

Are financial auditors involved in the determinants of environmental audit?

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ABSTRACT

The purpose of this paper is to study the level of involvement of financial auditors in environmental auditing and the determinants that motivate these auditors to become involved in this practice. From a methodological point of view, in order to measure the determinants and the implications simultaneously of the financial audit towards the environmental audit, it was based on the neo-institutional theory, like this theory, a questionnaire was distributed To 160 Tunisian financial auditors. The empirical results show that the involvement of Tunisian financial auditors in the environmental audit is limited or non-existent. Similarly, the results showed that auditors engage in this practice because they find the environmental audit useful for their financial audit work.

Keywords: Environmental audit, Financial auditors, Neo-institutional theory

1. INTRODUCTION

The environment has continued to address the major concerns of the company, or even society. With this awareness, the listeners feel the need to understand and meet the environmental requirements. Environmental reporting is a decision support tool that has become an essential component of ensuring a better quality of audit work.

Initially, the role of audit is limited, essentially, technical issues and legal compliance. With the advent of environmental problems, financial reporting is proving insufficient to guide the decision of investors. The integration of environmental constraints in the corporate governance process forced listeners to integrate the ecological aspect and sustainable development in their reporting. This environmental audit is usually performed by external professionals outside both, the field of accounting and the organization itself. Generally, these are environmental scientists who audit the sites by identifying organizational compliance with legislation in force. The environmental audit would eventually control the impacts, costs and environmental benefits of the organization.

The pressures that organizations face today regarding the environment are growing in extent and frequency. This is likely to require the Company to develop adequate environmental legislation continues to evolve. This legislation is necessary insofar as it forces the audit profession to get involved more in the conduct of an environmental audit.

This research aims to achieve a primary objective of determining the level of involvement of financial auditors in environmental auditing. As for the second

objective, it highlights the determinants behind these auditors to conduct an environmental audit integrating into their authority. To meet these objectives, we used a questionnaire administered to 160 Tunisian financial auditors who are directly or indirectly involved in the financial reporting and sustainability reporting.

The interest of this paper is to encourage Tunisian auditors adapt to the legislative change taking into account the environmental aspect in their reporting. This leads us to suggest the following research question: What determines the involvement of Tunisian financial auditors in environmental auditing?

This issue falls within the framework of a research applying to the environment of an emerging country (Tunisia) to answer the questions of raising the environmental audit problem as perceived by financial auditors.

This paper is organized into four sections. The first section focuses on the literature review. The second section will explain the conceptual framework and develop the research hypotheses. The third section, it develops the methodology adopted in this article. The interpretation of the results is the subject of the fourth section.

2. LITERATURE REVIEW

Empirical studies have shown that in the 1990s, the external and internal accounting professionals have been actively involved in conducting environmental audits (Mathews et al 1995. Tozer and Mathews, 1994). Nicolae et al. (2011) conducted a survey on the involvement of financial auditors to environmental auditing. They found that these officials are slightly involved in this practice. Two previous studies were originally works of Nicolae et al. (2011). The first, led by Chiang Christina and Margaret Lightbody (2004), shows the involvement of the accounting profession in New Zealand in the environmental audit. The second study, presented by Ienciu (2009), advanced the involvement of Roman financial auditors in environmental audit. This study focused on companies interested in environmental protection activities and the participation of financial auditors to audit the environmental side of experts in this field (engineers, environmental specialists). Finally, they aim to what extent the environmental audit can be an important source of information for listeners when communicating their opinion on the audited financial statements. These studies show that the auditors were engaged in environmental audits only because of pressure from the outside.

According to Eccles et al 2012b, the proportion of companies that obtain audit corporate social responsibility (CSR) is likely to increase, since investors are beginning to require that information CSR is credible and reliable. The large audit firms (the Big 4 for example) have developed and promoted their sustainable insurance products (O'Dwyer 2011; O'Dwyer et al 2011).

