DETERMINANTS OF VOLUNTARY DISCLOSURE OF INTERNAL CONTROL WEAKNESSES IN TUNISIA

Hamed Kharraz*, Jihene Ferchichi*

* Faculty of Economic Sciences & Management of Tunis, University of Tunis El Manar, International Finance Group Tunisia

Abstract

The main objective of this research is to examine the determinants which can push the auditors to reveal the weaknesses of the internal control system in companies listed on the Stock Exchange Securities of Tunisia. We are particularly interested in determinants related to corporate governance, ownership structure and some company characteristics. The conceptual framework referred to this work is the agency theory. We concluded from the results of the logistic regression model that the probability of disclosure of internal control weaknesses was not significantly associated with corporate governance and ownership structure. However, some other company characteristics, e.g. the size are strongly related with probability of firms disclosing internal control weaknesses.

Keywords: Internal Control Weakness, Disclosure, Corporate Governance, Audit Reports, Auditors

JEL Classification: G39

DOI: 10.22495/cocv14i2art6

1. INTRODUCTION

In these recent years the economic environment has been marked by perpetual changes, which leads our leaders to think of ways to keep their companies competitive and successful. One of the main ways is to develop an internal control system which is able to control all the functions of the entity and in this context has been developed the internal control culture.

Indeed, this unstable economic environment was punctuated by several slowing bankruptcies and financial and economic scandals such as Enron and BATAM case.

According to Passet and Libermann [35] the Enron case, takes its name from the famous company which artificially inflated its profits while masking its deficits with the use of a variety of dummy companies which have falsified accounts. The goal was no more or less than inflate the stock market value. The bursting of the bubble has precipitated not only Enron company but also Arthur Andersen auditing firm who was its accomplice.

At national level we cite the case of BATAM, according to Boumiza [3] this national giant of food distribution and appliances equipment was considered as the national leader in the distribution, and it is from 2001 that the group's financial situation deteriorates.

After the expansion made through a multiple hasty and contrast acquisitions with the financial imbalances of the group, unpaid debts, unpaid suppliers, internal mismanagement and an economic stagnation of the consumer market from 2000, BATAM was sinking into a debt spiral, leading the group to the implementation of a restructuring plan on October 2001.

The scale and the brutality of these scandals have more than ever the focus on internal control processes and have led legislators at national and international level to put in place new rules such as Sarbanes-Oxley (SOX) (2002) in the USA that requires to the listed companies in addition to the annual report an internal control report and requires to the auditors a statement in their reports of the evaluation of the internal control system.

In France the legislature put in place the Financial Security Act (LSF) (2003) which requires to the public limited companies and publicly traded companies and more precisely to the chairman of the executive board or the chairman of supervisory board a report related to the preparation and the organization of the board's work and the internal control procedures implemented by the company and requires the legal auditors, a report attached to their report to include the comments about the internal control procedures related to preparation of accounting and financial information. In Tunisia, the legislature established the Tunisian law on strengthening the security of financial relations (LRRSRF) (2005) which impose the inclusion of a paragraph about the internal control processes in the annual management report of publicly traded companies.

Besides, according to a survey "Global Economic Crime Survey (2011) "done by Price water house Coopers, talking about the increase of fraud between 2009 and 2011, communications and insurance sectors remain at the top of the ranking in terms of the number of reported fraud. And the public sector fraud increased by 9% compared to the results of the 2009 survey, which places this sector among the top five targets of economic crime.

This survey was also interested in the types of economic crimes in 2011 spread worldwide which can take various forms. The most common crime

reported by respondents is asset misappropriation by officers, trustees or employees. Then comes the accounting fraud, bribery and corruption. 72% of companies surveyed globally, who have been victims of economic crime in 2011 have suffered from asset misappropriation, which increased of 5% compared to the results of the 2009 survey.

We can see that generally, the absence or the lack of the internal control dispositive is not directly sanctioned but it has important and significant indirect consequences. If the entity is controlled by a legal auditor, he can in some cases refuse the certification of the accounts or he can be unable to certify them when he finds that the internal control system contains weaknesses or when he notices its absence.

Power [36] thinks that "The development of the financial audit seems trapped in failure dialectic, every crisis triggering new institutional changes."

Academic and professional studies have also given more importance and interest to the internal control reporting in listed companies such as the study of Le Maux and Alloul [26] conducted by Deloitte. This study show that diffused reports are increasingly heterogeneous and reveal the absence of the signature of the Managers which means a commitment rejection of their responsibility to the information published in the reports.

In addition, according to Ghosh and Lubberink [18] "Entities with big seize have more resources to invest in internal control therefore they have fewer weaknesses in their devices", Ge and Mc Vay [18] and Doyle and al [12] think that "Previous studies show that companies who report material weaknesses tend to be younger", Krishnan [24] has demonstrated that "Poorly performing companies may not be able to invest in an adequate internal control system and financial results can confirm that. Also, according to Asbaugh-Skaife and al [1] "The entities with an ineffective internal control tend to be younger, more volatile, with higher sales growth, and less profitable than companies with effective internal control system.", on the other hand, Zhang and al [51] affirm that "Entities with good corporate governance quality are expected to have fewer internal control weaknesses.'

Following to the financial scandals and the increase of fraud and economic offenses globally, managers are more encouraged to implement a robust internal control system which can guarantee the quality of information. However, the internal control system in Tunisia should be evaluated by an independent person who is the legal auditor as specified in the Commercial Companies Code in its Article 266 (Paragraph 2) but the legal auditor may find himself in situations which can refrain him from disclosing the weaknesses of internal control system.

