

The Determinants of Audit Opinion in Resilient Firms Before and After Covid Pandemic: The Case Study of Tunisian Banks Publishing CSR Information

Ben Letaifa Wissal¹, Maamouri Ichrak², Taleb Lotfi³

Abstract

The purpose of this study is to identify the determinants of audit opinion. We have examined financial statements, and auditor's opinion to particularly note which companies received a qualified/modified opinion contrary to those who had received an unqualified/unmodified opinion. The data was taken from a sample of the 11 listed banks in Tunisia during the critical era of covid from 2018 to 2021. The results in this report indicate that audit quality has an effect on qualified opinion, meaning if a company is audited by a BIG4 company; it's more likely to receive a qualified audit opinion. CSR also influences audit opinion.

Keywords: *Audit Opinion, Corporate Social Responsibility, Banks, Tunisia, Covid 19.*

JEL Classification: M41- M42.

Introduction

Audit opinion is a statement given by an auditor regarding the accuracy and completeness of a certain firm's financial statements which are then made for the public's disposal in the annual reports of the said company. There are two main types of audit opinion: an unqualified and a qualified opinion. The unqualified opinion indicates that the auditor has found no significant issue with the financial statements, while a qualified opinion indicates that there are some issues that need addressing. A key difference between the two opinions is of their significant impact on the stakeholders. An unqualified opinion provides assurance to investors, lenders and other holders that the financial statements are reliable and accurate. On the other hand, a qualified opinion can raise many concerns among these parties about the accuracy of the firm's financial situation. The level of details is also of a significant difference between the two main opinions; an unqualified opinion provides a broad overview of the financial statements, while a qualified opinion provides more detailed information about specific issues that need to be addressed.

Many researchers have been conducted that shows a strong correlation between audit opinion and earning management. Companies with a clean audit opinion are less likely to engage in earning management practices, although qualified or adverse opinions are more likely to do so, this is a result of such companies having greater accountability and transparency which reduces their incentive to manipulate their earnings. Earning management is a practice that involves manipulating financial reports to achieve desired results to meet earnings targets or to present a more favorable financial picture to appeal to investors and interested parties. Certainly, it is unethical and even illegal such as the example in some prevalent cases of bankruptcy in the last couple of decades. The risk associated are too great including legal and reputational damage, but still to effectively manage earnings, companies must have a deep understanding of accounting principles (GAAP) and financial reporting requirements, it's a must to have a strong internal control in place to prevent fraudulent activity, managers are encouraged to be mindful of auditors and present them accurate information as the opinion they state should be in accordance with their own criteria so all parties involved could guarantee their own legal safety.

¹ University of Tunis, Ecole Supérieure des Sciences Economiques et Commerciales de Tunis, 4, Av Abou Zakaria El Hafsi – Montfleury 1098 – Tunis – Tunisia, Email: abenletaifa@yahoo.fr

² University of Tunis, Ecole Supérieure des Sciences Economiques et Commerciales de Tunis, 4, Av Abou Zakaria El Hafsi – Montfleury 1098 – Tunis – Tunisia, Email: ichrak.maamouri@gmail.com

³ University of Tunis, Ecole Supérieure des Sciences Economiques et Commerciales de Tunis, 4, Av Abou Zakaria El Hafsi – Montfleury 1098 – Tunis – Tunisia, Email: lootfi63@yahoo.fr

The relationship between managers and auditors is very detrimental; a company should offer greater liability and limpidity which should reduce any incentive to manipulate any earnings.

Auditors should also make sure that such attempts are detected and noted. In retrospect, their relationship is very intertwined and woven.

It is worthy of noting that not all companies with qualified or adverse opinion do engage in earning management. Some of them may indeed have authentic issues with their financial statements that require a much thorough investigation by auditors.

Another great influence on audit opinion is corporate social responsibility (CSR) which has become increasingly vital and momentous throughout the last few years.

CSR refers to a firm's commitment in operating in an ethical and enduring manner, taking into consideration the impact of its operations on society and the environment.

Audit opinion and CSR share a distinct connection; companies who prioritize CSR are more likely to have a clean financial reporting. Companies that engage in non-sustainable and intolerable practices are highly likely to be involved in fraudulent and misleading financial reporting.

Further intertwining these three elements together proves that such elements internally in a company do connect to each other in a more deep and peculiar manner.

Evidently, it pressures auditors to increase their attention to an even non-financial factor such as CSR when conducting audits. Especially since these factors can influence a company's long-term success and its appeal to outside partners.

In conclusion, the link between audit opinion, earning management and CSR is closely tied to each other. A company should strive to appeal to public figures by engaging in non-financial factors such as CSR, enhancing their charm to a wider audience and keeping a close miniaturization over what they tend to manipulate before having an auditor's review and opinion.

The aim of this research is to prove the close and critical correlation these three factors have on each other and what factors precisely tend to determine or influence an auditor's opinion in the 11 listed banks in Tunisia the pivotal era of covid (2018-2021). We should precise that collecting data on CSR and audit opinion or on earning management is very difficult especially in Tunisia where the banking sector is considered strong and well protected and information's aren't easy to collect.

Ultimately, both audit opinion and earning management serve an important role in enhancing a company's reputation and the low risk it should tend to fall on to escape any unethical acts, appealing to all variety of external parties it's connected to with non-pecuniary elements such as CSR, ensuring a long-term survival and prosperity for the company.

Literature Review and Hypothesis Development

The link between audit opinion, earning management and corporate social responsibility was discussed by multiple authors. Subdivided into three parts. The first one shall explore audit opinion and its determinants, whilst the second will be for the development of hypotheses, and the last part will examine the methodology.

Audit Opinion Determinants

As previously noted audit opinion is an auditor's assessment of financial statements, whether they are presented equitably and in accordance with generally accepted accounting principles (GAAP) as a criterion to follow.

Two main types that hover over these statements; an unqualified/unmodified and qualified/modified opinion, adverse and disclaimer opinion are also worthy of note, but they are only made when there's a serious material misstatement and pervasive or auditors were not able to access the information they typically need.

The audit opinion is essential because it provides certitude for all external parties that the financial statements are authentic and exact. Ensuring compliance with GAAP rules and to further help organizations in areas that need improvement.

This paper investigates the nexus between audit opinion and a couple of internal factors (Earning management and corporate social responsibility) in issuing primarily a qualified audit opinion during the grave era of covid (2018-2021) in Tunisian listed banks.

In the past, there were multiple studies by researchers around the world about this profound association, however the results greatly varied.

Francis and Krishnan (1999) checked the relationship between the probabilities of issuing a modified opinion with certain levels of earning management using a sample of listed companies in the stock market in the United States. The results this research has shown is that firms with higher degree of earnings management are more plausible to get a higher degree of audit opinions with modified specifications. Furthermore, their findings apply only with auditors belonging to BIG-N auditors. Bradshaw et al. (2001) have also attested that high accruals have a closely tied kinship with receiving audits of modified opinion. Through a sample of 173 prominent firms built with modified audit statements, Bratov et al. (2000) have found that there's a positive linkage between discretionary accruals (which a representative of earnings management) and modified opinion. Ajona et al. (2008) have also supported this with an examination of companies with a high level of risk, mainly those who were on the verge of bankruptcy in Spain. Coherently with this finding, Omid (2015) proved that qualified audit opinions are significantly associated with earning management sampling 2818 firm-years of companies in Iran. However, many other studies showed an inconsequential relationship between audit opinion and earning management. Butler et al. (2004) researched listed companies on the Athens stock exchange, it was discovered that there's an insignificant link between earning management and audit opinion. The investigations of Herbohn and Ragunathan (2008), Jarboui (2021), Gracia-blandon et al. (2014), Rusmanto et al. (2014) and Moazedi and Khansalar (2016) verified in their research that auditors did not consider the effect of earning management when forming their audit opinions. As a result, auditors might have been aware that earnings management might lower upcoming profit but have failed to report so to investors through the issuance of a modified opinion.