The debates on the social audit raised questions about the professionals able to achieve this kind of mission. Accounting literature provides financial auditors potential that allows them to play a role in conducting environmental audits (Lightbody, 2000). Simnett et al (2009) consider the environmental audit providers that are members of the auditing profession as being of higher quality audit suppliers. In their study of 145 students in two major Australian universities, Hodge et al (2009) found that providing an audit report with the sustainability report gives more credibility to environmental information. In addition, they found that report users

have more confidence in the sustainability reports when environmental auditing is provided by an accounting firm that high level when it is provided by a specialized consultant. Similar results were found by (Cheng et al. 2012). They claimed that the audit of the sustainability report encourages retail investors to invest in the company. However, previous research by Lambert (1991) and Tozer and Mathews (1994) noted the low participation of accountants in the practice. In a study from 1994, yet over 33 large accounting firms, Tozer and Mathews found one accountant had been involved in environmental auditing, noting that the majority of environmental audits were conducted by engineers and scientists working as "environmental consultants". This limited involvement of accountants in environmental accountability practices is evidenced by surveys of accountants employed by companies. These investigations revealed that respondents were somewhat involved in the activity of their company on the management of the environment (Coombes and Davey, 1994).

Although no studies have explicitly examined the factors that are causing this low turnout, some ideas were provided by researchers. The observations were made on the lack of technical expertise, scientific knowledge and engineering in accounting (Tozer and Mathews, 1994). Likewise appropriate procedures in the form of standards or laws partially explain the absence of the environmental aspect in the financial reporting (Tozer and Mathews, 1994).Collison, Gray and Innes (1996) point out that accountant are increasingly involved in various aspects of the agenda of the environment and the concept of audit is gaining more currency environmentally. Collison and Slomp (2000) suggest that every accountant and auditor (Chartered Accountant and auditor) should be in the position to assess the consequences of environmental problems with accounting and auditing practices in auditing firms., then, a new approach in education and training of experts for the analysis of environmental costs and risks in the financial statements.

The Institute of Chartered Accountants in England and Wales (ICAEW (2000) stresses the importance of environmental issues for some companies. Auditors should have, then, a general awareness of the impact of these issues on business. This helped to highlight a number of arguments for widening the scope of the financial audit profession to integrate environmental issues. The central proposition here is that the profession of financial audit can make a significant contribution to the field of environmental auditing. This proposal raises questions about the ability of Tunisian financial auditors to meet environmental challenges and to participate in the environmental audit. The question is whether the auditing profession is able to cope with these new responsibilities for environmental matters and to help give an account of the environment.

3. CONCEPTUAL FRAMEWORKS AND ASSUMPTIONS

3.1 The new institutionalism

The fundamental inability of the two theories (The stakeholder theory and legitimacy theory) is to conceptualize interactions between firms, audit providers and other stakeholders are limiting their effectiveness to study the involvement of financial auditors in environmental auditing. Then, these two theories are unable to provide a comprehensive picture including both the interests of economic affairs and public interest requirements for the reissue and checking accounts.

This view glue with recent thinking admitting that theories of stakeholders and legitimacy and, although they offer an innovative perspective in areas of embryonic studies, become less and less useful seen the development of the area (Spence et al, 2010). Alternatively, the new institutionalism has one of frames commonly used in organizational analysis. She can describe how social and cultural pressures external influence and stabilize the structures and practices of the company (DiMaggio and Powell, 1983). The new institutionalism is relevant insofar as it goes beyond the organizational boundary to instead focus on the interactions between the "institutions" (DiMaggio and Powell, 1983). This theory is based not only on the concept of legitimacy but also seeks to explain how the institutions adopt practices or similar structures to conform to external expectations and gain support and legitimacy (DiMaggio and Powell, 1983). This is consistent with the "normalization" and the assurance of societal Reporting especially regarding the increasing adoption of standards and guidelines (Adams and Narayanan, 2007).

The basics of the new institutionalism are the concepts of "organizational fields" and the mechanisms or processes of institutionalization (DiMaggio and Powell, 1983). An organizational field has a recognized area of institutional life (DiMaggio and Powell, 1983). Organizational areas are becoming more homogeneous thanks to a process called "isomorphism" (DiMaggio and Powell, 1983). The need to confer legitimacy to organizations complying or appearing conform to external pressure, is the origin of the emergence of isomorphism (Moll et al, 2006). This isomorphism operates through three different mechanisms: coercive, normative and mimetic (DiMaggio and Powell, 1983). The coercive isomorphism describes how external factors such as government policy, regulatory or commercial pressures exert strong pressure on organizations to adopt specific structures and internal procedures. Mimetic isomorphism describes the process by which organizations mimic the structures and procedures adopted by other organizations. Normative isomorphism is the process by which organizations adopt advanced structures and procedures by certain dominant occupations, professional organizations and / or consultants (DiMaggio and Powell, 1983).

