The Expertise of Audit Committee and Earnings Management in Banks

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Abstract: It is widely accepted that the financial sector has undergone countless serious and severe financial crises and scandals in recent decades. The devastating effect of these shocks which has immediately been manifested by the bankruptcy of many large banks has affected many economies around the world and has called into question the credibility of the financial reporting disclosed. The purpose of this study is to show the effective role of an audit committee of expert members in finance and/or accounting in the mitigation of earnings management in banking institutions. The results of the empirical investigation initiated with Tunisian commercial banks over a period from 2007-2017 show that the expertise of the audit committee cannot mitigate the earnings management despite the legal provisions.

Key words: Audit committee expertise, earnings management, banks, provisions, mitigation, bankruptcy

INTRODUCTION

It is widely accepted that the financial sector has undergone countless serious and severe financial crises and scandals in recent decades (the financial crisis “subprime” in 2007 Eiteman, Madoff, 2008, Vivendi-Universal in France, Nortel in Canada, Parmalat in Italy, etc.). The devastating effect of these shocks which has immediately been manifested by the bankruptcy of many large banks has affected many economies around the world and has called into question the credibility of the financial reporting disclosed.

In an attempt to remedy the different manipulations of the inspected results, the public authorities became aware of the need to strengthen the corporate governance system. Thus, recent legislation (SOX Law, 8th European directive,..., etc.) recommended and required the restructuring and the introduction of new governance mechanisms including the audit committee. The latter is seen as an important governance mechanism capable of monitoring earnings management practices. However, research on the impact of the introduction of this audit committee on earnings management in particular those by Menon and Williams (1994), Wiraustari and Tanzi (2015) shows that the mere existence of the audit is not a guarantee of the efficiency of one’s job.

The theoretical financial literature on the effectiveness of the audit committee in particular the theory of the agency, teaches us that the audit committee’s expertise is an effective means of controlling the managers and the financial reporting quality disclosed.

However, the results of the empirical work, aspiring to validate the hypothesis of this theory, prove inconclusive. Indeed, a panoply of research confirms the negative impact of the audit committee’s expertise on earnings management (McMullen and Raghunandan, 1996; Agrawal and Chadha, 2005). On the other hand, other studies provide empirical proofs of the positive association between the expertise of the audit committee and the presence of accounting manipulations (Song and Windram, 2004).

The objective of this research is therefore, to try to decide on the effect of the expertise of the audit committee on the level of discretionary provisions within Tunisian banks. To do this, we will follow the following steps.

Literature review

The legislative framework of the audit committee: Following the succession of financial scandals and financial crises, international regulatory texts, professional reports and regulatory commissions have succeeded one another internationally (Treadway in the United States, 1987, Cadbury in the United Kingdom, 1992, Vienot in France, Toronto Stock Exchange Report in Canada) to recommend the introduction of the audit committee and require its features. In this respect, the Blue Ribbon Committee requires that all members of the audit committee must be financially literate and at least one expert in accounting or finance. The SOX Act requires disclosing the presence or the reasons for absence of a financial expert. The text Sancier requires that all members be financially literate and at least one
The impact of the audit committee on earnings management: After a review of the literature, Piot and Janin (2007) postulate that recent research is increasingly interested in expertise as a criterion of effectiveness of the audit committee and as an important factor in preventing earnings manipulations and therefore as a catalyst for the quality of the disclosed financial information. According to these researchers, apart from the United States, few studies have addressed the relationship between the expertise of the audit committee and earnings management. The results of this research prove to be divergent. Indeed, they oscillate between the effectiveness and the inefficiency of this characteristic in the exercise of the expected role.

The first category of these works revolves around the validation of the assumption of the effectiveness of the expertise (accounting/financial) of the audit committee. Among the supporters of this category, we mention Bedard et al. (2004), Carcello et al. (2006) who by defining financial expertise through the existence of at least one financial expert according to the provisions of RBC, confirm the negative effect of financial expertise on earnings management. Abernathy et al. (2013) find that the financial expertise of the audit committee is associated with accurate one-off accounting information and that the accounting expertise acquired through public accounting experience is also associated with ad hoc financial information. However, the accounting expertise acquired through experience is not associated with the timeliness and timeliness of financial reporting. Woitkic and Yeh (2013) prove that the earning information is reinforced by the accounting, financial or legal expertise of the directors. As for Abernathy et al. (2013), they find a significant association between the financial and accounting expertise within the audit committee and the results forecasts which are more precise and less dispersed.