Corporate social responsibility is a concept that has been getting popular lately in a drastic manner. It refers to how ethical and sensible can a company be committed to its exterior (society and environment) whilst minimizing its negative impact (Ferrell et al., 1989; Brinkmann and Peattie, 2008), supplementing an importance that has been recognized by all internal and external partners from employees to investors.

Through audit opinion, companies ensure fulfilling their obligations and addressing their deeds to their external partners. and auditors make sure that companies are meeting those obligations, assessing and evaluating whether a company's practices and policies align with what it intended regarding CSR and pinpointing the fields that needs improvement, so it'll enhance the social or environmental impact it aims to provide.

Studies have shown the existent positive correlation CSR has on financial performance. Luo

and Bhattacharya (2006) report that CSR contributes positively to a better financial performance and market value. Pava and Krausz (1996) provided a study that also supported this positive correlation through examining 21 studies between 1972 and 1992. In sum, certain studies demonstrated a positive association, others showed no association, and only one study indicated a negative correlation.

In addition, McWilliams and Siegel (2001) revealed no significant direction between CSR and corporate performance, further proving that such relation linking CSR and a firm's performance is questionable.

Hess (1999) argued that there's a need to establish an audit system that includes all aspects of a firm's social performance and thus adding more into the auditor's job making sure such reports are transparent and lucid enough so that their opinion is not in any way influenced.

Hypothesis Development

Throughout the past few decades, many research and articles have come out to prove and debunk many questions regarding audit opinion, earning management and lately the involvement of corporate social responsibility, as well as other factors affecting them.

DeAngelo (1981), a pioneer in this field who had examined that audit opinion is related to the size of audit firm, if the audit quality is increased it will reduce the company's probability of getting a qualified opinion. Accordingly, the first hypothesis is developed as follows:

H₁: Audit quality has an effect on qualified opinion.

According to Butar, Kurniasi B. and Sudarsi (2012), company size may be of an influence proving that large companies will usually get a qualified opinion. Therefore, the second hypothesis is developed as follows:

H₂: Company size has an effect on getting a qualified opinion.

Typically, earning management is done intentionally within a legal frame for a desired level of profit, as it is indeed defined as an intervention to obtain personal and specific benefits. If there's an increase in earnings management, it will reduce the company's probability of getting a qualified opinion.

This stream of research that had been conducted over the years assessing the link between earning management and audits proving the nexus between audit opinion and earning management and factors such as audit quality, auditor size and other possible elements.

Jarbouai (2021) used a sample of listed companies in Tunisia from the period of 2006 to 2013; in this study they have evaluated the interrelationship between earning management, modified audit opinion and developed an understanding of the role of audit quality; which was set a moderator variable. Resulting in a finding that indicated the significance of audit quality as a moderating role. This was previously backed up by Chung et al. (2005) and Othman and Zeghal (2006) who also mentioned that if company is audited by good quality auditors, managers are not willing to perform accruals. Many proxies used to assess audit quality and BIG4 audit firms are one of these proxies (Francies et al.1999).

Gerayli et al. (2011), took a sample of 90 non-financial listed firms in Iran from 2004 to 2009, evidencing that DA have a negative relationship with auditor's size when being audited by BIG4 firms, and companies having a lower level of earnings management. Moreover, it was supported by Inaam et al. (2012) and Gajevszky (2014) attesting that companies have a high level of DA and were audited by BIG 4 or other audit experts; tend to receive a modified opinion.

Rusmin (2010) also has further fueled this arguing that earnings management of the companies audited by one of the BIG 4 audit firms seem to be lower than those of companies audited by non-BIG4 audit firms.

In Malaysia, Johl et al. (2007) expanded the studies on the difference of audit opinions and in particular with the existence of profit management, showing a disparity in the quality of the BIG5 professionals. This means that when there's an existence of earnings management, in comparison with non-BIG5 auditors, the BIG5 auditors likely seem to issue a modified audit opinion.

Another sample from listed companies in Thailand from 1999 to 2004 by Pornupatham (2006), analyzed whether the auditors reflect earning management or not. The results showed that BIG-N auditors appear to be better than non-BIG-N auditors at detecting earnings management and their quality are reflected in their audit opinion basing this on tests that were performed in each type of audit opinion by assessing the mean and median value of the accruals - which is a measure of earning management.

From these arguments, this study aims to investigate the relationship between earning management and modified opinion, asserting which factors precisely deduce a modified opinion. Consequently, the following hypotheses are formulated as follows;

H₃: Earning management has an effect on qualified opinion.

H₄: Firms with high earning management will acquire a qualified audit opinion if they are audited by BIG4.

An auditor's role is obviously crucial; they are responsible for ensuring that financial statements accurately reflect a company's financial situation.

The knot between audit opinion, earning management and corporate social responsibility is quite intricate. Earning management refers to manipulating statements to meet specific targets or objectives. CSR, on the other hand, refers to a company's commitment to ethical mannerisms and their contributions to society and environment as formerly mentioned. Companies who prioritize the latter may be less likely to engage in unethical practices presumably leading to a more positive audit opinion. Thus, the following hypothesis is forged:

H₅: CSR influences audit opinion.

Methodology

Empirical Models

Audit Opinion

Hitherto, it was discussed that the objective of this study is to demonstrate which factors exactly contribute into altering an auditor's rapport into giving a qualified opinion. As a result, it is characterized in which firms have received the latter opinion, compared to a non-qualified opinion. In this sense, the dependent variable (OPINION) is a dichotomous variable, taking the value of 1 if it's a qualified opinion and the value of 0 if it's the opposite case.

Taking inspiration from multiple resources such as Dopouch et al. (1987), Bell et Tabor(1991), McKeown et al. (1991), Krishnan et Krishnan (1996), Blacconiere et DeFond(1997), Laitinen et Laitinen (1998), Reynolds et Francis (2001), Spathis (2003), Doumpos et al.(2005) and Gaganis et Pasiouras (2006) who were the pioneers in this field of work, outlining the modeling of the audit opinion and identifying its multiple variables, shaping in that process the basis for several studies and this one as well. Through their work, a set of indicators for measuring a qualified opinion was established and developed.

Probability of Bankruptcy

Represented in the Z-score formula conducted through the Altman business bankruptcy model; it's a multivariate formula that measures the financial health of a certain business. A tool designed with the likelihood that a business may be jeopardized over the course of 2 years.

Multiple studies have proved the effectiveness of Z-score, often accurate in predicting bankruptcy with a reliability of 72% to 80%.

Net Return on Equity

Return on equity is a measure of profitability; it measures the funds that a shareholder has entrusted to a company under the form of venture capital.

Various studies showed that less profitable firms receive more qualified audit opinion; Loebbecke et al. (1989), Laitinen et Laitinen (1998) and Beasley et al. (1999).

Reduced Liquidity

Reduced liquidity is a measure of financial health of a certain company, which explains its impact on the nature of audit opinion received; (Bell and Tabor, 1991 and Spathis, 2003). In view of this, Zopounidis et al. (2006) were able to present a proof of the existence of a negative and substantial relation between the probability of receiving a qualified opinion and a low liquidity ratio.

Total Debt

Total debt is a ratio that offers to the possibility of examining an association between external and domestic financing and to ultimately test the financial soundness of a company. The purpose being that it consists of realizing the financial autonomy of a company by measuring its degree of dependence on creditors.

This ratio constitutes a main variable in the reserve forecasting model cultivated by Dopouch et al. (1987).

Audit Quality and Enterprise Size:

Researchers have found that there has been an existence of a dependency between public opinion and qualified audit opinion and certain characteristics of a company, in particular its size and quality of its external auditor; Casterella et al. (2000), Arnold et al. (2001), Sharma and Sidhu (2001).

