

# The Possible Effects of Organization's Corporate Accountability Sense on Continuous Auditing: The Case of ISE 100\*

Prof Dr. Ganite Kurt
Gazi University,
Gazi Üniversitesi Rektörlüğü 06500
Teknikokullar /Ankara- TURKEY

Prof Dr. Beyhan Marsap Gazi University,Gölbaşı Kampusü, Gölbaşı/ Ankara- TURKEY

Assoc Prof Dr. Tugba Ucma Uysal (Corresponding author)

Mugla Sıtkı Koçman University, Fethiye Business School

Kötekli Kampüsü, 48000 Kötekli/ Mugla- TURKEY

Received: October 15, 2013 Accepted: December 01, 2013 DOI: 10.5296/ijafr.v3i2.4923

#### **Abstract**

The applicability of continuous auditing, which is deemed as the future of auditing, in terms of enterprises can be presented depending upon corporate management mentality of enterprises. As for the corporate management mentality within enterprises, it can be presented based on accountability which is a concept involving internal and external considerations. Consequently, the aim of this study is to identify the potential impacts of the corporate accountability mentality of enterprises on continuous auditing. In accordance with this purpose, a corporate accountability index has been prepared and the variables have been determined in the first place. Then, the data of the enterprises included in Istanbul Stock Exchange (ISE) 100 Index regarding these variables have been construed; thus, the potential impacts thereof on continuous auditing have been tried to be determined.

Keywords: Corporate Accountability, Continuous Auditing, ISE 100 Index

<sup>\*</sup> This paper was presented at the 24th World Continuous Auditing and Reporting Symposium Malatya, Turkey, April 2012.



## 1. Introduction: Continuous Auditing Fact and Corporate Accountability

The continuous auditing fact was propounded as a result of globalization and developments in information technologies in 1990s and the applicability of which has been more discussed after the accounting scandals of 2000s. It is in a stage of being exemplified or tried to be implemented in today's enterprises. Continuous accounting has become the key element of the risk monitoring strategy of internal auditing departments of many enterprises. Moreover, continuous auditing is increasingly being used as a means of improving the efficiency of independent auditing and continuous auditing means are becoming the key elements of corporate management, since corporate management mentality of organizations works through focusing on strategic corporate risk management (Kuhn and Sutton, 2010: 91-92).

Continuous auditing is a methodology which has been started to be discussed under the guidance of trade bodies and the applicability and processes of which is being developed by academicians. In the most general sense, continuous auditing is the production of instantaneous auditing outcomes of transactions when they materialize or after a while. Transactions here are not only related to financial statements of an enterprise, but also can be daily transactions and even transactions related to strategic projects affecting the long-term financial status of the enterprise. The necessity of daily reporting, the starting point of continuous is auditing, has been mentioned in the report of AICPA called Special Committee on Assurance Service (1995) for the first time. It has been emphasized in this report that, information used for decision making is mostly based on unaudited data. Continuous auditing and test notions are included in the report so as to prevent this (Cited by El – Masry and Reck, 2008: 781).

Because, it has a critical role in providing updated and reliable financial information and in operation decisions in a real-time economy such as strategic planning, capital increase and credit decisions (Chan and Vasarhelyi, 2011: 152). Retrospective auditing through financial reports, namely traditional auditing fails to satisfy the needs of financial information users. As a consequence, updated electronic information produced by real-time accounting systems is required. Continuous auditing is a system enabling pure electronic auditing processes to provide assurance for auditors through continuously produced data. Furthermore, continuous auditing ensures the reliability of continuous information provided for auditors by management and third parties (Rezaee et al, 2002: 150).