The main objective of this research is to examine the determinants which can push the auditors to reveal the weaknesses of the internal control system in companies listed on the Stock Exchange Securities of Tunisia. We are particularly interested in determinants related to corporate governance, ownership structure and firm characteristics.

2. EVOLUTION OF THE REGULATORY CONTEXT OF INTERNAL CONTROL AND OBLIGATIONS OF THE AUDITOR IN TUNISIA

Following to measures taken by USA and France, Tunisia too was among the countries who introduced a new Financial Security Act 2005-96 which is the Tunisian law on strengthening the security of financial relations which impacted the legal auditing by few changing like:

- A rotation of auditors and the law stipulates that when the auditor is a natural person cannot exceed 3 mandates and if he is a legal person with three members from the Certified Public Accountant Order, he cannot exceed 5 mandates with the change of the team responsible of the mission every three years.
- New measures to nominate two auditors who must be members of the Certified Public Accountant Order for the following companies: Financial institutions making public savings, multi-line insurance companies, companies required to establish consolidated financial reports and companies with liabilities total to credit institutions exceed an amount set by decree.
- Communication by auditors of a copy of each report prepared by themselves to the attention of the shareholders for ordinarily or extraordinarily assembly, also to the Central Bank of Tunisia and to the financial market board, for publicly traded companies and to the Central Bank of Tunisia for companies required to prepare consolidated financial statements if the consolidated assets total exceed an amount set by decree; or whose with liabilities total to credit institutions exceed an amount set by decree. As the auditors of public companies making savings, must report to the financial market board any matter likely to jeopardize the interests of the Company or the holders of its securities.
- Obligation to evaluate periodically the internal control systems for publicly traded companies, after the evaluation, the auditor has to in serta paragraph in his auditing report.

According to the opinion of the Minister of Justice in the parliamentary debates (Yaich, [48]), "The auditor proceed to an annual audit of the effectiveness of internal control system in parallel with the audit of financial statements to prepare the auditing report destined to the annual general assembly. Thus, significant deficiencies in internal control system must henceforth be mentioned in a paragraph in the auditing report of the auditor who may, if the volume of comments is important, mention them in a separated report which will be communicated to the assembly".

Tayechi [43] says that "These measures remained till this day are limited to the financial institutions, insurance, the undertakings for the collective investment of transferable securities and associations authorized to grant microloans. As a matter of fact, no reference, no operating guide, or professional standard for auditor related to the internal control issue, like it has been in the international level, have emerged, making the nature and the scope of work, on the one hand and internal control disclosing on the other hand, superfluous."

3. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

According to Xu-dong Ji and al [46], studies have demonstrated that which motivates more firms to provide voluntary disclosures is the decrease of the cost of capital and the cost of debts through decreasing information asymmetry (Botosan [5]; Diamond and Verrecchia [11]; Meek and al [33]); the decrease of the agency costs in monitoring management behavior, (Lang and Lundholm [25]); the decrease of potential litigation risk by voluntarily disclosing of bad news (Skinner [41]) and the distinction from lower quality firms (Watson and al [51]).

In this study, we are interested in factors which can push auditors to reveal the weaknesses of the internal control system in companies listed on the Stock Exchange Securities of Tunisia: corporate governance, ownership structure and company characteristics, on which our hypotheses are based.

3.1. Corporate governance

Companies with good corporate governance quality have less and less internal control weaknesses (Zhang and al [52]). Previous studies which examined the Chinese corporate governance mechanisms suggest that when the size of the directors' board is larger, greater is the board independence, also a larger size of the board supervisory engender more independence to this board, so the internal audit committee can be more competent and we will have more factors which contribute to have an effective corporate governance while the duality between Chairman of the Board and the chief executive officer can distort the effectiveness of corporate governance (Cho and Rui [9]; Firth and al [16]; Xiao and Yuan [44]; Xiao and al [45]; Xu and Wang [47]).

In our study, three characteristics retain our attention, which are the degree of independence, the duality between the chief executive officer and the Chairman of the Board, the existence of an audit committee and the auditing by a BIG4.

3.1.1. Board independence

The variable through which we can analyze the independence of the board is the percentage of independent directors and according to Boutan [4] "A director is independent when he has not any kind of relationship with the company, its group or its management that could compromise their freedom of judgment". Independent directors have the power to make better the audit quality by requiring further auditing work and it is in this sense that O'Sullivan [34] shows that the proportion of independent directors impacts positively the audit quality and push the auditor to disclose all forms of failures. We even see that Beasley and Petroni [2], Carcello and al [6], Lennox [27], Goodwin and al [19] and recently Xudong Ji and al [46] found that independent directors have an important role in making effective the control function of the administration board and therefore they require a better audit quality. We formulate our hypothesis as follows:

H1: The presence of a significant proportion of independent directors in the board affects positively

the audit quality to disclose the weaknesses of the internal control system.

3.1.2. Duality of chairman of the board and CEO

Makni and al [30] found after studying a sample of 29 Tunisian entities between 2005 and 2009 that the duality of roles can positively affects the quality of the external audit and this leads us to conclude that the independence of the board in this situation may be affected and this could cause an increase of the agency costs. Moreover a study on 1998 of more than 800 Chinese listed companies by Xu and Wang [47] have shown that the duality between chief executive officer and the chairman of the board generates generally a negative association with the disclosure of internal control weaknesses by the auditor engendered by schemes or scams which can be used to hide failures in the entity from external auditors. This was once again confirmed by another study between 2010 and 2011 by Xu Ji-dong and al [46] of 1365 Chinese listed companies on 2010 and 1389 listed Chinese companies on 2011. Our second hypothesis is developed as follows:

H2: The duality of chairman of the board and CEO affects negatively the disclosure by the auditor of the internal control system weaknesses.