Xie et al. (2003) show that expertise, defined by the proportion of business bankers, limits the opportunistic earnings management and reduces the propensity of managers to engage in earnings management. As for Bedard et al. (2004) as well as Yang and Krishnan, they observed other forms of skills such as governance expertise which is a factor in reducing earnings management. Some works go beyond these remarks, proposing to distinguish between accounting and non-accounting financial expertise.

Carcello et al. (2006) state that the presence of a financial expert on the audit committee would reduce the likelihood of a correction of result. According to these researchers, these companies are more effective in mitigating manipulations of accounting results. By the same, Dhaliwal et al. (2010) highlight the role of accounting expertise in measuring the "quality" of accruals based on their association with operational flows in adjacent periods. As for Carcello et al. (2006), they argue that abnormal accruals only decrease when financial expertise is accountable. In addition, these researchers confirm that the quality of the overall governance system can be substituted for the benefits of the accounting expertise of the audit committee.

Zarai and Bettabai find that the existence of at least one member of the audit committee with a professional designation in accounting or a related field or with experience in the accounting or financial field makes it possible to improve the quality of profits. For their part, Zhang et al. (2007) find that audit committees with greater financial expertise were quicker to dismiss listener Arthur Andersen from their company when his credibility was threatened in the Enron scandal. More recently, Dickins et al. (2009) attest that financial analysts have more confidence in financial statements when the source of expertise of the audit committee's financial experts is accounting rather than oversight. Therefore, if analysts consider that the financial information of the companies where the audit committee includes a financial and accounting expert are more credible then they will use this financial information in the formulation of profit forecasts that will be precise.

Krishnan and Visvanathan (2008), indicate that the financial and accounting expertise of the audit committee is associated with higher levels of accounting conservatism. Hoitash et al. (2009) show that this financial and accounting expertise of the audit committee is associated with a low probability of weaknesses in internal control. In addition, Krishnan and Visvanathan (2009) find that auditors charge lower fees for companies whose audit committees include financial experts. Dhaliwal et al. (2010) for their part, show that the financial and accounting expertise of the audit committee favors a better quality of regularization. Subsequently, Krishnan and Zhao (2011) find that the presence of directors with a legal background in the audit committee is associated with a better quality of financial information. Further, tests reveal a positive result in the association
between changes in legal competency and changes in the quality of financial information, indicating that legal expertise serves as a monitor rather than a signal of the quality of the financial information. Financial information. In testing this relationship, Badolato et al. (2014) also found that the expertise of the audit committee is associated with a low level of managerial discretion. The study by Sun et al. (2011) also checks the negative and significant relationship between audit committee expertise and earnings management. Also, Bedard et al. (2004) and Carcello et al. (2006), provide empirical evidence for the theory of governance. Indeed, they reconcile the idea that the financial and accounting skills of audit committee members are strongly recommended in solving the problem of earnings management. In the same vein, Lin and Hwang (2010) also reinforced the idea that audit committee expertise is a good governance mechanism. Similarly, Abernathy et al. (2015) found a positive and significant relationship between the audit expertise of audit committee members and current financial reporting. For its part, Qin (2007) corroborates that the presence of type I experts (accountants, auditors, CFOs and auditors) in the audit committee is of great importance because it generates a great profit-return relationship and thus, favors the improvement of the quality of the accounting earnings. Nevertheless, the same researcher agrees that the second category of type II experts (CEO, financial analysts and bankers) does not have a significant impact on the relevance of benefits.

Beyond this research confirming the positive contribution of the audit committee’s expertise to the quality of financial information, other works reject this association. Thus, the study by Lin et al. (2006), involving US companies in 2000 does not confirm this relationship and ignores the role of audit committee expertise in reducing accounting manipulations. Such a relationship is not similarly corroborated in the UK by the works by Song and Windrum (2004). In Malaysia, Raman and Ali by choosing 97 companies over the period from 2002-2003 do not in turn, confirm this relationship between the expertise of the audit committee and the reduction of earnings management. Finally, Livingston (2003) suggests that the financial expertise gained from experience as CEO or President does not ensure a good understanding of accounting issues for a member of the audit committee. Abernathy et al. (2013) in turn, reject the significant relationship between non-accounting financial expertise (i.e., surveillance expertise) and forecast accuracy or dispersion of forecasts.