The need of responding to changes occurred in community based globalization phenomenon and the changing conditions due to developments in information technologies caused new corporate behavior patterns of enterprises. This situation not only determines the perspectives of countries to corporate governance, but also is of importance in terms of maintaining the self control mechanisms of enterprises. This new aforementioned corporate fact is a sensitive regulation according to some authors, while is a collaborative institutionalization for some other authors and a commodity arrangement for others (Hess, 2007: 454). However, corporate accountability concept underlies all of these. The accountability concept defined in the Corporate Management Principles of the Capital Markets Board of Turkey (2003) states the accountability obligation of board members to the corporate legal entity in principle and



consequently to the shareholders (www.spk.gov.tr). According to Corporate Management Principles of OECD (2004), administrative boards of enterprises must clarify the line between responsibility and accountability in order to obtain integration between reporting and monitoring systems (www.oecd.org/dataoecd/20/60/40823806.pdf).

Hence, determination of potential impacts of corporate accountability mentality in enterprises on continuous auditing is aimed in the study. In parallel with this purpose, the potential impact of this mentality on continuous auditing is tried to be determined through accessing the data of the enterprises included in Istanbul Stock Exchange (ISE) 100 index within the context of the corporate accountability index being prepared.

# 2. Research Methodology

Regulatory authorities state that internet could be an important means for enterprises to develop their publicity expressions in reply to accounting scandal in the past (Kelton and Yang, 2008). Due to increasing impacts of technological developments in addition to the abovementioned circumstance, announcing and publishing information through internet are getting easier. But, this cannot create the environment entirely proper for developing continuous auditing. In consequence, national-level continuous auditing implementations are impossible be encountered. The basic objective of this research is to determine the potential impacts of corporate accountability mentalities of enterprises on continuous auditing. The evaluations regarding the design and findings of the research within this context are as follows.

#### 3. Predecessor Researches and Development of the Research Question

The primary research benefited from in the development of the basic question of the research is the study made by Kelton and Yang in 2004. The authors investigated the relations between the internet-based financial reporting and corporate management within 305 enterprises operating within the scope of the capital market in USA and employing internet-based financial reporting systems. According to the authors, corporate management mentalities of enterprises are directly affecting their attitude of making internet-based financial reporting. At this point, the authors have developed a corporate management index to demonstrate the relationship in between. The presentation format, voluntary attitude of publicity, and corporate management mentality of each enterprise are included in this index. As for measuring their corporate management mentalities, stakeholders' rights, ownership structures, and administrative board structures are utilized.

In their study of 2008, Kelton and Yang aimed at measuring the relationship between the corporate management mechanisms and publicities of 284 enterprises being traded at the capital market in USA on a basis of internet-based financial reporting. They used stakeholder rights, ownership structures, constitution of committees and auditing committee characteristics for measuring corporate management mentalities within the index they prepared. According to the outcomes of this study, weaker stakeholder rights, low-level ownership structures, existence of administrators (CEO) with high incidence of independence, and more careful auditing committees within enterprises enhance the levels of internet-based



financial reporting in such enterprises; consequently increased their publicity. Nevertheless, the bigger size of auditing companies to which auditors appertain, the higher level of financial reporting through internet.

As it can be seen by means of the abovementioned studies, the internet-based financial reporting levels of enterprises are frequently tried to be interrelated to notions such as corporate management and publicity by means of literature researches. For example, Searcy et al (2003) applied a survey about continuous auditing on 217 auditors within the four biggest auditing firms. According to the outcomes of this study, 65% of the survey participants expressed that continuous auditing would contribute to the fulfillment of the responsibility of an auditor; while participating auditors defend that, this type of auditing is impossible to be implemented entirely in spite of the fact that they have numerous benefits. They justify this fact by two reasons. While the first one of these is the low utilization levels of real-time accounting systems, the second on is the lack of training within auditors supposed to implement continuous auditing.

Again according to the 2009 research report of KPMG on Continuous Auditing / Continuous Monitoring, The continuous auditing is a process of collecting auditing evidences on a continuous basis or over a certain frequency through information technologies, processes and transactions in a certain period of time by persons who are able to provide assurance such as an internal auditor or an independent auditor. According to this definition, continuous auditing assists the internal auditing unit of an enterprise in revealing the failures within their internal control systems on a real-time basis, thus develops the internal auditing profile within an organization.