Because of the work of the previously mentioned efforts; Abderraouf et Moalla. (2010) have chosen in their study to include these two variables in their work to present as control variables, hence why this work as well has followed suit.

Therefore, the audit quality will be indicated by also the means of a dichotomous variable, taking the value of 1 when the company is audited by one of the BIG4, and the value of 0 otherwise. For the company size, it would be represented by the logarithm of total assets.

Corporate Social Responsibility

Hence in this study, CSR is added to test if this new variable can have a link of association in effecting the result of an audit opinion.

In this regard, this independent variable is an also dichotomous; the value of 1 represents a company that utilizes CSR and the value of 0 being the opposite. The following table shall recapitulate all that was mentioned in this section;

Results

We present a summary of the independent variables in the Table 1 below

Table 1. Summary Table of Independent Variables

| Variable | Definition | Measure |
|----------|------------|---------|
|----------|------------|---------|

| Z-score | Probability of bankruptcy | Z-score of Altman |
|---------|---------------------------------|---|
| RENKP | Net return on equity | <i>Net income Equity for the year</i> |
| LIQR | Liquidity | Ratio of total liquidity/assets |
| ENDET | Total debt | <i>Total debt/ total assets</i> |
| QA | Audit quality | Dichotomous variable: 1: audited by BIG4 company 0: otherwise |
| TE | Company size | log (Total assets) |
| CSR | Corporate social responsibility | Dichotomous variable: 1: Company that has CSR 0: otherwise |

Earnings Management

As subsequently mentioned, earning management is the manipulation of financial statements to achieve desired results aiming to personally benefit the internal governance of a company for their own gains and goals.

Though to certain extents, it can be legal and ethical, it can also be used to mislead external parties. For this purpose, the auditor's task is to closely monitor these financial statements before they're publicized.

Healy's article (1985) is considered to be the first to have put down a measurement for earnings management, proposing the use of accruals as an indicator.

$$\text{Total Accruals} = \text{Net Income} - \text{Cash Flow from exploitation}$$

Jeanjean(2002) have stated that for managers to make use of their efforts and not be easily detected, earnings management does not concern total accruals but on some of them. Therefore.

$$\text{Total Accruals (TA)} = \text{Normal Accruals (NDA)} + \text{Discretionary Accruals (DA)}.$$

Normal Accruals: comes from normal activity and corresponds to sincere and regular application of GAAP.

Discretionary Accruals: intentionally managed and it is used to detect and measure earning management. Thus, earning management can also be called as Discretionary Accruals. the difference between the two will be positive from the perspective of the maximization of accounting results and negative contrarily,

surely measuring the overall impact of all the accounting choices made by a company and as a result it is used to estimate the extent of the practice of earning management (Bernard and Stober, 1989).

Healy (1985), DeAngelo (1986), Jones (1991), the latter modified by Dechow et al. (1995) to give a new model, the sectoral model of Dechow, Sloan (1991) and Teoh et al. (1998) are models developed for measuring earnings management. Most commonly used and is utilized in this research is Jones (1991), which attempts to measure the management of results as a whole requiring large sample.

Unlike Healy (1985) and DeAngelo (1986), Jones (1991) presents a model based on the technique of regression, exceeding the assumption of the stability of non-discretionary accruals in time. According to him, non-discretionary accruals for period t are considered to be a function of:

$$- \text{Variation of earnings or turnover between year } t \text{ and year } t-1. - \text{Gross fixed assets excluding financial fixed assets.}$$

The inclusion of the latter two makes it possible to take into account the variations in TA that are due to the simple evolution of the economics of a company.

Turnover is used to control the surroundings of a company, and this is prior to any manipulation from managers. For fixed assets, they are in this model in order to exude control over the proportion of total accruals that depends on the load of non-discretionary amortization, prioritized before their variations for that the total amortization charge is included in the measure of total accruals and not in its variation.

According to Jones (1991), these factors are less likely to be manipulated and constitute thus the determining of variables of non-discretionary accruals.

Selection and Measurement of Variables

When dealing the qualified audit opinion, Bell and Tabor, 1991; McKeown et al., 1991; Blacconiere and Defond, 1997; Spathis, 2003; have used this popular model given its popular use.

To carry out the multivariate analysis, the logistic regression is hence adopted in this study following the footsteps of Abderraouf et Hanen (2010) and the ones prior, the latter should be justified regarding ordinary linear regression.

Despite having experienced some difficulties in previous cases, indeed, ordinary linear regression cannot be used if the errors are not normally distributed or if the variance of the errors is not constant. Thus, the following model is employed.

$$\text{OPINION}_i = \beta_0 + \beta_1 \text{Z-score}_i + \beta_2 \text{RENKP}_i + \beta_3 \text{LIQR}_i + \beta_4 \text{ENDET}_i + \beta_5 \text{QA}_i + \beta_6 \text{TE}_i + \beta_7 \text{CSR}_i + \varepsilon_i$$

With:

- OPINION_i = Dichotomous variable, taking the value of 1 if the company receives a qualified audit opinion, or 0 otherwise.
- Z-score = Altman's score, measuring the probability of bankruptcy.
- RENKP = net return on equity.
- LIQR = ratio of reduced liquidity.
- ENDET = ratio of total debt.

- QA = Dichotomous variable, taking the value of 1 if a company is audited by BIG4 company, or 0 if not.
- TE = company's size.
- CSR = Dichotomous variable, taking the value of 1 if a company utilizes CSR, or 0 alternatively.
- $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ = The model's coefficients.
- ε_t = Error term.

Jones (1991) has a leverage, considering the effect changes into a company's economic conditions on the non-discretionary portion of accruals. the model details as follows:

$$\frac{TA_t}{Assets_{t-1}} = \alpha_1 \left(\frac{1}{Assets_{t-1}} \right) + \alpha_2 \left(\frac{\Delta REV}{Assets_{t-1}} \right) + \alpha_3 \left(\frac{PPE}{Assets_{t-1}} \right) + \varepsilon_t$$

with:

- $\frac{TA_t}{Assets_{t-1}}$ = Total accruals of year t deflated by the value of total assets for year t-1
 - ΔREV = Variation in sales between year t and t-1
 - PPE = Gross fixed assets for the financial year t
 - $\alpha_1, \alpha_2, \alpha_3$ = the model's coefficients
 - ε_t = error term.

Sample

This study sample covers the 11 Tunisian listed banks over the pivotal period of covid from 2018 to 2021. The data is primarily collected from annual final reports of the said listed banks with the support of their individual sites and the Tunisian stock market site BVMT. The program utilized to analyze the data is SPSS.

Results and Discussions

During the previous chapter, hypotheses of this study has been addressed, discussed and analyzed backed up by attachments of previous researchers' works deliberating over the connection between audit opinion, earnings management and CSR for Tunisian listed banks during covid's crisis.

Through this final chapter, Empirical and results of this report would be presented, interpreted and examined thoroughly, starting with a presentation of Empirical results for audit opinion, earnings management and CSR in part 1 and 2 and a discussion of the second chapter's hypotheses finally.

Audit Opinion

Table N°2 exhibits the descriptive statistics (maximum, minimum, mean and standard deviation) of audit opinion.

Table 2. Descriptive Statistics

| Descriptive Statistics | | | | | | |
|---------------------------------|----|-----------|----------|------------|----------------|-----------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Variance |
| audit opinion | 44 | 0 | 1 | ,18 | ,390 | ,152 |
| Net result | 44 | -22007578 | 20542419 | -134951,75 | 4768446,192 | 2,274E+13 |
| Probability of bankruptcy | 44 | ,325 | 197,705 | 21,84159 | 30,897164 | 954,635 |
| net return on equity | 44 | -,359 | 1,877 | ,13733 | ,302711 | ,092 |
| reduced liquidity | 44 | ,882 | 18,359 | 2,19427 | 3,566127 | 12,717 |
| Total dettes | 44 | ,002 | ,091 | ,04274 | ,026097 | ,001 |
| company size | 44 | 6,053 | 8,998 | 7,06864 | ,683000 | ,466 |
| audit quality | 44 | 0 | 1 | ,36 | ,487 | ,237 |
| corporate social responsibility | 44 | 0 | 1 | ,45 | ,504 | ,254 |
| Valid N (listwise) | 44 | | | | | |

The mean percentage indicates the average of a value, translating into the difference between variables marking the existence of a negative or a positive information (Website).