3.1.3. The internal audit committee

Krishnans (2005) indicated that companies with more effective internal audit committees than others and which employ more skills and expertise within the committee, they are those whom have less internal control problems. Zhang and al. [52] found also similar results, so companies with high audit committees' quality are least likely to have internal control problems. In addition, Stephens [42] demonstrated that internal audit committees with competent members will be able to discover the internal control weaknesses and his study shows that the existence of good audit committees within the company can generates a sincere disclosure of internal control deficiencies. In China, the audit committee is one of the most important corporate governance mechanisms, its quality and the level of competence of its members will push therefore the management of the company to report all troubles and problems discovered in the internal control system and thereafter this will facilitate the work for to the auditor. Our third hypothesis is developed as follows:

H3: The presence of an internal audit committee affects positively the disclosure by the auditor of the internal control weaknesses.

3.1.4. Auditing by BIG4

According to Healy and Palepu [21] previous studies see that the quality of the external audit can play a positive role in improving the quality of voluntary disclosure of their clients pushed by the auditor. Specifically, regarding to the failures disclosure of internal control system Ashbaugh-Skaife and al. [1] found that companies controlled by a Big 4, are more likely to put in their reports the internal control weaknesses detected otherwise the auditor should put that in his report to avoid any damage

for the reputation of the Big 4 for which he works. Our fourth hypothesis is developed as follows:

 $\it H4:$ The presence of an audit firm belonging to the Big 4 affects positively the audit quality and pushes the auditor to disclose internal control weaknesses.

3.2. Ownership structure

Authors such as Ashbaugh-Skaife and al. [1] demonstrate that the ownership structure is another factor influencing the disclosing of the internal control weaknesses. This was also demonstrated by Xu Ji-dong and al [46] that studied between 2010 and 2011 a sample of listed Chinese companies and conclude that there is a strong association between the ownership structure and the disclosing of internal control weaknesses. In our case our study will be based on two parameters which are the concentration of ownership and the direct or indirect state participation in the share capital of the company.

3.2.1. Ownership concentration

According to Demsetz [10], Shleifer and Vishny [40] the concentration of ownership is a guarantee for management control whose objectives are similar to internal control objectives, shareholders consider it as a tool to limit and controlling agency costs. A majority shareholder is more encouraged than others to invest in the management control and internal control system of the entity to remove subsequently the resulting benefits. Besides, Mtanios and Paquerot [32] found that the majority shareholders have more important role than minority shareholders because they are required to control more directors and to preserve their interests. On the other hand, Chan and al [7] argued that when we have major shareholders this will lead to a limited audit and conversely when the capital is dispersed this leads to a more thorough audit which will impact positively its quality therefore we will have a better internal control weaknesses disclosure. In additions, Mitra and al. [31] show a negative relationship between the existence of majority shareholders and the level of audit fees. Our fifth hypothesis is formulated as follows:

H5: The presence of concentrated ownership affects negatively the disclosure of internal control weaknesses by the auditor.

3.2.2. The direct or indirect state participation in the share capital of the company

The state participation in the share capital is important and even interesting in our case as it can has a significant role in corporate governance. Moreover financial resources which can detain a partner such as the state will conduct to a good control and eventually to a good management (Jensen and Meckling [22]). Besides Velury and al. [50] and Velury and Kane [49] demonstrated that there is a positive relationship between the state participation in the share capital and the requirement for a good audit quality. In addition, previous studies such as that of Chen and al [8] which studied the cases of Chinese listed companies found that companies in which the state holds a

stake in their capital is generally less concerned with the quality of information disclosed by them, on the other hand Ashbaugh-Skaife and al. [1] found that US companies with state participation have greater incentives to correct their failures in the internal control system due to a good oversight. Our sixth hypothesis is developed as follows:

H6: The presence of direct or indirect involvement of the state in the capital of the company affects positively the disclosure of the weaknesses of internal control system by the auditor.

3.3. Firm characteristics

The Most of the studies which showed an interest to the disclosure of internal control weaknesses, Ge and McVay [17] found that disclosure is negatively associated with firm size and profitability because small firms have fewer resources to improve their internal control systems, Ghosh and Lubberink [18] found that large firms have more resources to invest in internal control, therefore they have less failures in their internal control system, and are less likely to disclose weaknesses. On the other hand, Doyle and al. [12] found that the internal control weaknesses are usually found in smaller firms, younger, financially weaker and more complex. Ashbaugh-Skaife and al. [1] demonstrated that firms with more complex activities, with fewer available resources to improve the internal control system, having a small size and lower profitability are more likely to disclose their internal control weaknesses and its age can be negatively related with the disclosing of the weaknesses, in addition, Doyle and al. [12] demonstrated that a company with a high debt ratio and growth opportunities and more complex business is more likely to have problems with the internal control system. We have five hypotheses formulated as follows:

H7a: The financial performance of the company affects negatively the disclosure of the internal control weaknesses by the auditor.

H7b: The leverage of the company affects positively the disclosure of the internal control weaknesses by the auditor.

H7c: The size of the company affects negatively the disclosure of the internal control weaknesses by the auditor.

H7d: The age of the company affects negatively the disclosure of the internal control weaknesses by the auditor.

H7e: The growth of the company affects positively the disclosure of the internal control weaknesses by the auditor.