As can be seen in the studies, continuous auditing has not become an actively practiced auditing type yet. There are two basic reasons for this. The first one of these reasons is not utilizing a real-time accounting system enabling to materialize continuous development yet. The second one is the auditing companies' lack of adequate capability to properly materialize continuous auditing due to limited internet-based auditing. In line with these basic reasons, the studies are based on an opinion that accountability mentalities of enterprises could enhance their tendency of internet-based financial reporting. Because, the corporate accountability mentality of an enterprise affects its publicity or transparency in an increasing manner (Bushman and Smith, 2003). The internet-based reporting level of an enterprise directly affects the preparation of an environment required for continuous auditing. Accordingly, the main objective of the study is to determine the publication frequencies of various variables on an internet basis designating the corporate accountability of enterprises and hence to discuss the potential impacts of internet-based financial reporting levels of enterprises on the development of continuous auditing. In line with this basic objective, a corporate accountability index has been developed on the first 100 enterprise active in ISE and respective data has been collected. The preparations of the enterprises for the continuous auditing fact by means of the frequencies of the variables determined in accordance with their corporate accountability mentalities. The variables used within the index of corporate accountability index used in the research are summarized in the following table:



**Table 1 - Corporate Accountability Index Variables** 

Defined Variables	Measurements of Variables	
Investor Relations	In the web pages of the enterprises;	
	<ul> <li>Is the investor relations section located in the home page?</li> </ul>	
Annual Activity Reports	Are there annual activity reports?	
	Are the annual activity reports of the last 5 years available?	
Annual Financial	Are there annual financial statements?	
Statements	Are the annual financial statements of the last 5 years available?	
	Is there information regarding financial ratios?	
	Are there any analyst reports included?	
Auditing Reports	Are there annual independent auditing reports?	
	• Are there annual independent auditing reports of the last 5 years available?	
	Is it possible to access information about the companies by which the	
	enterprise has auditing performed?	
	Which companies are used by the enterprise to have auditing performed?	
Corporate Management	Is the report for adaptation to corporate management principles included?	
	Is it possible to access information regarding internal auditing units and	
	the auditing committees?	
Financial Calendars	Is it possible to access financial calendars?	
Social Responsibility	Is the information regarding social responsibility projects available?	
Projects		
Informing Policy	Is the continuous informing form is included?	
	Is there any explanations related to informing policies?	
Internal Control Systems	Is it possible to access information regarding internal control systems?	
	Is it possible to access information regarding risk managements?	

# 4. Research Findings and Discussion

The findings regarding the enterprises retrieved from the determined corporate accountability index variables are as follows.

#### **Investor Relations**

According to the corporate accountability index variables developed with respect to the basic objective of the study, the first finding of the study is obtained from the examination of the home pages of the enterprises included in ISE 100 index whether they contain a direct link to investor relations pages or not. Accordingly, 99% of the enterprises covered by the study have direct links on their home pages to their investor relations pages. In conjunction with this question, the frequency of announcement to investors published in the announcement pages has been examined and it has been understood that 81% of the enterprises are currently most up-to-date announcements from their web pages to their investors and potential information users.



#### Annual Activity Reports

The second variable is the existence level of annual activity reports in the web pages of the enterprises. In accordance with the findings of the study, all of the enterprises are publishing their annual activity reports. All of the activity reports are downloadable and in pdf, excel and word formats. Furthermore, when retrospective ability of the annual activity reports, it has been revealed that 96% of the enterprises are publishing their annual activity reports of the last 5 years. Similar to activity reports, publishing frequency of financial statements are also measured. According to the outcomes, all of the enterprises are publishing their annual financial reports in their web pages and these statements are downloadable. Also, it is possible to find the financial statements of the last 5 years or earlier for 99% of the enterprises. Based on the existence of the financial ratios in web pages in conjunction with financial reports, 84% of the enterprises are publishing information regarding their financial ratios and two of the enterprises are including their financial ratios within their activity reports. The situation regarding publishing financial calendars of the enterprises are also checked and 51% of the enterprises are turned to be publishing their financial calendars in their web pages. The level of publishing information regarding equity and publishing analyst reports in their web pages have been examined again in conjunction with these findings. 36% of the enterprises are publishing information regarding their equities, while 18% are publishing independent auditing reports regarding their equity values.