For this table, the mean for audit opinion is 0.18 or 18%. This percentage also means a variability of 0.390 for this dependent variable.

It also shows quite a noticeable value of 21.841 in the probability of bankruptcy on the contrary to other variables that are perceptibly lower in comparison. The latter indicates the presence of a significant influence compared to the others.

The probability of bankruptcy also shows a sturdy value as a variable with a maximum of 197.705 compared to the low total debts of 0.091.

The minimum for total debts is quite low too, in comparison to company size being of a large negative of 6.053.

Table 3. Audit Opinion

| audit opinion | | | | | |
|----------------------|-------------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | a non qualified opinion | 36 | 81,8 | 81,8 | 81,8 |
| | a qualified opinion | 8 | 18,2 | 18,2 | 100,0 |
| | Total | 44 | 100,0 | 100,0 | |

In the 11 listed banks in Tunisia during the period between 2018 and 2021; 81.8% of the opinions stated in the final annual reports by auditors are mainly of a non-qualified opinion while as a moderate percentage of 18.2% are of qualified opinion.

Essentially; 9 out of the 11 banks received a non-qualified opinion during that period leaving 2 that got a qualified opinion.

Table 4. Audit Quality

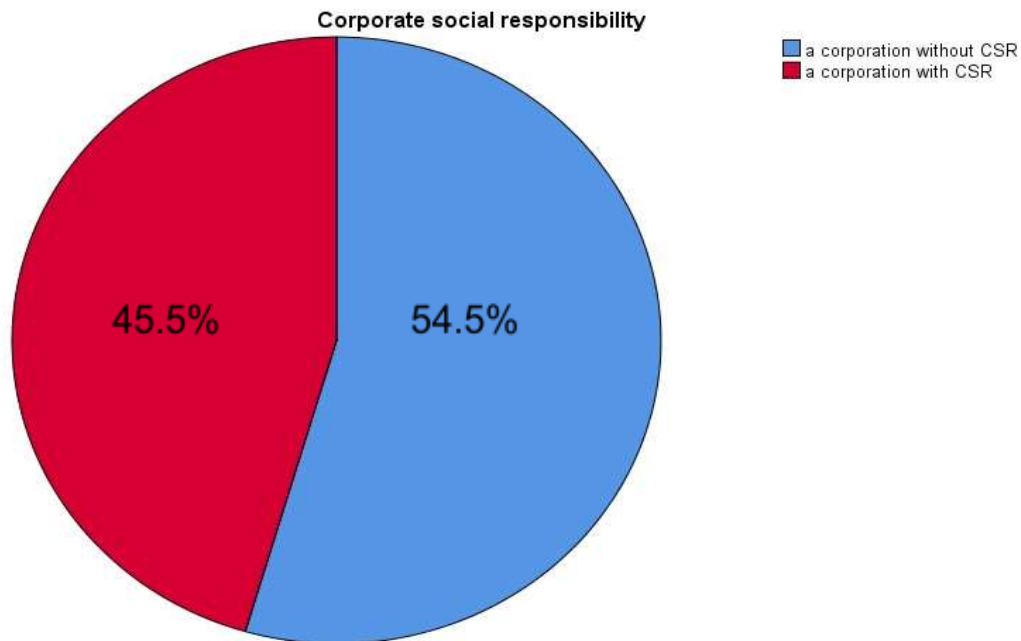
| | | audit quality | | | |
|-------|--------------------------------------|----------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | a company not audited by a BIG4 firm | 28 | 63,6 | 63,6 | 63,6 |
| | a company audited by a BIG4 firm | 16 | 36,4 | 36,4 | 100,0 |
| | Total | 44 | 100,0 | 100,0 | |

For this Groupe set, this table demonstrates that 63.6% of the firms listed were not audited by a BIG4 firms over the course of 2018-2021 period. With 36.4% for the contrary. Meaning that during said period, it's evident that BIG4 companies tend to slightly overshadow a substantial and notable percentage of the listed banks in Tunisia during that time.

Table 5. Corporate Social Responsibility

| | | corporate social responsibility | | | |
|-------|------------------------------------|--|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | a company that doesn't utilize CSR | 24 | 54,5 | 54,5 | 54,5 |
| | a company that utilizes CSR | 20 | 45,5 | 45,5 | 100,0 |
| | Total | 44 | 100,0 | 100,0 | |

Figure 1. Corporate Social Responsibility



In this report's Groupe set, 54.5% of these 11 listed banks in Tunisia don't utilize corporate social responsibility in their final annual reports, a considerable and a high number. Whilst only 45.5% utilizes the latter. A below medium percentage. It shows that these listed banks do not consider CSR in their strategies which may influence some investors, creditors or any external party.

Table 6. Regression Results

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 4,600 | 7 | ,657 | 12,160 | ,000 ^b |
| | Residual | 1,945 | 36 | ,054 | | |
| | Total | 6,545 | 43 | | | |

a. Dependent Variable: audit opinion

b. Predictors: (Constant), corporate social responsibility, Probability of bankruptcy, reduced liquidity, audit quality, Total dettes , net return on equity, company size

In spss, The ANOVA results presented in table 6 below determines whether the model is significant enough to determine an outcome. In general terms, 95% confidence interval or 5% is a level of significance chosen for a study, thus the sig-value should be less than 0.05 (Website).

In this case study, it is 0.000 and thus the result is roughly significant.

The 12.160 represented in the F-ratio is a representation of an improvement in the prediction of the variable, by fitting the model after considering the inaccuracy present in it. A value that is greater than 1 for F-ratio yield an efficient model which is good. within the next table, the results of the estimation of the model considered will be provided.

Table 7. Estimation Results

| | | Coefficients ^a | | | | | | |
|-------|---------------------------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95,0% Confidence Interval for B | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 1,284 | ,573 | | 2,240 | ,031 | ,122 | 2,446 |
| | Probability of bankruptcy | ,000 | ,001 | -,012 | -,117 | ,907 | -,003 | ,003 |
| | net return on equity | ,151 | ,128 | ,117 | 1,174 | ,248 | -,110 | ,411 |
| | reduced liquidity | -,029 | ,013 | -,264 | -2,151 | ,038 | -,056 | -,002 |
| | Total dettes | -9,431 | 1,526 | -,631 | -6,179 | ,000 | -12,526 | -6,335 |
| | company size | -,039 | ,077 | -,069 | -,509 | ,614 | -,197 | ,118 |
| | audit quality | -,388 | ,078 | -,484 | -4,952 | ,000 | -,547 | -,229 |
| | corporate social responsibility | -,513 | ,081 | -,662 | -6,343 | ,000 | -,676 | -,349 |

a. Dependent Variable: audit opinion

The table for coefficients has a certain value that is most suited for interpretation, if a value is below the tolerable level of significance, which is 0.05 for 95% confidence interval.

Based on the significant value, the null hypothesis is rejected or is not rejected.

If sig in this table is <0.05, the null hypothesis is rejected and so it proves to be of an impact. and if it's >0.05, the null hypothesis is not rejected and thus there is no impact.

In this case, for the independent variables of probability of bankruptcy and company size

(which are respectively 0.907 and 0.614 are significantly more than the acceptable limit of

0.05); it is proven that there's no influence on audit opinion due to the probability of bankruptcy and company size.