4. RESEARCH DESIGN AND MODEL SPECIFICATION

4.1. Sample selection

Our study focuses on the study of determinants which will push and motivate the auditor to disclose internal control weaknesses. At the beginning we selected 38 Tunisian industrial and commercial companies listed on the Stock Exchange of Tunis, after deleting firms with missing data we have kept only 22 companies. Furthermore, for this study, neither banking sector nor insurance sector has been taken into account do to its specific characteristics.

The period of our research is focused on three years 2012, 2013 and 2014 and we have chosen these periods because they represent a transitional period for Tunisia, a new step towards democracy and towards greater economic and financial transparency and because during these years we have lived one of the biggest financial scandals in Tunisia related to Syphax Airlines company. The Accounting and financial data as well as corporate governance data are manually collected from the annual audit reports and the annual management reports provided from the financial market board, we have got also the official bulletins of the firms from the securities exchange of Tunis. Finally, our sample is composed of 60 observations.

4.2. Model for the determinants of disclosing Internal Control Weaknesses

Building upon voluntary disclosure theories and recent studies of internal control weaknesses disclosure (Xu-dong Ji and al. [46]; Ashbaugh-Skaife and al. [1]), we will use the following logistic regression model to investigate the probability of auditors' disclosing internal control weaknesses in their reports. When designing the model, we include all possible factors which can impact on auditors' disclosing; these factors are related to the corporate governance, the ownership structure and firm characteristics.

Our Model is applied to investigate the determinants of the likelihood of disclosing internal control weaknesses. FCI is equals to 1 when auditors

disclose internal control weaknesses in their reports, otherwise it equals to 0. For our hypotheses, we include the following variables for corporate governance: (AIND; CUMUL; COMAUD;BIG4), the following variables for the ownership structure (TOP3; CODE STATE) and the following variables for firm characteristics (LEV; ROA; TAILLE; AGE; GROWTH).

AIND represents the percentage of independent directors on the board of directors; CUMUL is equal to 1 if a chief executive officer is also the chairman of the board of directors, otherwise it is 0; COMAUD is equal to 1 if the entity has an audit committee otherwise it is 0; BIG 4 is equal to 1 if the entity is audited by a big4 otherwise it is 0.

TOP3 is the percentage of top 3 shareholders' ownership interests in firms; CODE STATE is a dummy variable that is equals to 1 if there is a direct or indirect state participation in the share capital of the company otherwise it is 0.

LEV is the measurement of a firm's leverage, it's equal to the total liability divided by total assets; ROA is the net income or the total profits after taxes divided by total assets; TAILLE is the logarithm of total assets; AGE is based on the number of years the firms have operated; GROWTH is based on changes of total sales revenue divided by total sales revenue.

5. EMPIRICAL RESULTS

5.1. Descriptive statistics

The descriptive analysis has to explain the nature of the companies studied (The minimum and the maximum, mean and standard deviation of the study variables). The following table represents the descriptive statistics of the variables:

VARIABLES	Observations	Minimum	Maximum	Mean	Standard deviation
FCI	60	0	1	0,62	0,490
ADIND	60	0,000	0,429	0,05648	0,116222
CUMUL	60	0	1	0,35	0,481
COMAUD	60	0	1	0,92	0,279
TOP3	60	0,297	0,888	0,63047	0,159097
CODESTATE	60	0,000	0,798	0,15611	0,265322
BIG4	60	0	1	0,27	0,446
ROA	60	-0,239	0,190	0,00516	0,090972
LEV	60	0,078	2,647	0,65541	0,492212
TAILLE	60	6,177	8,970	7,78205	0,512503
AGE	60	2	65	28,45	16,359
GROWTH	60	-0,448	2,665	0,16758	0,502663
N	60	-		=	-

Table 1. Descriptive Analysis

For FCI variable, we see that for 60 observations, we found a mean of 0.62 which means that the disclosure of weaknesses internal control system by the auditor is represented by a percentage of 62% of the sample and because we treat a categorical variable so we have 0 and 1 as a maximum and a minimum. For ADIND variable in our sample, 5.6% is the mean of the independence of the board, according to the study done by (Xu Jidong and al [46]) during 2010 and 2011, this percentage is 37.11% for a sample of 1141 observations composed of listed Chinese industrial companies, it is 44.2% for another study (Dumontier P. and al [13]) who studied on 98 Tunisian

companies, 21 listed non-financial companies and 77 unlisted companies during 2002.

35% of our sample represents a duality between the chief executive officer and the chairman of the directors' board, whereas, for the study published by Xu-dong Jiand al [46], the percentage is 11.74%. We can also see that 92% of companies which are represented in our observations have an internal audit committee. The mean of ownership concentration TOP3 in our sample reached a percentage of 63,047%, this percentage is 18.18% with Xu Ji-dong and al [46], on the other hand, the percentage of direct or indirect participation of the state in the share capital is 15.61%. We can see also

that 27% of our sample is audited by a BIG 4, this mean is considered high compared to the mean found by Xu Ji-dong and al [46] which is 11.66% representing the Chinese market, but if we take a look of the American market we find that Zhang and al [52], between November 2003 and July 2005 for a sample of 208 industrial companies, showed that 80% of these companies are audited by BIG 4.

The mean of financial performance in our case is 0.516% this mean is 5.97% in the study presented by Xu Ji-dong and al [46] and the mean of leverage is 65.54%, Xu Ji-dong and al, [46] found 52.91%. The Size is also interesting in our sample we found a mean of 7.78.

Xu Ji- dong and al [46] found 22.53. The average age of our observations is 28.45 years, it is 14.97 years for Xu Ji-dong and al [46] in another study of Doyle and al [12] who worked on a sample of 779 listed companies between August 2002 and 2005, this age is 8.274 years. Concerning the average growth of our observations, it is 16.75%, Xu Ji-dong and al, [46] found 32.47% and Doyle and al, [12] found 22.20%.