As for the banking sector, the works is much less abundant. In addition, the results of the research dealing with this relationship are also inconclusive. A recent study by Itonen et al. (2018) further demonstrates the negative association between audit committee members with previous expertise and the increase in discretionary provisions on their sample of banks included in S&P over the period 2004-2012. For their part, Zhou and Chen provide empirical evidence of the negative effect of audit committee member’s expertise on earnings management in US banks during the period 2000-2001.

However, Lin et al. (2006) find that the expertise of the audit committee does not help to control the management and consequently, to mitigate the accounting manipulations within the banks.

In this research, by raising the suspicions by Bedard et al. (2004), Lin and Hwang (2010) and Badolato et al. (2014), we expect a negative relationship between audit committee expertise and earnings management in Tunisian commercial banks to the extent that expertise in the field of accounting or even related areas can be effectiveness factor of the committee allowing it a more rigorous and precise control. Thus, we make the following hypothesis: The expertise of audit committee members has a negative effect on discretionary provisions in Tunisian commercial banks.

MATERIALS AND METHODS

Choice of the sample: The sample of the study is made up of Tunisian commercial banks (or depots) which are listed on the Tunisian Stock Exchange. We chose a study period ranging from 2007-2017 that is 111 observations. This choice is justified by the fact that from the year 2007 all Tunisian banks have set up an audit committee. The earnings management data are collected manually from the annual reports available to the libraries and websites of the banks in question. As for the data on the audit committee (expertise) we conducted interviews with the heads of the audit committee of each bank.

Measurement of variables
Dependent variables: Our first dependent variable is the Loan Loss Provisions (LLP). This variable is measured by the total loan loss provisions of bank i in year t divided by the total loans in year t-1.

The second dependent variable used in this research is Discretionary Loan Loss Provisions (DLLP). This variable is measured by the error term of the model estimate for calculating total provisions.

Independent variables
The expertise of the audit committee (Expert): Referring to the previous research, the measures of the audit committee’s expertise retained are diverse. Some researchers such as Piot and Janin (2007) have
measured the expertise of the audit committee by a binary variable that takes the value 1, if there is at least one an expert in accounting or finance and 0 if not. Moreover, DeZoort et al. (2002), Carcello et al. (2006) measured this variable by the existence of members with a high level of expertise in the accounting and financial field (diploma) within audit committee. DeZoort et al. (2002) used as a measure of audit committee expertise the percentage of directors with accounting and/or financial expertise. Gunes and Atilgan (2016) for their part, measured this variable by the percentage of committee members with at least 10 years of experience in accounting or finance. Choi et al. (2004) bring together the expertise of audit committee members into five categories: financial expertise, accounting expertise, the expertise of current or former university professors, employee expertise, expertise in the law. As for Bedard et al. (2004), they foresee the existence of three aspects relating to the expertise of the members of the audit committee, namely: financial, governance, specific at the level of the firm. For DeZoort et al. (2002), expertise is related to the audit experience of audit committee members and their audit knowledge. According to Enricetta, expertise is associated with accounting and related skills.

In this research, like DeZoort et al. (2002), Zhang et al. (2007), we will use as a measure of the exper variable, the percentage of directors with accounting and/or financial expertise within the audit committee.

**EXPER**: The percentage of accounting and/or financial experts on the audit committee non-performing loans.

**NPL**: The opening balance of non-performing loans for bank i divided by the total loans of year t-1. Non-performing loans variation.

**ANPL**: The variation of nonperforming loans between the date t and t-1 of the bank i to the period t divided by the total loans of the year t-1. Loans variation.

**ALOAN**: The change in loans from bank i to period t to period t divided by the total loans of year t-1. Control variables.

**Return on Assets**: Net income/total assets the size of the bank.

**LASET**: The natural logarithm of total assets.

**The membership of a BIG**: BIG, auditor measured by a binary variable which is equal to 1, if the bank is audited by a BIG and 0 otherwise.

**The age of the bank**: Measured by the natural logarithm of the age of the bank i to the year t (calculated from the date of creation of the bank).