For the variables of net return on equity, reduced liquidity, total debts, audit quality and corporate social responsibility which represent in sig by 0.000 for all other than return on equity and reduced liquidity (which are respectively 0.248 and 0.038). The significant change in audit opinion due to the previously mentioned is evident due to the values being less than

0.05 which is a less acceptable value. Therefore, with each 1% increase in them, the audit opinion will increase by a 0.151 (B value in net return on equity).

Table 6. Pearson Correlation Analysis

| | | Correlations | | | | | | | |
|------------------------------------|---------------------|---------------------|------------------------------|-------------------------|----------------------|--------------------|---------------------|--------------------|---------------------------------------|
| | | audit opinion | Probability of bankruptcy | net return on equity | reduced liquidity | Total dettes | company size | audit quality | corporate social responsibility |
| audit opinion | Pearson Correlation | 1 | ,005 | -,044 | -,159 | -,332 [*] | ,008 | -,356 [*] | -,430 ^{**} |
| | Sig. (2-tailed) | | ,974 | ,779 | ,303 | ,028 | ,960 | ,018 | ,004 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Probability of bankruptcy | Pearson Correlation | ,005 | 1 | -,095 | -,163 | ,229 | -,406 ^{**} | -,210 | -,001 |
| | Sig. (2-tailed) | ,974 | | ,541 | ,290 | ,135 | ,006 | ,172 | ,997 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| net return on equity | Pearson Correlation | -,044 | -,095 | 1 | -,077 | -,081 | -,040 | -,034 | ,382 [*] |
| | Sig. (2-tailed) | ,779 | ,541 | | ,621 | ,599 | ,796 | ,827 | ,011 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| reduced liquidity | Pearson Correlation | -,159 | -,163 | -,077 | 1 | -,021 | ,653 ^{**} | -,172 | -,092 |
| | Sig. (2-tailed) | ,303 | ,290 | ,621 | | ,894 | ,000 | ,263 | ,551 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Total dettes | Pearson Correlation | -,332 [*] | ,229 | -,081 | -,021 | 1 | -,210 | -,192 | -,300 [*] |
| | Sig. (2-tailed) | ,028 | ,135 | ,599 | ,894 | | ,171 | ,212 | ,048 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| company size | Pearson Correlation | ,008 | -,406 ^{**} | -,040 | ,653 ^{**} | -,210 | 1 | -,112 | -,094 |
| | Sig. (2-tailed) | ,960 | ,006 | ,796 | ,000 | ,171 | | ,469 | ,543 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| audit quality | Pearson Correlation | -,356 [*] | -,210 | -,034 | -,172 | -,192 | -,112 | 1 | ,069 |
| | Sig. (2-tailed) | ,018 | ,172 | ,827 | ,263 | ,212 | ,469 | | ,656 |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| corporate social responsibility | Pearson Correlation | -,430 ^{**} | -,001 | ,382 [*] | -,092 | -,300 [*] | -,094 | ,069 | 1 |
| | Sig. (2-tailed) | ,004 | ,997 | ,011 | ,551 | ,048 | ,543 | ,656 | |
| | N | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation is used to demonstrate which independent variable are more correlated to a certain dependent variable, in this case study, it will be which independent variables are correlated to audit opinion and later on who's correlated with earning management.

Pearson's r typically varies between +1 and -1, in which +1 is a perfect positive correlation and vice versa, whereas 0 is used to signifies that there is no correlation at all. a value that's close to +1 is of a very weak positive correlation.

in this case study, we notice that the probability of bankruptcy and company size are close to zero which signifies a very low correlation.

while as the rest of the independent variables (that includes net return on equity, reduced liquidity, total debts, audit quality and corporate social responsibility) are closer to -1, and evidence of an existing negative correlation between the previously stated variables and audit opinion.

the 2-tailed value is also significant, the standard alpha value is of 0.05 which is an indicator of a highly significant correlation.

even with a weak correlation and a big sample size (N), it can still indicate a good correlation despite being small in value, since it is then proven that a larger Groupe set of data offers enough statistical power to identify very weak effects.

In this case study, most of the variables are above 0.05 which is a strong indicator of strong positive correlation.

Table 7. Regression Results

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 4,600 | 7 | ,657 | 12,160 | ,000 ^b |
| | Residual | 1,945 | 36 | ,054 | | |
| | Total | 6,545 | 43 | | | |

a. Dependent Variable: audit opinion

b. Predictors: (Constant), corporate social responsibility, Probability of bankruptcy, reduced liquidity, audit quality, Total dettes , net return on equity, company size

In spss, The ANOVA table determines whether the model is significant enough to determine an outcome. In general terms, 95% confidence interval or 5% is a level of significance chosen for a study, thus the sig-value should be less than 0.05 (Website).

In this case study, it is 0.000 and thus the result is roughly significant.

The 12.160 represented in the F-ratio is a representation of an improvement in the prediction of the variable, by fitting the model after considering the inaccuracy present in it. A value that is greater than 1 for F-ratio yield an efficient model which is good. Within the next table, the results of the estimation of the model considered will be provided.

Table 8. Estimation Results

| | | Coefficients^a | | | | | | |
|-------|---------------------------------|---------------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95,0% Confidence Interval for B | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 1,284 | ,573 | | 2,240 | ,031 | ,122 | 2,446 |
| | Probability of bankruptcy | ,000 | ,001 | -,012 | -,117 | ,907 | -,003 | ,003 |
| | net return on equity | ,151 | ,128 | ,117 | 1,174 | ,248 | -,110 | ,411 |
| | reduced liquidity | -,029 | ,013 | -,264 | -2,151 | ,038 | -,056 | -,002 |
| | Total dettes | -9,431 | 1,526 | -,631 | -6,179 | ,000 | -12,526 | -6,335 |
| | company size | -,039 | ,077 | -,069 | -,509 | ,614 | -,197 | ,118 |
| | audit quality | -,388 | ,078 | -,484 | -4,952 | ,000 | -,547 | -,229 |
| | corporate social responsibility | -,513 | ,081 | -,662 | -6,343 | ,000 | -,676 | -,349 |

a. Dependent Variable: audit opinion

The table for coefficients has a certain value that is most suited for interpretation, if a value is below the tolerable level of significance, which is 0.05 for 95% confidence interval.

Based on the significant value, the null hypothesis is rejected or is not rejected.

If sig in this table is <0.05, the null hypothesis is rejected and so it proves to be of an impact. and if it's >0.05, the null hypothesis is not rejected and thus there is no impact.

In this case, for the independent variables of probability of bankruptcy and company size

(which are respectively 0.907 and 0.614 are significantly more than the acceptable limit of

0.05); it is proven that there's no influence on audit opinion due to the probability of bankruptcy and company size.

For the variables of net return on equity, reduced liquidity, total debts, audit quality and corporate social responsibility which represent in sig by 0.000 for all other than return on equity and reduced liquidity (which are respectively 0.248 and 0.038). The significant change in audit opinion due to the previously mentioned is evident due to the values being less than

0.05 which is a less acceptable value. Therefore, with each 1% increase in them, the audit opinion will increase by a 0.151 (B value in net return on equity).

Earnings Management

Table 9. Descriptive Statistics

As previously stated, the descriptive statistics table shows the maximum, minimum, mean and standard deviation. Applying the same for Earnings management.

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|-------------|-------------|-------------|----------------|
| earning management | 44 | ,000 | ,000 | ,00000 | ,000000 |
| PPE | 44 | ,002 | ,091 | ,03491 | ,020520 |
| Var Rev | 44 | ,009 | 1,038 | ,10536 | ,144676 |
| A | 44 | ,0000000010 | ,0000008859 | ,0000001777 | ,0000002248 |
| Valid N (listwise) | 44 | | | | |

For this table, the mean also shows quite a noticeable low percentage in all of the variables presented. with 0.0349 being the largest in PPE. This latter indicates the existence of a most significant influence compared to the others which are low in contrast.

the variables of the variance in revenue (Var rev) is more prominent in the maximum (the max presenting a 1.038) as well as in the minimum (the minimum being 0.009) the largest negative percentage that's shown but still significantly low for. The others don't differ much for their low value in general.

