Ho and Wong, 2001), particularly in the area of financial reporting, where the information of the two is significantly different of stakeholders (Barako, et al., 2006).

On the other hand, the external auditor has a crucial role in enhancing the efficiency of corporate governance by increasing the the credibility of the information provided by financial reporting as transparent as possible (Francis et al., 2003; Sloan, 2001). So what is justified by the external auditors were sometimes seen as "gatekeepers" to monitor managerial behavior on behalf of all stakeholders (O'Sullivan et al., 2008), in their absence maintaining the appropriate corporate governance structures could be endangered (Coffee, 2001).

In the spirit of agency theory, the big audit firms act as mechanisms for reducing the information asymmetry and agency costs, limiting opportunistic behavior of management through monitoring (Jensen and Meckling, 1976) and also contribute to improving the quality of information disclosed (Chung et al., 2002), thus ensuring the protection of investors (McDaniel et al., 2002).

Thus, the audit quality was assessed frequently in the literature in terms of the size of the audit firm (Barako, et al., 2006; Eng and Mak, 2003; Gul and Leung, 2004; Chau and Gray, 2010; Al-Shammari and Al -Sultan, 2010; Akhtaruddin, et al., 2009; Haniffa and Cooke, 2002; Huafang and Jianguo, 2007), large firms (ex. big Four) are assessed as able to contribute to the establishment of good corporate governance practices among entities, at least for the following reasons:

- The higher quality of audit services provided compared to that of the small firms (Leung and Horwitz, 2010), because at the level large entities "there is more wealth in the game" (Dye, 1993). This is generally reflected of the higher audit fees charged by fund dedicated more time audits and fewer processes subsequent to (DeAngelo, 1981; Palmrose, 1988, Palmrose, 1989);
- The reputation in minimizing errors (DeAngelo, 1981; Beatty, 1989; Firth, 1979; Chow, 1982; Ahmed and Nicolis, 1994). Large audit firms are willing to invest more to maintain its reputation as suppliers of quality audit services, because if they damage the reputation risks losing more than small firms;
- The greater experience, usually manifested through influences on leadership in encouraging the entity to disclose as much information to reduce the information asymmetry and agency costs (Baiman, et al., 1987; Baiman, 1990; Wallace et al. 1994; Watts, 1977; Watts and Zimmerman, 1986);
- The higher degree of independence to customers, given the large number of them, which could compromise the quality of their work to a lesser extent than in the case of small audit firms (Owusu-Ansah, 1998). Given their role to enhance the level and quality of information disclosed, independent status allows them to influence corporate financial reporting to better meet the needs of external users (Barako, et al., 2006)..

2. Study on the relationship between the quality of external audit - financial performance, solvency and performing rate in the Romanian banking system

2.1. The object of study and research hypotheses

The main purpose of this study is to examine the possibility of interdependence between, on the one hand, the external audit quality and, on the other hand, the financial performance, the asset quality (in terms of non-performing loans ratio - non-performing

loan NPL) and the solvency indicators at the level of the Romanian banking system. Therefore, this paper provides a comprehensive analysis of the relationship of the external audit with the financial performance at the level Romanian banking system, trying to provide answers justified by the results of an empirical research question: influences and if so, in what way influences the quality of of external audit of financial performance, the asset quality and the solvency of banks?

Based on the records of the previous research literature, the following hypotheses of research were formulated:

H1: *There is a significant positive association between the quality of external audit and the financial performance of banks?*

H2: *There is a significant positive association between the quality of external audit and the asset quality of banks?*

H3: *There is a significant positive association between external audit quality and the solvency of banks?*

2.2. The research methodology

The research methodology used to test assumptions, is mainly quantitative. This is based on a statistical analysis deductive, whose starting point agency theory, aimed at testing and possible links of cause - effect, and also analyzing their significance level.

The external audit quality in the banking system is studied from the perspective of belonging to the group Big Four..

In the performed research, the specific tools were used for data processing using SPSS software under Windows (correlation test and regression analysis)..

At the end of 2013, the Romanian banking system comprises 40 credit institutions which 31 banks, Romanian legal entities (including credit cooperative organization) and 9 branches of foreign banks.

Out of the 40 banking companies, the sample analyzed consists of 25 banks, Romanian legal entities under their websites for information published on 31 December 2013, were excluded from the analysis of the nine branches of foreign banks which, under Regulation 25/30/2006 regarding the disclosure requirements for credit institutions and investment firms, there is no obligation to publish information on Romania (these being made public the information on the homeland of group) and a number of six banking companies, Romanian legal persons who have not published information on their official websites.

The collection of data needed research was based exclusively on the information posted on the websites of the banks, of the National Bank of Romania or through the annual financial statements and related reports of 2013 on transparency and disclosure requirements designed on accordance with the NBR-NSC No 25/30/2014 amended and supplemented by Regulations NBR - NSC No. 21/26/2010 and 23/15/2011 and NBR Regulation No. 25 / 10.12.2010.