**Models to estimate**: The purpose of this research is to determine the effect of the audit committee's expertise on the level of discretionary provisions within Tunisian banks. In fact, the review of the literature has allowed us to note that loan loss provisions are considered as accruals most used by banks. To do this, in the manner by Kanagaretnam et al. (2004), we will use this variable to calculate discretionary provisions. Thus, we will break down the total provisions into a non-discretionary and a discretionary part. To do this, we built the following model. First model (calculation of DLL):

\[
\text{LLP}_t = \alpha_0 + \alpha_1 \text{NPL}_t + \alpha_2 \Delta\text{NPL}_t + \alpha_3 \Delta\text{ALOAN}_t + \epsilon_t
\]

(1)

Non-discretionary provisions are calculated following the estimation of this model:

\[
\text{NDLLP}_t = \hat{\alpha}_0 + \hat{\alpha}_1 \text{NPL}_t + \hat{\alpha}_2 \Delta\text{NPL}_t + \hat{\alpha}_3 \Delta\text{ALOAN}_t
\]

(2)

In addition, discretionary allowances are represented by the error term of this estimate:

\[
\text{DLLP}_t = \text{LLP}_t - \text{NDLLP}_t = \{\hat{\alpha}_0 + \hat{\alpha}_1 \text{NPL}_t + \hat{\alpha}_2 \Delta\text{NPL}_t + \hat{\alpha}_3 \Delta\text{ALOAN}_t\}
\]

(3)

**Second model**: In our second model we will use the discretionary provisions calculated from the first, estimate as the dependent variable. So, our second model is built:

\[
\text{LLP}_t = \alpha_0 + \alpha_1 \text{NPL}_t + \alpha_2 \Delta\text{NPL}_t + \alpha_3 \Delta\text{ALOAN}_t + \alpha_4 \text{EXPER}_t + \alpha_5 \text{ROA}_t + \text{LASET}_t + \epsilon_t
\]

(4)

**RESULTS AND DISCUSSION**

**Descriptive statistics**: From Table 1, presenting the descriptive statistics of the variables of our study, we note that the expertise is 39% on average with a minimum value of 0 and a maximum value of 80% with a relatively high standard deviation (31.83%). This is seen in line with the legal provisions by Tunisia which require that at least the chairman of the audit committee must have a qualification and expertise in the financial and accounting field and that the composition of the committee must take into account the qualifications of the members who
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Table 1: Descriptive statistics of the variables used

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>0.3183571</td>
<td>0.00</td>
<td>0.8</td>
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<tr>
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<td>0.0112797</td>
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<td>0.4985848</td>
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</tr>
<tr>
<td>Age</td>
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<td>0.2510345</td>
<td>3.135194</td>
<td>4.094549</td>
</tr>
</tbody>
</table>

LLP: Loan loss provisions, NPL: Opening balance of non-performing loans divided by total loans, ∆NPL: Change in non-performing loans divided by total loans, ∆LOAN: Change in loans divided by total loan, EXPERT: Expertise of the audit committee, ROA: Return on assets, LASSET: Size of the bank, BIG: The belonging of the external auditor to the Big 4 group, AGE: Age of the bank

Table 2: Results of the regression

| Variables     | Coefficients | SE     | t-values | p>|t| | 95% CI             |
|---------------|--------------|--------|----------|--------|-------------------|
| Expert        | 0.0123512    | 0.0062998 | 1.96    | 0.053" | -0.0001416 0.0248410 |
| Big           | 0.0049831    | 0.0050773 | 0.98    | 0.329 | -0.0050854 0.0150515 |
| ROA           | -0.9178691   | 0.1608748 | -5.71   | 0.000*** | -1.2368900 -0.5988484 |
| LASSET        | 0.0003627    | 0.0047002 | 0.08    | 0.939 | -0.0089580 0.0096834 |
| Age           | 0.0071764    | 0.0071172 | 1.01    | 0.316 | -0.0093537 0.0212902 |
| Constant      | -0.0111610   | 0.0892355 | -0.14   | 0.891 | -0.1722938 0.1499718 |

EXPERT: Expertise of the audit committee, ROA: Return on assets, LASSSET: Size of the bank, BIG: The belonging of the external auditor to the Big 4 group, Age: Age of the bank; *** Significant at 1% and ** Significant at 10%

sit there in relation to the duties required. Similarly, this result is relatively close to that by Badnato et al. (2014) who found that the average of the audit committee’s expertise in their sample is 57%.

Loan loss provisions have an average value of 2% with a minimum value of 0.7% and a maximum value of 11.76%. Non-performing loans average 13.45% with a minimum value of 0.008 and a maximum value of 45% as for the variations in non-performing loans, the results show that on average, Tunisian commercial banks recorded a value of 8.32% with a maximum of 26.15%.

With respect to the control variables, the results of the descriptive statistics show that the return on the asset is on average 0.95% with a standard deviation of 1.12%. Bank size is 15.40 on average. The standard deviation is 48.01% which indicates the high volatility within our sample. Membership of a Big 4 group auditor is 58.55% on average with a standard deviation of 49.48%. Finally, the age of the bank presents on average the value of 3.72 with the standard deviation of 25.10%.