## **Auditing Reports**

Subsequent to evaluating activities and financial statements of enterprises, it has been investigated whether the enterprises present their auditing reports or not. The auditing reports of 97% of the enterprises are published in the web pages. The independent auditing reports and financial statement footnotes of the last 5 years of 71% of the enterprises are published in the web pages, while the independent auditing reports of the rest are presented within the activity reports. Furthermore, the auditing companies that the enterprises used for performing audits are also reached and the following table is obtained:



Table 2 - Auditing Companies by which Enterprises have Audits Performed

Auditing Firms	Number	Percentage
		(%)
Deloitte Touche Tohmatsu	26	0,26
KPMG	19	0,19
Ernst & Young	16	0,16
PricewaterhouseCoopers (PwC)	16	0,16
Grant Thornton International	6	0,06
Firm of Kreston International	3	0,03
Inaa Group – Consulta	3	0,03
Pür Bağımsız Denetim	3	0,03
Denge Bağımsız Denetim Şirketi	2	0,02
Euraaudit International	2	0,02
BDO International	1	0,01
Crowe Horwath International	1	0,01
Enterprise Worldwide	1	0,01
Nexia International	1	0,01
Total	100	100,00

As can be seen on the table, the biggest auditing companies of the world in 2011, namely Deloitte, PwC, KPMG, Ernst & Young (Big 4) are the auditing companies preferred by the companies included in ISE 100 index as well on the national basis. So, there is no differentiating national outcome from the world.

#### Corporate Management

As is known, the Corporate Management Principles has been published by the Capital Markets Board of Turkey in 2003. Since then, although these principles have not been made obligatory for the companies that the shares of which are traded in ISE, the Board has worked through some activities so as to promote the implementation of these principles and create a public awareness thereof. In order to embody the principles to be followed by the partnerships subject to the capital market legislation and the principles intended for developing corporate managerial implementation of these partnerships, "Serial: IV, No: 41 Communiqué on the Principles to be Followed by Joint Stock Companies subject to the



Capital Market Law", which is also containing some principles of corporate management, have been published in the 26821<sup>st</sup> issue of the Official Gazette dated 10.03.2008 in accordance with all of the abovementioned considerations (www.spk.gov.tr). Accordingly, all of the enterprises traded in ISE and included in the 100 index are publishing their compliance report to the corporate managerial principles in their web pages. Furthermore, 91% of the enterprises are publishing their compliance report to the corporate managerial principles of the last 3 years in their web pages.

Moreover, the web pages of the enterprises are also investigated whether they include their internal auditing units and auditing committees and the following outcomes has been obtained. 86% of the enterprises are making explanations regarding their internal auditing units and auditing committees. In addition, 25% of the enterprises are providing detailed explanations regarding the external companies by which they have internal audits performed and the processes thereof. Again 77% of the enterprises are announcing the persons within the context of insider trading through their web pages on a regular basis.

## Social Responsibility Projects and Informing Policy

The web pages of the enterprises have been investigated whether they contain their activities intended for their environmental and social responsibility and it has been observed that 97% of the enterprises are publishing explanations regarding their social responsibility projects. The web pages of these enterprises have also been investigated whether containing explanations regarding their continuous forming policies and 89% of these enterprises have been observed to have continuous informing forms and contact information in their web pages.

# **Internal Control Systems**

Finally, the web pages of the enterprises have been investigated whether containing information regarding their internal control systems and risk managements. In accordance with the findings, 63% of the enterprises include explanations about their internal control system, while 41% include explanations about their risk management systems. Furthermore, 4% of the enterprises make web-based reporting in their web pages and include explanations about their integral management systems.