Table 10. Estimation Results**Coefficients^a**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95,0% Confidence Interval for B | |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 1,539E-7 | ,000 | | 1,727 | ,092 | ,000 | ,000 |
| | PPE | -1,246E-6 | ,000 | -,088 | -,534 | ,596 | ,000 | ,000 |
| | Var Rev | -3,500E-8 | ,000 | -,018 | -,108 | ,914 | ,000 | ,000 |
| | A | -,323 | ,205 | -,251 | -1,580 | ,122 | -,737 | ,090 |

a. Dependent Variable: earning management

As previously mentioned in the table N°7 for audit opinion, the coefficient table indicates that if a value that's significant enough, the null hypothesis would be rejected or not. A significance of <0.05 , the null hypothesis is rejected proving an impact and vice versa.

In this table, the var rev is greatly bigger than 0.05 (which is being 0.914) indicating that there's no influence in earning management due to the said variable.

It is thus proven that there's no influence for earning management due to the variations in revenue.

The same could be said for the PPE (by a 0.596) slightly bigger than 0.05 which is acceptable enough.

Table 11. Pearson Correlation Analysis

| | | Correlations | | | |
|--------------------|---------------------|--------------------|-------|---------|-------|
| | | earning management | PPE | Var Rev | A |
| earning management | Pearson Correlation | 1 | -,153 | -,016 | -,270 |
| | Sig. (2-tailed) | | ,320 | ,917 | ,076 |
| | N | 44 | 44 | 44 | 44 |
| PPE | Pearson Correlation | -,153 | 1 | ,295 | ,238 |
| | Sig. (2-tailed) | ,320 | | ,052 | ,119 |
| | N | 44 | 44 | 44 | 44 |
| Var Rev | Pearson Correlation | -,016 | ,295 | 1 | -,109 |
| | Sig. (2-tailed) | ,917 | ,052 | | ,482 |
| | N | 44 | 44 | 44 | 44 |
| A | Pearson Correlation | -,270 | ,238 | -,109 | 1 |
| | Sig. (2-tailed) | ,076 | ,119 | ,482 | |
| | N | 44 | 44 | 44 | 44 |

As mentioned earlier, the correlation tables indicates that Pearson's r which varies between +1 and -1 (+1 representing a perfect positive correlation, -1 representing a perfectly negative correlation, 0 being of no correlation at all.)

Also, the 2-tailed is of a great importance; 0.05 being the standard alpha value, a mark of a high correlation.

For earning management, Pearson's correlations are all close to zero but still on the negative side indicating an existing relation between earnings management and its three different independent variables.

Among these three independent variables, their 2- tailed are fluctuant, ranging between a very close value to zero or a high one coming closer to +1; since for 2-tailed, a value bigger than 0.05 is significant enough meaning that variation in revenue is of a strong correlation.

Table 12. Correlation Between Audit Opinion, Earnings Management And CSR

| Correlations | | audit opinion | earning management | audit quality | corporate social responsibility |
|---------------------------------|---------------------|---------------|--------------------|---------------|---------------------------------|
| audit opinion | Pearson Correlation | 1 | ,084 | -,356* | -,430** |
| | Sig. (2-tailed) | | ,587 | ,018 | ,004 |
| | N | 44 | 44 | 44 | 44 |
| earning management | Pearson Correlation | ,084 | 1 | ,010 | ,162 |
| | Sig. (2-tailed) | ,587 | | ,951 | ,294 |
| | N | 44 | 44 | 44 | 44 |
| audit quality | Pearson Correlation | -,356* | ,010 | 1 | ,069 |
| | Sig. (2-tailed) | ,018 | ,951 | | ,656 |
| | N | 44 | 44 | 44 | 44 |
| corporate social responsibility | Pearson Correlation | -,430** | ,162 | ,069 | 1 |
| | Sig. (2-tailed) | ,004 | ,294 | ,656 | |
| | N | 44 | 44 | 44 | 44 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In this final table, its worthy of noting that there's a very important 2-tailed significance between earnings management and audit opinion with a value of 0.587.

For Pearson's r , earning management and audit quality and CSR are very close to zero or of considerable negative value, indicating a considerable weighty effect but negative. Corporate social responsibility and audit quality aren't of a value that close to earning management's correlation to audit opinion in 2-tailed which is a value that isn't strongly noticeable.

Discussions

The Empirical results formerly addressed and interpreted would be further discussed and concluded in this segment alongside any availability of nexus with the five hypotheses.

The descriptive statistics of table 2 demonstrates that the probability of bankruptcy has a noticeable strong mean; the variable for company size follows close but not quite while the others are notably low. Table 9's variables, however, are all substantially low indicating a weak influence.

Our results show that there's no effect on Audit opinion due to the probability of bankruptcy and company size, other variables are markedly low. Also, its asserted that there's no influence from the mentioned variables on earnings management.

Via table 3 and 4, the 11 Tunisian listed banks during this study's chosen period received an

Audit opinion that was mainly of a non-qualified opinion. And a considerable percentage of

18.2% were for qualified opinion. Though it's unclear on which type of opinion precisely; admittedly indicating a limitation in this study.

Many of these banks were not audited by BIG4 audit firms which are a considerable percentage of 63.6%, as it has been explained through numerous research that these firms tend to require much more detailed information which may bother many managers. This is explained in this study by the high percentage of companies who were not audited by

BIG 4 firms. Which contradicts the findings of Chung et al. (2005), also cited in Gajevszky,(

2014), Pornupatham (2006), Othman and Zeghal (2006), Johl et al. (2007), Rusmin(2010), Gerayli et al. (2011), and Gajevszky (2014) who mentioned that auditor size has a significant effect on audit opinion.

As it is revealed in table 5 and figure 1; 54.5% of listed banks do not utilize CSR in their annual reports nevertheless in their strategies.

Through table 12; CSR is of a close value to 0.000 thus negatively impacting audit opinion and thus H5 is rejected.

After analyzing data, the results of the logistic regression that examines the effects of Earnings management and the variables for audit opinion on the latter are described in table 7 and 10.

It has been explained that for a sig level of >0.05 ; the null hypothesis is rejected and thus of impact and vice versa.

Through table 7; the probability of bankruptcy and company size influencing audit opinion is of a value bigger than 0.05 significantly which proves that H2 is rejected. For the rest of the variables which are lower than 0.05; there's a significance, meaning that there's an impact on audit opinion from those elements which concludes that H1 is accepted.

Because of the values shown in table 10; Earnings management wasn't prominent using its independent variables leading to the conviction that H3 and H4 is rejected.

For the Pearson correlation matrix, there's an admissible significance at 0.05 level and 0.01 level.

As Audit opinion most independent variables are not correlated with it.

According to Tabachnick and Fidell (2013), also cited in Imen and anis (2021); There's no correlation coefficient between independent variables discovered to be more than 0.9; suggesting that any correlation between independent variables at such level is not accepted. In this study, within table N°8; other than the probability of bankruptcy and company size (Which hold a low value), the others hold a negative one; meaning a negative correlation or of no statistical significance and low correlation otherwise. Ultimately, H2 and H5 are rejected.

Using table 11, for Earnings management; all variables are of a negative value, hence a negative correlation. For the 2-Tailed, A is the closest to 0.05 meaning a close correlation. Despite that Butler et al. (2004), Herbohn and Ragunathan (2008 cited in Imen&Anis,

2021), Garcia Blandon et al. (2014), Tsipouridou and Spathis (2014), and Rusmanto et al. (2014) have found that there is no significant effect of modified audit opinion on earnings management and vice versa.