5.2. Bivariate Analysis

We have to study the bivariate correlations between the different variables of our model using the Pearson parametric test to ensure that the variables with strong correlations between them will not been considered in the model and to avoid any possible problems of multicollinearity.

The detection of the bivariate multicollinearity is done with the use of the correlation matrix. If the correlation coefficient is greater than 0.7 which is the limit provided by (Kerwin, 1992) we conclude that we have multicollinearity problem. The author provides an "r = 0.7" to decide about the serious problem of multicollinearity between the independent variables included in the regression model, with "r" the coefficient of bivariate correlation. The limit set by Kennedy (1985) is 0.8. In our study, we will retain, as in the most studies, the limit set by (Kervin, 1992).

From the table 2 below, representing the correlations through the test of Pearson, we have ensured that none of the variables present between each other a strong correlation that could lead us to an eventual multicollinearity problem.

Pearson Correlation	FCI	ADIND	CUMUL	COMAUD	ТОР3	CODE STATE	BIG4	ROA	LEV	TAILLE	Age	GROWTH
FCI	1	0.119	-0.653	-0.238	-0.112	0.116	-0.532	-0.458	0.286	-0.048	0.005	0.084
ADIND		1	-0.360	0.073	-0.140	-0.269	-0.296	-0.356	0.459	0.007	-0.070	-0.089
CUMUL			1	0.221	0.052	-0.077	0.506	0.463	-0.312	-0.117	-0.055	-0.077
COMAUD				1	0.142	0.179	0.182	0.052	0.073	0.219	0.335	-0.217
TOP3					1	0.392	-0.102	0.101	-0.259	-0.041	0.373	0.035
CODESTATE						1	-0.157	-0.115	-0.176	-0.075	0.573	-0.178
BIG4							1	0.401	-0.230	0.152	-0.154	0.001
ROA								1	-0.574	0.029	-0.086	-0.091
LEV									1	0.105	0.023	0.008
TAILLE										1	-0.031	0.242
Age											1	-0.314
GROWTH												1

Table 2. Pearson Correlation Matrix

5.3. Multivariate analysis

According to Evrard and al [15], a multivariate analysis is used for simultaneous treatment of all variables. We choose for our study the use of the chi-square test, also the Hosmer & Leme show test to see how well the model fits the data which will indicate a poor fit if the P-value is less than 0.05. We have also to assess the strength and significance of the connection between the dependent variable and the independents variables and we will use the coefficient of determination "R2" to measure the proportion of variance (the dependent variable Y) returned by the model.

The table 3 provides us the logistics estimation of our study model. As we can see, the Chi-Square used to see the adjustment is equal to 60.051 significant at the 1% level which allows us the reject of the null hypothesis stating the invalidity of all beta coefficients.

Variables Coefficient Significativity StandardError ADIND -17.718 0.036 8.436 0.017 CUMUI. 11.175 4.661 COMAUD 13 522 0 999 14013 505 TOP3 -6,334 0.239 5,378 CODESTATE 7,768 0,259 6,879 0,229 2,153 1,789 BIG4 21.079 ROA -27.9710.185 LEV 0.449 0.841 2 238 TAILLE -6,740 0,043 3,338 -0,099 0,091 Age GROWTH 0,286 3,317 3,538 0.051 26.255 CONSTANTE 51.264

Table 3. Multivariate Analysis

Note: Chi-square = 60.051; Hosmer-Lemeshow = 1.7 (0.989); R^2 of Nagelkerke = 0.859

The test Hosmer & Lemeshow show $a\chi^2$ equal to 1.7 which is not significant and revealing a good fit between the values predicted by the model and those observed in reality with a P-value of 0.989.

The R^2 of Nagerlkerke indicates that 85.9% of the disclosure of the internal control weaknesses by the auditor is explained by all the variables included in the model.

The "Table 3" is a summary of all our study, so if the P-value is less than 0.05 we have a useful parameter for our model, therefore the parameters having a significant P-value are the independence of directors (ADIND) with a significance of 0.036, the duality of functions (CUMUL) with a significance of 0.017 and firm size (TAILLE) with a significance of 0.043, but only this variable related to the hypothesis (7c) and to the firm characteristics is confirmed.

5.4. Results Analysis

From the results of the logistic regression model we have to explain the determinants that push the auditor to disclose internal control weaknesses and we can conclude that: Our first hypothesis assuming a presence of a significant proportion of independent directors in the board affects positively the audit quality to disclose the internal control weaknesses is significantly negative, so our first hypothesis is rejected.

In fact, we are not surprised by this result because according to Boutan [4],"a director is independent when he has no relationship of any kind with the company, its group or its management that could compromise his judgment", this says that an external administrator must not have contractual relationships with the company and even family relations with those who have the power of decision and according to Ebondo [14] who done a study based on the French market which assimilate the management of a company to the government of a nation, reported us that the method of appointment of internal and external directors presents few irregularities. Indeed, directors are chosen between friends meet in the club, school or between people from the same social class. In these circumstances, it is unrealistic to expect from these directors to effectively carry out their role to monitor the managerial action. Moreover, Richard and Miellette [38] sum up the mood of the board when he writes: "The board is one of the most distinguished ways of wasting time. It is the front of the house; but whereas for fronts 'shops fashion demands a little decoration and plenty of light but we often prefer a board with a little light and a lot of decoration." He added that "The internal and external directors use their powers when business is bad, it is only at this time when they suddenly wake up to try to exercise their control right to penalize opportunistic chief executive officers."