**Regressions analysis**: The regression results using the GLS method are shown in Table 2. The results of the estimation of our second model show that the effect of the expertise on the discretionary provisions is positive and significant which invalidates our hypothesis. We note that despite the bank’s compliance with regulatory requirements for the number of experts on the audit committee, the effect of this variable on the mitigation of earnings management is still positive. This may be due to the insufficiency of this characteristic to minimize on its own, the various manipulations. This characteristic of the committee is certainly necessary but not sufficient to achieve the intended purpose of controlling published information. Indeed, an effective audit committee must also be independent, small and active. In this respect, we agree with the results by Woidtke and Yeh (2013) that suggest that the independence of the audit committee alone may not be sufficient to improve the information on the benefits and reliability of the information disclosed. Thus, the complete independence and financial or legal expertise of independent directors is a more fruitful way to increase investor confidence in accounting information. This result agrees with that by Sun et al. (2011) verifying a significant positive relationship between audit committee expertise and earnings management. We also affirm that our result is relatively similar to that found by Lin et al. (2006) who do not confirm this relationship and deny the role of audit committee expertise in reducing accounting manipulations.

However, the result is far from that by Abernathy et al. (2013) who did not find a significant association between non-accounting financial expertise (i.e., supervisory expertise) and forecast accuracy or the dispersion of forecasts. Moreover, this result opposes the result by Zagami et al. (2018) which by simultaneously testing four efficiency features of the audit committee, find a significant negative relationship between the audit committee’s expertise is the discretionary provisions on a sample of Tunisian commercial banks over a period of analysis ranging from 2007-2014. These results also differ from those by Itonen et al. (2018) who found on a sample of US banks that the presence of expert members is associated with low levels of discretionary provisions. In
this same context, Carcello et al. (2006) state that in order to fulfill their supervisory, internal control and financial reporting responsibilities, members of the audit committee must have the necessary accounting and financial expertise. Lastly, we note that our results do not agree with those found by Niu (2006) which ensures that audit committees with expertise from their members record fewer discretionary accruals.

As for the control variables, the regression shows the results below. First, the return on assets has a significant and negative effect on discretionary provisions. This means that banks with high performance are less likely to engage in earnings management. These results are consistent with those found by Cohen et al. (2004) as well as Kothari et al. (2005) showing that earnings management is more prevalent in underperforming firms. As for the size of the bank, it does not have any significant effect on the management of the results, thereby opposing Cornett et al. (2009) on a sample of US banks. Regarding the auditor's membership in the BIG4, it also shows no significant impact on the earnings management, this indicates that the use of Tunisian banks to the external auditors belonging to the BIG4 network did not result in disciplining discretionary practices, particularly with regard to provisions. This governance mechanism is still timid in terms of its role in controlling the opportunistic behavior of leaders and limiting the earnings management. Finally, the age of the bank does not show any significant effect on the discretionary provisions.

CONCLUSION

The empirical results of this study help to advance the timid research related to earnings management in Tunisian banks. We also hope to have contributed to supporting the empirical literature on banking governance in the Tunisian context in particular through the study of the impact of the audit committee’s expertise on earnings management in Tunisian banks. This refined study of one of the most important governance mechanisms has been justified by the fact that, since, 2001 Tunisian legislation has required the setting up of an audit committee for all banking institutions in Tunisia. However, it was not until 2007 that the establishment of an audit committee became common to all the commercial banks studied. Our study was also justified by the small number of researches initiated in the banking context on this subject.

This study provides empirical proof of the insufficiency of the audit committee’s expertise to mitigate, alone, the accounting manipulations in Tunisian banks, despite its compliance with regulatory requirements. This suggests that an effective audit committee is not exclusively composed of expert members in finance or accounting. Eventually, he must also be independent (Woidtke and Yeh, 2013). This calls for a future study of the effect of the interaction of audit committee independence and expertise on earnings management, so that, it is not limited to an aesthetic role that only reinforces the image of banks to the general public.

LIMITATIONS

These results can be very useful for both governments and shareholders who must look to the hidden roots of earnings management. However, like all research work, our research is not free of limits. The main limit refers to the small size of our sample. Indeed, in order to obtain a homogeneous sample, we have selected only the Tunisian commercial banks listed on the stock exchange and which are low numbers. Another limitation is the measurement of earnings management used. In fact other dimensions of the quality of the accounting result such as the smoothing of the result, fraud could enrich our results.

REFERENCES