Through table 12, Earnings management is larger than 0.05, pointing to a strong correlation which indicates that H3 is rejected. Contradicting Francis and Krishnan (1999), Bartov et al. (2000), Bradshaw et al. (2001), Ajona et al. (2008), Omid (2015), Imen and Anis (2021) who stated in their research that earnings management explain the publication of modified audit opinion.

Audit quality and corporate social responsibility have a negative value, evidencing that H5 is rejected.

Conclusion

The objective of this paper is to study which factors that influence auditors into granting a modified audit opinion. It has been argued before that receiving Audit quality, Company size, Earnings management may affect auditors into giving a modified or a qualified audit opinion.

As well as the recently introduced element which is Corporate social responsibility. It has been contended that BIG 4 audit firms offer higher quality audits, demanding details and certain specificities from their clients which arguably provides a much higher quality audit. Therefore, they are expected to issue a modified opinion more than non-BIG4 firms. Through countless previous studies, it has been argued that Earnings management can influence auditors into releasing a modified audit opinion.

Based on the sample of 11 listed banks in Tunisia during the crucial and pivotal era of covid, results indicate that audit opinion has low correlation to certain elements contrary to audit quality which is of a high influence on the publication of a qualified opinion. Company size and corporate social responsibility are hardly of notable influence. This is opposing the findings of multiple studies which concluded that companies with high earnings management would have a greater probability on receiving a modified opinion.

In general, the findings of this research supports the results of some previous studies in concluding that BIG 4 companies tend to give a modified opinion with a relative percentage. However, no evidence was found to support the effect of earnings management, corporate social responsibility and other intricate components on their relationship with audit opinion.

References

- Averio, T. (2020), The Analysis of Influencing Factors on the Going Concern Audit Opinion– A Study in Manufacturing Firms in Indonesia, *Asian Journal of Accounting Research*. [Online]. Available: <https://www.emerald.com/insight/content/doi/10.1108/AJAR-09-2020-0078/full/html>
- Ball, R., Walker, R. G. & Whittred, G. P. (1979). Audit Qualifications and Share Prices. *Abacus*, 15(1), 23–34.
- Bell, T. B. & Tabor, R. H. (1991). Empirical Analysis of Audit Uncertainty Qualifications. *Journal of Accounting Research*, 29(2), 350–370.
- Blacconiere, W. G. & DeFond, M. L. (1997). An investigation of Independent Audit Opinions and Subsequent Independent Auditor Litigation of Publicly-Traded Failed Savings and Loans. *Journal of Accounting and Public Policy*, 16(4), 415–454.
- Chan, Y. K. & Walter, T. S. (1996). Qualified Audit Reports and Costly Contracting. *Asia Pacific Journal of Management*, 13(1), 37–63.
- Claessens, S. & Fan, J. P. (2002). Corporate Governance in Asia: A Survey. *International Review of finance*, 3(2), 71–103.
- DeAngelo, L. E. (1981). Auditor Size and Audit Quality. *Journal of Accounting and Economics*, 3(3), 183–199.
- Djongoue, G. (2007). Fiabilité de l'information Comptable et Gouvernance d'entreprise: Une Analyse de l'audit Légal dans les Entreprises Camerounaises. In *Colloque International Université Catholique de Lille*.
- Djoutsa Wamba, L. & Foka Tagne, A. G. (2014). Le comportement des audités : quel effet sur la qualité de service rendu par les cabinets d'audit au Cameroun ? *Revue Gestion et Organisation*. 6(2), 93–103.
- Djoutsa Wamba L., Takoudjou Nimpa, A. & Wamba H., (2015). Efficacité des mécanismes de gouvernance dans la lutte contre les distorsions à l'image fidèle de l'entreprise. [Online]. Available: https://www.researchgate.net/profile/Takoudjou_Nimpa_Alain/publication/301296990_Efficacite_des_mecanismes_de_gouvernance_dans_la_lutte_contre_les_distorsions_a_l'image_fidele_de_l'entreprise/links/5710d53708aefb6cadac159f/Efficacite-des-mecanismes-de-gouvernance-dans-la-lutte-contre-les-distorsions-a-limage-fidele-de-l'entreprise.pdf
- Doan, T. T. Ta, D. Pham, L. Nguyen and H.N. Tran (2021). Audit opinion and earnings management: Empirical evidence from Vietnam. *Investment Management and Financial Innovations*, 18(4), 131– 140.
- Dopuch, N., Holthausen, R. W., & Leftwich, R. W. (1987). Predicting Audit Qualifications With Financial and Market Variables. *Accounting Review*, 62, 431–454.
- Doumpos, M., Gaganis, C., Pasiouras, F., (2007). Probabilistic Neural Networks for the Identification of Qualified Audit Opinions. *Expert Systems with Applications*, 32(1), 114–124.
- Foka Tagne, A. G., Ateumo, E. G., Bidias Menik, H. P., Kenmogne Tamwa, A. & Djoutsa Wamba, L., (2020). Explanatory factors for the manipulations of accounting records in Cameroon: The role of the financial situation and the characteristics of the enterprise. *Journal of Management Strategy & Accounting, Finance* 15(2), 49–88.
- Foka Tagne, A. G., Hikouatcha Kenfack, P. D., Mbadiet, J. F. & Ndassi Yegnou, J., (2018). Qualité d'audit, concentration de l'actionariat et reporting financier : une étude auprès des préparateurs des comptes au Cameroun. *Journal of Academic Finance* 9(1), 27–54.
- Francis, J. R. & Ke, B. (2006). Disclosure of Fees Paid to Auditors and the Market Valuation of Earnings Surprises. *Review of Accounting Determinants of the Qualified Audit Opinion in Cameroon: The Role of the Company's Financial Situation and the Quality of the External Audit Studies*, 11(4), 495–523.
- Gajevsky A. (2014). The impact of auditor's opinion on earnings management: evidence from Romania, *Network Intelligence Studies*. Vol II, Issue 1 (3).
- Hadriche M., (2015), Auditor Reputation, Audit Opinion, and Earnings Management: Evidence From French Banking Industry. *Journal of Modern Accounting and Auditing*. Vol. 11, No. 7, 341–352.