To achieve the objective of the research was necessary to define two distinct sets of variables: those dependent and independent analyses underlying the correlations between them, including a breakdown of how to define them and their evaluation are shown in Table no 1.

Table no 1: The list of analyzed variables

Variable	Symbol	Definition	Measurement
Independent Variable			
The quality of the external auditor	EA_QUAL	The quality assessed by the external auditor belonging to group "Big Four"	1 – membership in "Big Four"; 0 – to the contrary
The dependent variables on the financial performance			
1. Return on Assets	ROA	Return on Assets	The net result / total assets
2. Return on Equity	ROE	Return on Equity	Net income / equity
The dependent variable on the quality of assets			
3. NPL ratio	NLP	The share of nonperforming loans in the total loan portfolio	Non-performing loans / total loans
4. The solvency	Solv	the capital adequacy ratio - the adequacy of own funds to the risk weighted assets	ratio of Tier 1 and 2 of the credit institution and its risk- weighted assets

Source: author's own

In order to test the possible correlations between the dependent variable and the independent variables we used the Pearson coefficient calculation, commonly used to assess the intensity exhibited linear dependence between two variables.

The correlation coefficient is denoted by $\rho(X, Y)$ and is defined by the relationship:

$$\rho(X, Y) = \frac{cov(X, Y)}{\sigma_x \times \sigma_y} = \frac{\sum_{i=1}^N (x_i - \mu_x)(y_i - \mu_y)}{N \times \sigma_x \times \sigma_y}, \quad i=1, N, \quad (1)$$

Where:

$$- cov(X, Y) - \text{covariance: } cov(X, Y) = \frac{\sum_{i=1}^N (x_i - \mu_x)(y_i - \mu_y)}{N}; \quad (2)$$

- x_i, y_i and μ_x, μ_y – values of the correlated variables and their average;

- N – the number of pairs of values;

- σ_x, σ_y – the standard deviation for X, respectively Y.

The correlation coefficient is obtained by standardizing covariance.

The Pearson coefficient can have values between "1" (which shows a direct link perfect) and "-1" (which shows the absence of a linear correlation between the two variables).

A correlation coefficient equal to +1 indicates a perfect direct relationship between variables and one equal to -1 indicates a perfect inverse relationship.

If ρ takes the value 0 zero, then there is no connection between variables.

This analysis of possible correlations that may exist between the studied variables gives us indices about the meaning and significance of the possible links between them, thus allowing us to accept or reject hypotheses formulated research.

The dependent variables analyzed are: the financial performance (ie ROA - Return on Assets, Return on assets - and ROE - Return on Equity, cost), the asset quality (NPL to total loans) and the solvency ratio as a summary of the recorded bank performance.

In order to evaluate the performance of the bank, previous research with similar objectives reflect a very wide range of financial indicators. One of the most frequently used proved Tobin's Q [ratio of (market value of equity + market value of debt) and the replacement cost of all assets] or various other modified variants, derivatives thereof.

Because it is difficult to obtain information on the market value of banks included in the sample, such information is not always in the content published financial reports, we used in the study of basic indicators of performance assessment, those return on assets (Return on Assets - ROA) and ROE (Return on equity - ROE), these variables are often used on previous similar studies..

In order to assess the quality of the loan portfolio, was used as the dependent variable performing loans on total loans (NLP), knowing that in the financial services sector banking, financial and economic crisis has had a negative impact on credit quality. NPL ratio is calculated as the share of gross exposure and non-bank interest rates on loans with debt service greater than 90 days and / or where judicial proceedings have been initiated against the operation or the debtor on total loans and interests, non-bank loans.

Another dependent variable used on research is the solvency indicator (capital adequacy ratio - the adequacy of own funds to risk-weighted assets); It is calculated as the ratio of Tier 1 and 2 of the credit institution and its risk-weighted assets.

Tier 1 include¹: *subscribed social capital and paid up*², *share premium*, fully paid, regarding the social capital, *legal, statutory and other reserves*, as well as *retained earnings* of the previous financial years, after the distribution of *profit and net profit* last financial year, earnings until its distribution as decided by the General Meeting of Shareholders.

Tier 2 include: *Tier 1 instruments* (reserves from the revaluation of tangible assets, adjusted for tax obligations, foreseeable at the time of calculation of own funds; Titles unlimited duration and other similar instruments which, cumulatively several conditions; other items that meet the conditions set on the elements of Tier 2 basic) and *Tier 2 supplementary* (fixed-term cumulative preferential shares; capital in the form of subordinated loans)

The adequacy of capital to the risks continues to experience a very high level at Romanian banking system (by 6 percentage points higher than regulated), which is a consequence of prudential regulation and supervision measures adopted by the NBR with the start of the event in Romania to the international financial crisis, namely the imposition of the 10% threshold for solvency indicator (compared with 8 percent minimum, regulated at national and European level) in the case of credit institutions considered to have a high risk profile.(Bunea, 2014).

2.3. Results and discussion

The Pearson coefficient values, coefficient which illustrates the possible correlations between all variables considered in this analysis and their significance level are shown in the Table 2.