By the way, Dumontier P. and al [13] that made a study based on a Tunisian sample confirms this by concluding that the extent of the independence of external directors on the board seems quite subtle (this is only an appearance of independence).

Regarding our second hypothesis, we found a significant positive association between the duality of the chief executive officer and the chairman of the Board and the disclosure by the auditor of the internal control system weaknesses, our hypothesis

is therefore rejected, this result did not surprise us because the study done by Gul and Al[20], on 246 listed Australian companies in 1998 demonstrated that there is a positive association between the duality of the chief executive officer and the chairman of the board and the level of audit fees. According to the author this situation conducts to a greater need for a better audit quality result, therefore the fee increases and of course when we talk about audit quality, it means more incentives for the auditors to disclose internal control. Besides the study of Makni and al [30] based on a sample of 29 Tunisian companies between 2005 and 2009 concluded that duality of the chief executive officer and the chairman of the Board has a positive relationship with the quality of external audit. The duality of the chief executive officer and the chairman of the board can compromise the board independence. The owners sacrifice their interests for the directors, who will take advantage of this situation, which will engender an increase of the agency costs. So a company will require a good audit quality in order to protect the interests of shareholders and to limit the opportunistic behavior of directors.

Regarding our third hypothesis assuming that the presence of an internal audit committee affects positively the disclosing by the auditor of the internal control weaknesses is rejected because the P-value of the variable (COMAUD) which is (0.999) is not statistically significant although the coefficient for the same variable is positive (13,522) so we are obliged to reject this hypothesis. In that case, we can say that we are in contradiction with the significant results found by Xu Ji-dong and al [46], but we should mention that the results of Zhang and al [52] showed that companies with high audit committees quality are the least likely to have internal control problems, eventually the auditor will not have any failures to disclose in the internal control system. We add to this that we noticed in the sample on which our work is based, that some companies do not have an internal audit committee and they are those who have the most of internal control weaknesses. We noticed too that the financial market board in Tunisia requires to these companies newly introduced in the stock exchange to set up an audit committees.

Concerning our fourth hypothesis that assumes the presence of an audit firm belonging to the Big 4 can affects positively the audit quality and pushes the auditor to disclose internal control weaknesses is rejected because the P-Value of the variable (BIG4) which is (0.229) is not statistically significant although the coefficient for the same variable is positive (2.153). We are obliged to reject this hypothesis and once again we are in contradiction with the significant results found by Xu Ji-dong and al [46] who conclude that the number of companies that have internal control weaknesses verified by an auditor from the Big 4 is significantly less than the number of companies that do not have internal control weaknesses verified by a Big 4, which means that Big 4 auditors impose strong internal control standards to their customers. To explain more our result we have to mention that only 16 observations from our sample which is composed of 60 observations have an auditor belonging to the Big 4 for the external auditing.

Our fifth hypothesis that assumes the presence of concentrated ownership affects negatively the quality of disclosure by the auditor of internal control weaknesses is rejected because the P-value of the variable (TOP3) which is (0.239) was not statistically significant although the coefficient for the same variable is negative (-6.333) we are obliged to reject this hypothesis. This does not confirm the significant results of Demsetz [10], Shleifer and Vishny [40] and Ashbaugh-Skaife and al [1]. Moreover we think that we have to expand our samples to see if this result persists but according to Chan and al [7] when we have major shareholders this will lead to a limited audit and conversely when the capital is dispersed this leads to a more thorough audit which will generate a better audit quality and a better disclosure of internal control weaknesses.

Likewise for our sixth hypothesis that assumes the presence of direct or indirect participation of the state in the capital of the company affects positively the quality of the disclosure by the auditor of the weaknesses of internal control system is rejected because the P-Value of the variable (STATE CODE) which is (0.259) is not statistically significant although the coefficient for the same variable is positive (7.768). We are obliged to reject this hypothesis and once again we are in contradiction with the significant results of Velury and al [50], Velury and Kane [49] and Ashbaugh-Skaife and al [1]. However, other previous studies like the study of Chen and al [8] show that listed companies and state controlled tend to be less concerned by the quality of financial information so it does not give enough importance to their internal control system and to the disclosure made by the auditor at that level.

Similarly, our seventh hypothesis (a) implies that financial performance of the company affects negatively the disclosing by the auditor of the internal control weaknesses is rejected because the P-value of the variable (ROA) which is (0.185) is not statistically significant although the coefficient for the same variable is negative (-27,971) we are obliged to reject this hypothesis.

Our seventh hypothesis (b) assumes that the leverage of the company affects positively the disclosing by the auditor of the internal control weaknesses is rejected because the P-value of the variable (LEV) which is equal to (0.841) is not statistically significant although the coefficient for the same variable is positive (0.449) we are obliged to reject this hypothesis.

The same thing for our seventh hypothesis (d) assuming that the age of the company affects negatively the disclosing by the auditor of the internal control weaknesses is rejected because the P-value of the variable (AGE) which is equal to (0.272) is not statistically significant although the coefficient for the same variable is negative (-0099) we are obliged to reject this hypothesis.

The seventh hypothesis (e) is also rejected, it assumes that the growth of the company affects positively the disclosing by the auditor of the internal control weaknesses, the P-Value of the variable (GROWTH) which is (0.286) is not statistically significant although the coefficient for the same variable is positive (3.538).