- [18] Hopwood, W., McKeown, J. & Mutchler, J. (1989). A Test of the Incremental Explanatory Power of Opinions Qualified for Consistency and Uncertainty. *Accounting Review*, 64, 28-48.
- Hopwood, W., McKeown, J. C. & Mutchler, J. F. (1994). A Reexamination of Auditor Versus Model Accuracy Within the Context of the Going-Concern Opinion Decision. *Contemporary Accounting Research*, 10(2), 409-431.
- Ireland, J. C. (2003). An Empirical Investigation of Determinants of Audit Reports in the UK. *Journal of Business Finance & Accounting*, 30(7-8), 975-1016.
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kalay, A. (1982). Stockholder-Bondholder Conflict and Dividend Constraints. *Journal of Financial Economics*, 10(2), 211-233.
- Keasey, K. & Watson, R. (1987). Non-financial Symptoms and the Prediction of Small Company Failure: A test of Argenti's Hypotheses. *Journal of Business Finance & Accounting*, 14(3), 335-354.
- Kinney, W. R., Martin, R. D. & Martin, R. (1994). Does Auditing Reduce Bias in Financial Reporting? A Review of Audit-Related Adjustment Studies. *Auditing*, 13(1), 149-156.
- Koh, H. C. & Killough, L. N. (1990). The Use of Multiple Discriminant Analysis in the Assessment of the Going-Concern Status of An Audit Client. *Journal of Business Finance & Accounting*, 17(2), 179-192.
- Koh, H. C. (1991). Model Predictions And Auditor Assessments of Going Concern Status. *Accounting and Business Research*, 21(84), 331-338.
- Laitinen, E. K. & Laitinen, T. (1998). Qualified Audit Reports in Gilles, F. T. A., Prince, H., Joëlle, N. T., Léopold, D. W. 90 Finland: Evidence From Large Companies. *European Accounting Review*, 7(4), 639-653.
- Lynda, S. (2016). Determinants of Audit Opinion After the Scandals of Enron: Empirical Validation in the French Context. *International Journal of Business and Management*, 11(5), 219.
- Loebbecke, J. K., Eining, M. M. & Willingham, J. J. (1989). Auditors' Experience with Material Irregularities: Frequency, Nature, and Detectability. *Auditing: A Journal of Practice & Theory*, 9(1), 1-28.
- Loyer, P. (2006). L'indépendance des auditeurs financiers: une approche des facteurs déterminants. [Online]. Available: <https://www.theses.fr/2006LIL12004>
- Mautz, R. K. & Sharaf, H. A. (1961). *The Philosophy of Auditing*, American Accounting Association. United States: American Accounting Association.
- McKeown, J. C., Mutchler, J. F. & Hopwood, W. (1998). Towards an Explanation of Auditor Failure to Modify the Audit Opinions of Bankrupt Companies. *Auditing-a Journal Of Practice & Theory*, 10, 1-13.
- Moalla, H. & Abelaziz, A. (2015). L'impact de la détresse financière de l'entreprise et de son risque de faillite sur l'opinion d'audit avec réserve. *La Revue des Sciences de Gestion*, 272(2), 77-83.
- Moizer, P. (1997). Auditor Reputation: The International Empirical Evidence. *International Journal of Auditing*, 1(1), 61-74.
- Mutchler, J. F. (1985). A Multivariate Analysis of the Auditor's Going-Concern Opinion Decision. *Journal of Accounting research*, 23(2), 668-682.
- Evina, J. F. N. (2010). Système de Gouvernance et Performance des Entreprises Camerounaises: un Mariage Harmonieux. *La revue des sciences de gestion*, 243-244(3-4), 53-62.
- Normes ISA 200, Objectifs généraux de l'auditeur indépendant et réalisation d'un audit conforme aux normes internationales d'audit.
- Normes ISA 705 (révisée), Expression d'une opinion modifiée dans le rapport de l'auditeur indépendant. Determinants of the Qualified Audit Opinion in Cameroon: The Role of the Company's Financial Situation and the Quality of the External Audit 91
- Pasiouras, F., Gaganis, C. & Zopounidis, C. (2007). Multicriteria Decision Support Methodologies for Auditing Decisions: The Case of Qualified Audit Reports in the UK. *European Journal of Operational Research*, 180(3), 1317-1330.
- [38] Rapport des Nations Unis (2018), Global Study on Occupational Fraud and Abuse. [Online]. Available: <https://www.acfe.com/report-to-the-nations/2018/default.aspx>
- [39] Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, 23-40.
- [40] Sangué-Fotso, R. (2015). Qualité de L'audit et Réduction des Scandales Financiers en Contexte Camerounais. *Revue de Management et de Stratégie*, 2(1), 1-17.
- Spathis, C. T. (2003). Audit Qualification, Firm Litigation, and Financial Information: an Empirical Analysis in Greece. *International Journal of Auditing*, 7(1), 71-85.
- Spathis, C., Doumpos, M. & Zopounidis, C. (2003). Using Client Performance Measures to Identify Pre-Engagement Factors Associated with Qualified Audit Reports in Greece. *The International Journal of Accounting*, 38(3), 267-284.
- Sikka, P. (2009). Financial Crisis and the Silence of the Auditors. *Accounting, Organizations and Society*, 34(6-7), 868-873.
- Simamora, R. A. & Hendarjanto, H. (2019). The Effects of Audit Client Tenure, Audit Lag, Opinion Shopping, Liquidity Ratio, and Leverage to the Going Concern Audit Opinion. *Asian Journal of Accounting Research*, 4(1), 145-156.
- Tsipouridou, M. & Spathis, C. (2012). Earnings Management and the Role of Auditors in An Unusual IFRS Context: The Case of Greece. *Journal of International Accounting, Auditing and Taxation*, 21(1), 62-78.
- Zdolšek, D., Jagrič, T. & Odar, M. (2015). Identification of Gilles, F. T. A., Prince, H., Joëlle, N. T., Léopold, D. W. 92 Auditor's Report Qualifications: An Empirical Analysis For Slovenia. *Economic research-Ekonomska istraživanja*, 28(1), 994-1005.
- Acte Uniforme révisé relatif au Droit des Sociétés Commerciales et Groupement d'Intérêt Economique (2014).
- Acte Uniforme relatif au Droit Comptable et à l'Information Financière et Système Comptable OHADA (2017).

Webography:<https://www.bvmt.com.tn/><https://www.zonebourse.com/><https://www.biat.tn/biat/Fr/> <http://www.bna.tn/> <https://www.bh.com.tn/><https://www.attijaribank.com.tn/Fr/><https://www.atb.tn/><https://www.uib.com.tn/> <https://www.ubci.tn/> <https://wifakbank.com/><https://www.bt.com.tn/><https://www.bte.com.tn/en/><https://www.investopedia.com/terms/q/qualifiedopinion.asp><https://www.tandfonline.com/doi/full/10.1080/23311975.2020.175784>1 <https://www.accountinghub-online.com/4-types-of-audit-opinion/>*Statistiques*

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------|-----|----------|-----------|-----------|----------|
| ID | 44 | 6 | 3.198837 | 1 | 11 |
| YEAR | 44 | 2019.5 | 1.13096 | 2018 | 2021 |
| BANK | 0 | | | | |
| AO | 44 | 1 | 0 | 1 | 1 |
| CF | 44 | 5.02e+07 | 1.37e+08 | 827410 | 6.04e+08 |
| zscore | 44 | 21.84159 | 30.89716 | .3253074 | 197.7055 |
| CSR | 44 | .4545455 | .5036862 | 0 | 1 |
| RENKP | 44 | .1373284 | .3027107 | -.3591712 | 1.877454 |
| LIQR | 44 | 2.194267 | 3.566127 | .8815945 | 18.35948 |
| DETTE | 44 | .0427357 | .0260973 | .0022251 | .0912667 |
| QA | 44 | .3636364 | .4866071 | 0 | 1 |
| TE | 44 | 7.068642 | .683 | 6.052607 | 8.997919 |

Estimations Logit (Model Restreint) Randomeffect Model

```

Random-effects logistic regression      Number of obs   =      16
Group variable: ID                    Number of groups =       4

Random effects u_i ~ Gaussian          Obs per group:
                                     min =       4
                                     avg =      4.0
                                     max =       4

Integration method: mvaghermite        Integration pts. =     12

Log likelihood = -2.198e-14            Wald chi2(4)      =       .
                                     Prob > chi2        =       .

```

| AO | Coef. | Std. Err. | z | P> z | [95% Conf. Interval] | |
|----------|-----------|-----------|-------|-------|----------------------|----------|
| zscore | 1.185041 | 6352547 | 0.00 | 1.000 | -1.25e+07 | 1.25e+07 |
| CSR | 0 | (omitted) | | | | |
| RENKP | 405.8268 | 5.25e+08 | 0.00 | 1.000 | -1.03e+09 | 1.03e+09 |
| LIQR | 3.438637 | 6914776 | 0.00 | 1.000 | -1.36e+07 | 1.36e+07 |
| DETTE | 1566.111 | . | . | . | . | . |
| QA | 0 | (omitted) | | | | |
| TE | -53.61445 | 5.37e+07 | -0.00 | 1.000 | -1.05e+08 | 1.05e+08 |
| _cons | 318.7548 | 4.50e+08 | 0.00 | 1.000 | -8.82e+08 | 8.82e+08 |
| /lnsig2u | -2.77886 | 4717044 | | | -9245240 | 9245234 |
| sigma_u | .2492173 | 587784.6 | | | 0 | . |
| rho | .0185291 | 85783.3 | | | 0 | . |

LR test of rho=0: chibar2(01) = 4.4e-14

Prob >= chibar2 = 0.500

.