Unlike some literature on the social reporting of insurance, previous neo-institutional research has shown that audit and accounting professions are not merely passive agents in the institutional process (Jones and Solomon, 2010). Greenwood et al. (2006) showed how the accounting profession in Canada responded to market demand by a wide range of professional services. This is achieved by redefining and extending the reach of their consulting services but also by changing the political context of accounting firms. The new institutionalism can, therefore, be able to answer some of the dynamic interaction between companies, insurance providers and the social context in which they operate (Smith et al, 2011).

- ✓ Individual commitments for environmental auditing are likely to be influenced by, among others:
- ✓ The mimetic and coercive pressure other companies in the sector (Park and Brorson, 2005).
- ✓ The normative influences the academic community, professional organizations and standards bodies (Waddock, 2008).
- ✓ The differences in how the insurance process is conceptualized as an internal or external function (Jones and Solomon, 2010).

- ✓ Coercive pressures, normative, and perhaps mimetic pressures from the insurance provider (Maltby, 1995; Park and Brorson, 2005).
- ✓ Mimetic pressures and possibly coercive forces involved between the standards bodies themselves.

3.2 Assumptions Research

This study aims to examine, firstly, the level of involvement of Tunisian financial auditors in practice environmental audit and identify the other determinants that lead them to engage in this practice. From the literature review presented above, we have been able to identify the following assumptions:

H1: The involvement of Tunisian financial auditors in the environmental audit is related to their responsibility towards the environment.

H2: The involvement of Tunisian financial auditors in the environmental audit is related to the involvement of the accounting profession in the practice.

H3: The involvement of Tunisian financial auditors in the environmental audit is related to profession-specific factors.

H4: The involvement of Tunisian financial auditors in the environmental audit is related to the perception of the usefulness of this practice.

H5: The involvement of Tunisian financial auditors in the environmental audit is linked to organs affecting the application of this practice.

H6: The involvement of Tunisian financial auditors in the environmental audit is related to the role of the accounting profession. We will try to respond to these assumptions in a Tunisian context.

3.3 Data and Research Methodology

3.3.1 Sample and Data Collection

A questionnaire survey on the involvement of financial auditors in the environmental audit was conducted to obtain data from the study. This empirical investigation will try to verify the research hypotheses. What are the determinants of involvement of Tunisian financial auditors in the environmental audit work?

To provide some answers to this question, we have taken as sample 200 firms of accountants' reports mainly concentrated in Tunis. We obtained responses from 160 financial auditors. It was tested the questionnaire with 15 respondents. Some revisions were made to the questionnaire based on feedback from respondents. The clarification was made to improve the validity of data (Fowler, 2002). A Likert-type scale with 5 points was used to measure the attitudes of financial auditors.

A total of 160 responses to the questionnaire were analyzed. 138 respondents had more than three years' experience in conducting financial audit. Individual experiences on the number of financial audit show that hundred respondents made a number of Audit less than one hundred. Regarding the type of audit firm to which respondents belong. The results showed that twenty-one respondents belong to a Big oven while the rest is not up to this kind of practice.

Finally, we wondered whether the firm which owns the respondents conducting environmental audits. Effective 144 respondents answered no, while the rest answered yes. This means that the involvement of Tunisian financial auditors to the environmental audit is very limited.

We administered a questionnaire to analyze the level of involvement of Tunisian financial auditors to environmental auditing. We validated our hypothesis by using SPSS 18.0 data analysis software.

3.3.2. Esteemed Model and definition of variables

The model to be estimated can be written as follows:

$$IN_{it} = \alpha + \beta_1 RES_{i,t-1} + \beta_2 ATT_{it} + \beta_3 FAC_{it} + \beta_4 UTI_{it} + \beta_5 ORG_{it} + \beta_6 ROL_{it} + \varepsilon_{it}$$

(IN) is the level of involvement of Tunisian financial auditors to environmental auditing. This is the dependent variable in this study. **(RES)** measures the responsibility for the environment. **(ATT)** reflects the opinions of financial auditors about the involvement of the accounting profession in the environmental audit. **(FAC)** measures the factors limiting the involvement of financial auditors to environmental auditing. **(UTI)** The value given to the environmental audit. **(ORG)** are the organs that influence the demand for an environmental audit. **(ROL)** reflects the role of the accounting profession in the development of an environmental audit.

4. FINDING AND DISCUSSION

4.1 Exploratory factor analysis

Before turning to the regression analysis, we must conduct a factor analysis to purify the scales measures of independent variables.