Finally the seventh hypothesis (c) implies that the size of the company affects negatively the disclosing by the auditor of the internal control weaknesses is confirmed, this confirms the hypothesis of Ge and Mc Vay [17] who found that the disclosure failures is negatively associated with the company's size because small businesses have fewer resources to improve their internal control systems, and according to Ghosh and Lubberink [18], large companies have more resources to invest in internal control systems, therefore they are less likely to disclose weaknesses.

The results that we found for the seventh hypothesis does not agree in general with the results of Xu-dong Ji and al [46] who concluded that the disclosure of weakness is influenced by all parameters representing the firm characteristics which are the leverage ratio (LEV), financial performance (ROA), age (AGE), size (SIZE) and growth (GROWTH) and not only the size (TAILLE) as we found.

6. CONCLUSION

This paper investigates the issue associated with the determinants disclosure of the internal control weaknesses by the auditor. The determinants on which our work is based are: The governance mechanisms so we choose as mechanisms, the form of the directions' board, the audit committee and the external audit quality, we worked too on the ownership structure and more precisely, we were interested to the ownership concentration and the direct and indirect state participation in the capital share company. Then we were interested to the company's characteristics, such as financial performance, leverage, size, age and growth.

To find more significant results compared to what we found, we think that we need to expand our sample, but as we have already mentioned that we have chosen to work on 2012, 2013 and 2014 because these years represent a transitory period for the political and economic future of Tunisia.

Furthermore, We think that we can go even further in our study of determinants disclosure of the internal control weaknesses by focusing on the independence principle of the auditor, because according to the Article 266 of the Commercial Companies Code in Tunisia, the auditor has no right to interfere in the company's management during its auditing work and at the same time under the Article 270 of the same code, the auditor is forced to "report to the general assembly the discovered irregularities and inaccuracies. Moreover it is required to the auditor to disclose to the public prosecutor the criminal acts which he discovered ", otherwise the auditor risk an imprisonment term for one to five years and a fine which can be from 1200 to 5000Tunisian Dinars or one of these penalties, according to Article 271 of the same code. The auditor in this case is in a deadlock and we even find that the legal texts are contradictory knowing that criminal acts could be directly related with the internal control system which is one of the pillars of management and the good corporate governance. On the other hand we may be interested in the study of the psychological behavioral components of the statutory auditor in Tunisia who is faced to difficult business situations in which independence may be compromised.

REFERENCES

- 1. Ashbaugh-Skaife, H. Collins, D. W & Kinney, W. R, (2007), The discovery and reporting of internal control deficiencies prior to SOX-mandated audits, Journal of Accounting and Economics, pp.166-192.
- Beasley, M.S., & Petroni, K. R. (2001). Board independence and audit firm type. Auditing: A Journal of Practice &Theory, pp.97-114.
- 3. Boumiza, K. (2002). Webmangercenter.com, «BATAM Un géant au pied d'argile qui se relève» (In French).
- 4. Bouton, D. (2002). Pour un meilleur gouvernement des entreprises cotées-Rapport du groupe de travail présidé par Daniel Bouton. Document Mouvement des Entreprises de France (MEDEF) & Association Française des Entreprises Privées (AFEPAGREF), Paris (In French).
- 5. Botosan, C.A.,(1997). Disclosure level and cost of equity capital. Account. Rev. pp.323–349.
- Carcello, J. V., Hermanson D. R., Neal, T. L., & Riley, R. A. (2002). Board characteristics and audit fees. Contemporary Accounting Research, pp. 365–384.
- 7. Chan, P., Ezzamel, M., & Gwilliam, D. (1993). Determinants of audit fees for quoted UK companies. Journal of Business Finance and Accounting, pp.765–786.
- 8. Chen, H., Chen, J.Z., Lobo, G.J., Wang, Y., (2010). Association between borrower and lender state ownership and accounting conservatism. J. Account. pp.973–1014.
- Cho, S., Rui, O., (2009).Exploring the effects of China's two-tiered board system and ownership structure on firm performance and earnings in formativeness. Asia Pac. J. Account.Econ. pp. 95– 118.
- 10. Demsetz, H. (1983). The structure of ownership and the theory of the firm. Journal of Law and Economics, pp. 375–390.
 11. Diamond, D.W., Verrecchia, R.E., (1991).Disclosure,
- 11. Diamond, D.W., Verrecchia, R.E., (1991).Disclosure, liquidity, and the cost of capital. J. Finance, pp. 1325–1359.
- 12. Doyle, J. W. Ge, & S. Mc Vay. (2007). Determinants of weaknesses in internal control over financial reporting. Journal of Accounting and Economics, forthcoming, pp. 1-31.
- 13. Dumontier, P. Chtourou, S. Ayedi, S. (2010). La qualité de l'audit externe et les mécanismes de gouvernance des entreprises: Une étude empirique menée dans le contexte tunisien. Association francophone de comptabilité, pp. 1-23 (In French).
- 14. Ebondo Wa Manszila. E, Thèse de doctorat, «La contribution du contrôle interne et de l'audit au gouvernement de l'entreprise», 2004, Faculté des sciences économiques et de gestion (Institut de recherche en gestion) (In French).
- Evrard, Y. Pras, B. & Roux, E. (2000). Market: études et recherches en marketing, Dunod, 704 pages (In French).
- Firth, M., Fung, P.M.Y., Rui, O.M., (2006).Corporate performance and CEO compensation in China. J. Corp. Finance. pp.693–714.
- Ge, W & Mc Vay, S. (2005). The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act. Accounting Horizons (19), 137–158.
- 18. Ghosh, A., & Lubberink, M, (2006), Timeliness and mandated disclosures on internal controls under section 404.Department of Accountancy City University of New York, 1-46.
- Goodwin-Stewart, J., & Kent, P. (2006).Relation between external audit fees, audit committee