¹ NBR Regulation no.18 / 2006 on the own funds of credit institutions and investment firms

² With the exception of the cumulative preferential shares or, where appropriate, the endowment capital available to the branch in Romania of the credit institution from the third country

Table no 2 The correlation matrix of the analyzed variables

<i>The financial performance</i>			EA_QUAL
Return on assets	ROA	Pearson Correlation	0,182
		Sig, (2 - tailed)	0,010
		N	25
Return on equity	ROE	Pearson Correlation	0,186
		Sig, (2 - tailed)	0,011
		N	25
<i>The asset quality</i>			
NPL rate	NLP	Pearson Correlation	0,190
		Sig, (2 - tailed)	0,012
		N	25
<i>The solvency</i>			
Solvency	Solv	Pearson Correlation	0,192
		Sig, (2 - tailed)	0,011
		N	25

Source: Calculations performed by the author using SPSS

Following the analysis of The Pearson coefficient values it is noted that the financial performance achieved by the credit institutions depend to a lesser measure on the quality of the external auditor, positive correlations identified with a significant probability of only 95%, recorded values of the Pearson coefficient nearly identical (0,185 for ROA, ROE 0.186 respectively).

The same situation can be observed regarding the existence of an external audit influences on loan quality and solvency of credit institutions respectively, being so closely identified correlation (coefficient being 0.190 to 0.192 respectively for NLP and the indicator of solvency).

The correlation analysis identified for each analysed independent variable, giving reasons for acceptance or rejection of the formulated research hypotheses has been based on the results of the analysis and regression also presented in Table 3.

Table no 3 Regression analysis

The external audit quality	Unstandardized/Standard Coefficients			t	Sig.	R.Sg.	Adj.R. Sg.	F. Value
	B	Std. Error	Beta					
<i>The financial performance (ROA)</i>								
(Constant)	0,823	0,028		26537	0,000			
EA_QUAL	0,000	0,000	0,182	2421	0,010	0,032	0,27	6340
<i>The financial performance (ROE)</i>								
(Constant)	0,829	0,030		26782	0,000			
EA_QUAL	0,002	0,003	0,186	2510	0,011	0,033	0,27	6210

The asset quality (NLP)								
(Constant)	0,698	0,029		27825	0,000			
EA_QUAL	0,003	0,001	0,190	2670	0,012	0,032	0,28	6295
The Solvency (Solv)								
(Constant)	0,792	0,042		28472	0,000			
EA_QUAL	0,001	0,002	0,192	2732	0,011	0,034	0,29	6183

Source: Calculations performed by the author using SPSS

Starting from the premise that the provided services, the reputation, the experience and the independence are defining aspects underlying audit quality assessment and given the fact that auditors from the "Big Four" has all the attributes essential to limit opportunistic behaviour by monitoring were tested the following hypotheses:

H1: *There is a significant positive association between the quality of external audit and the financial performance of banks*

H2: *There is a significant positive association between the quality of external audit and the asset quality of banks*

H3: *There is a significant positive association between external audit quality and the solvency of banks*

Given the values of the Pearson coefficient obtained by using SPSS software (which are to 0,250 and that the value of Sig. Which is less than 0.05), low intensity positive associations have been identified as financial performance and the quality of assets and solvency ratios; however, they are statistically significant.

Thus in terms of the three hypotheses testing, after analysis, it can be concluded that there is ***no a significant positive association*** between the quality of the external audit and the financial performance, asset quality and solvency of credit institutions from the Romanian banking system.

In conclusion, the three hypotheses tested (H, H2 and H3) are rejected, external audit quality (expressed in terms of belonging to the Big Four) not having a significant influences on the dependent variables in this analysis at the level of the banking companies from Romania.

3. Conclusions

The study was designed to provide an analysis of possible relationships between external audit quality (assessed by membership the Big Four) and the financial performance, portfolio quality and solvency of the banking system from Romania.

The testing of possible influences between the quality of external audit on the value of an entity has been subject to wide range of research until now. In contrast, research performed on this study contains a unique approach to this problem recorded in a specific area of activity, the financial question bank, rather than exploited area under this perspective until now. Also, by this analysis we tried to capture in addition to the relationship between the quality of external audit and financial performance and the links between this and the performing loan ratio and the indicator of solvency).

At the same time, the study was focused on a single "key player" respectively the external audit- thus giving them due consideration of the role and place in the governance process. Also, assumptions and associations with the dependent variables included in the analysis, research gives a touch of originality and, by default, value added.

The research has a number of limitations, caused primarily sample size of banking companies analysed, and that research was based on information related to effectuate a single calendar year (end of 2013), all are considered as challenges for future research. Also, this study included only a few indicators that measure the performance of the banking system, paving the way on future research furthering other indicators of performance analysis and risk management of credit institutions (capital adequacy of credit risk, market risk, operational risk etc.).

With all of these limitations, we consider that this study could be a useful source of information and reflection for banking practitioners, representing also of the challenges of future research.

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