Table 1: Summary of dimensionality analysis and reliability

Dimensions	Number of items	KMO	Significance of Bartlett	Alpha Crombach
RES	4	0,602	0,002	0,649
ATT	3	0,652	0,002	0,877
FAC	5	0,667	0,002	0,784
UTI	5	0,506	0,000	0,703
ROL	4	0,768	0,000	0,876

4.2 Results

4.2.1 Regression Results

In the following, we will seek the determinants of involvement of Tunisian financial auditors in environmental auditing. The following table presents the regression results.

dépendant variables	Indépendants Variables	Bêta estimator	t	sig
IN	Cons	1,519	27,703	0,000***
	RES	-0,253	-0,027	0,972
	ATT	-1,295	-4,797	0,001***
	FAC	-2,063	-2,944	0,515
	UTI	2,092	2,622	0,010***
	ORG	-0,002	-0,027	0,000***
	ROL	-0,530	-3,485	0,004***
R²	0,250			
Adjusted R²	0,220			
F Prob	0,000			

R² variance measures the proportion of the change in a variable which is explained by the other. Our results show that R² has a value of 0.250 therefore a percentage of 25% of the variation of the variable "level of involvement" is explained by the model. This is a low percentage means that justifies the existence of other variables that may better explain the dependent variable.

Thus, the overall significance of the model is examined by the Fischer test that has a value less than 0.01 ($P < 0.01$) which proves that the model is globally significant. Alternatively, if one explains the relationship of each explanatory variable with the variable to explain the "The level of involvement, "there is not a significant negative relationship with the variable" responsibility "and" factor "variable. The variable "interest" shows a positive and significant coefficient. Other variables "attitudes", "organs" and "roles" have significant negative coefficients.

For the Tunisian financial auditors in our study, they get involved in environmental auditing because they find it useful for their audit work (positive and significant relationship $P \leq 1\%$ with the variable value). This leads us to confirm H 4.

They can use as audit evidence in the investigative work. Significant negative relationships were marked with the tag "Attitude", which means that the attitude of the Tunisian financial auditors do not reflect the reality of their commitment to environmental auditing as almost all respondents consider the natural environment as important. However, their participation in the environmental audit is limited see absent.

The significant negative correlation ($p \leq 1\%$) of the level of involvement of Tunisian financial auditors with the variable "ROL" is an unexpected result. This can be explained by the fact that the roles can play the accounting profession such as: developing a framework for assessing, identifying environmental risks, the development of a methodological framework and increasing the expertise to carry out this mission are insufficient to the Tunisian financial auditor's ways to better address their environmental auditing.

This also reflects the fact that accounting practices are not geared towards protecting the environment. Similarly, the absence of mandatory standards has the effect of not encouraging the accounting profession of being a stakeholder in promoting accounting practices taking account of the impact of business activities on the environment.

Environmental audit is designed to help organizations fulfill the commitment of management to control environmental practices and respect the environmental regulations and company policies. Environmental issues can still be considered a relatively new challenge for listeners regardless of whether environmental responsibilities are voluntary or required by law.

5. CONCLUSION

This paper aims to understand the potential role of the accounting profession and especially the Tunisian financial auditors in conducting an environmental audit. We found that their involvement in this area is very limited. This amounts mainly to the absence of a standard or a legal framework; and the low demand for this practice by companies. We also found that financial auditors engage in this practice because they find it useful for their financial audit work. There is a significant opportunity for accountants in the understanding and management of environmental issues. For financial accounting, the target is to understand the assets and environmental liabilities and contingencies as well as be able to identify and report accurately using a standard process. For the management accountant, the vision must be complete, that is to say it must be focused on the costs and environmental benefits to an organization. This would make rational decisions consistent with the way the organization should develop in the future.

For the listener, it is necessary to understand the environmental management and processes and control systems, which will enable it to provide a real verification of environmental accounts. It is important to emphasize that the listener does not need to have proper training to be able to provide a true verification of all environmental accounts, but it must be possible at least to him to ensure that auditors understand what to look for, and where they can get help in this area. However, it must be aware of the impact of environmental issues on the profession and the benefits that accountants can present to the environment. We also stress the need to develop guidelines to help the industry to identify environmental issues, assess these issues and to prepare a report about them. In addition, large-scale training must be provided. Although awareness of environmental issues increases in accounting, it is necessary to improve their knowledge by establishing formal training programs.

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