- characteristics and internal audit. Accounting and Finance, pp.387-404.
- 20. Gul, F. A., Hutchinson, M. R., & Bliss, M. A. (2004). Board characteristics, growth opportunities and audit risks: some evidence from Australian audit pricing. The University of NSW School of Accounting, pp. 1–41.
- 21. Healy, P.M. and Palepu, K.G., (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature, Journal of Accounting and Economics, pp. 405-440.
- 22. Jensen, M.C. et Meckling, W.H. (1976). Theory of the firm, Managerial Behavior, Agency Costs & Ownership Structure. Strategic Management Journal, pp.305-360.
- 23. Kane G.D., Velury U. (2004), «The role of institutional ownership in the market for auditing services: an empirical investigation», Journal of Business Research, vol. 57, pp. 976-983.
- Krishnan, J. 2005. Audit committee quality and internal control: an empirical analysis. The Accounting Review No. 80, pp.649–675 (In French).
- 25. Lang, M., Lundholm, R., (1993).Cross-sectional determinants of analyst ratings of corporate disclosures. J. Account, pp. 246–271.
- Le Maux, J., Alloul, A. (2005), «L'obligation de communication sur le contrôle interne. Etude du cas français», Gestion - Revue internationale de gestion, volume 30, No 3, pp. 74-79 (In French).
- 27. Lennox, C. (2005). Management ownership and audit firm size. Contemporary Accounting Research, pp.1–23.
- 28. Loi n °2005-96 du 18 October 2005, relative au renforcement de la sécurité des relations financières, Tunisie (In French).
- 29. Loi n°2003-706 du 1er août 2003 de Sécurité Financière, France (In French).
- Makni, I., Kolsi, M. C., &Affes, H. (2012). The impact of corporate governance mechanisms on audit quality: evidence from Tunisia. The IUP Journal of Corporate Governance, pp.48–70.
- 31. Mitra, S., Deis, D. R., & Hossain, M. (2007). The empirical relationship between ownership characteristics and audit fees. Review of Quantitative Finance and Accounting, pp. 257–285.
- 32. Mtanios, R., & Paquerot, M. (1999). Structure de propriété et sous performance des firmes : une étude empirique sur le marché au comptant le règlement mensuel et le second marché. Revue Finance Contrôle Stratégie ,pp. 157–179 (In French).
- 33. Meek, G.K., Roberts, C.B., Gray, S.J., (1995). Factors influencing voluntary annual report disclosures in U.S., U.K. and continental European multinational corporations. J. Int. Bus. Stud., pp.555–572.
- 34. O'Sullivan, N. (2000). The impact of board composition and ownership on audit quality: evidence from large U K companies. The British Accounting Review, pp.397-414.
- 35. Passet, R., Liberman, J. (2002). Mondialisation Financière et Terrorisme, Coll.EnjeuxPlanète, éd. de l'Atelier, 174 p. (In French).
- 36. Power, M., (2005), La société de l'audit-l'obcession du contrôle, Edition La Découverte, 304 p. (In French).
- 37. Rapport Price water house Cooper, (2011), Global Economic Crime Survey.
- 38. Richard, B., Miellet, D. (2003), La Dynamique du gouvernement d'entreprise, Editions d'Organisation, 203 p.
- 39. Sarbanes-Oxley Law (SOX LAW), (2002).

- Shleifer, A., & Vishny, R. (1986). Large shareholders and corporate control. Journal of Political Economy, pp.461-479.
- 41. Skinner, D.J., (1994). Why firms voluntarily disclose bad news. J. Account. Res. pp.38–60.
- Stephens, N., (2009). Corporate governance quality and internal control reporting under SOX section 302. Document, Disponible Via: http://ssrn.com/abstract=1313339.
- 43. Tayechi, N. (2012), «La certification du contrôle interne : Proposition d'un référentiel Vers une approche combinée COSO et la norme d'audit 5 du PCAOB» Mémoire d'expertise comptable,ISCAE(In French).
- 44. Xiao, H.F., Yuan, J.G., (2007). Ownership structure, board composition and corporate voluntary disclosure. Evidence from listed companies in China. Managerial Auditing Journal, pp.604–619.
- Xiao, J., Yang, Y., Chow, C.W., (2004). The determinants and characteristics of voluntary internet-based disclosures by listed Chinese companies. J. Account. Public Policy, pp.191–225.
- 46. Xu-dong Ji, Wei Lu &Wen Qu. (2015). Determinants and economic consequences of voluntary

- disclosure of internal control weaknesses in China. Journal of Contemporary Accounting & Economics. pp. 1–17.
- 47. Xu, X., Wang, Y., (1999).Ownership structure and corporate governance in Chinese stock companies. China Econ. Rev., pp. 75–98.
- 48. Yaich, A., (2011), «La revue comptable et financière n° 92 deuxième trimestre 2011».
- 49. Kane G.D., Velury U. (2004), The role of institutional ownership in the market for auditing services: an empirical investigation, Journal of Business Research, vol. 57, pp. 976-983.
- Velury U., Reisch J. T., O'reilly D.M. (2003), institutional ownership and the selection of industry specialist auditors , Review of Quantitative Finance and Accounting, pp. 35-48.
- 51. Watson, A., Shrives, P., Marston, C., (2002). Voluntary disclosure of accounting ratios in the UK. Br. Account. Rev., pp. 289–313.
- 52. Zhang,Y. Zhou, J & Zhou, N. (2007). Audit committee quality, Auditor independence and internal control weaknesses. Journal of Accounting and Public Policy, No.26, pp. 300 327.