#### 5. Conclusion

The potential impacts of various variables identifying accountability mentalities of enterprises on the development of continuous auditing fact are tried to be determined in this study, based on the web pages and internet-based reporting levels of enterprises. In line with this objective, a corporate accountability index has been developed on the first 100 enterprises traded in ISE and the relevant data has been collected. The internet-based reporting levels of the enterprises have been determined by means of their corporate accountability variables based on the obtained data. It has been determined based on the research findings that, almost all of the enterprises are including their activity reports, financial reports and independent auditing reports in their web pages. In addition, almost all of the enterprises are also publishing their compliance reports to the corporate managerial



principles and are including internal auditing and auditing committee information in their web pages in accordance with the relevant communiqué of Capital Markets Board of Turkey. However, very little data is available in the web pages of the enterprises indicating that they are making web-based reporting. Only four enterprises are making web-based reporting and publishing online data regarding their internal control systems under the name of integral managerial systems.

It can be argued that, most of the enterprises included in ISE 100 index are ready for web-based reporting activities in terms of applicability of the continuous auditing fact. Therefore, it would be beneficial to make an investigation on the ways of operation of the companies by which the enterprises have audits performed in terms of testing the validity of this determination. Because, actual or real-time reporting made only by the enterprises is not sufficient. Auditors should also be able to utilize auditing means based on automation. So, an independent auditor has been interviewed, who is working in the Istanbul office of the Deloitte Touche Tohmatsu auditing company which is the company auditing the maximum amount of companies included in ISE 100 index on the national level. According to the information obtained from the independent auditor, in case of a web-based reporting system, auditors obtain usernames and passwords to access accounting systems of customers, and hence required data are transferred to the computer-aided system of auditing company in a paperless working environment. Auditing process is followed and auditing reports regarding enterprise are web-based reported by using transferred data, namely auditing evidences. This system implies that the auditing firm performs computer-aided auditing. However, this auditing type is not properly complying with the continuous auditing fact. Because, reports are generated at the end of periods or at the end of quarters as well and reports audited instantly by real-time accounting data are impossible to be accomplished. So, this would be a starting point for the future researches and the next step should be investigating auditing firms' ways of work and whether auditors are ready for continuous auditing fact or not.

## References

Bushman, R.M. & Smith, A.J. (2003). Transparency financial reporting and corporate governance, *New York Federal Reserve Bank's Economic Review*, 9(1), April, 65-87.

Chan, D.Y. & M. A. Vasarhelyi. (2011). Innovation and Practice of Continuous Auditing, *International Journal of Accounting Information Systems*, 12, 152-160.

El - Masry, El-Hussein & Jacqueline L. R. (2008). Continuous online Auditing as a response to the Sarbanes- Oxley Act, *Managerial Auditing Journal*, 23(8), 779-802.

Hess, D. (20079. Social Reporting and New Governance Regulation: The Prospects of Achieving Corporate Accountability Through Transparency, *Business Ethics Quarterly*, 17 (3), 453-476.

Kelton, A. & Y. Yang. (2008). The Impact of Corporate Governance on Internet Financial Reporting, *Journal of Accounting and Public Policy*, 27(1), 62-87.

Kelton, A. & Y. Yang. (2004). The Impact of Corporate Governance on Internet Financial



Reporting,

http://www.web.chapman.edu/asbe/faculty/bdehning/JISNSRW/2005/010%20Kelton.pdf Access Date: 11.01.2012

KPMG, (2010). Continuous auditing and monitoring: Are promised benefits no w being realized?, http://www.kpmg.com Access Date: 03.01.2012

KPMG, (2009). Continuous Auditing/Continuous Monitoring – Using Technology to Drive Value by Managing Risk and Improving Performance, <a href="http://www.kpmg.com">http://www.kpmg.com</a> Access Date: 03.01.2012

Kuhn, J.R. & Sutton S. G. (2010). Continuous Auditing in ERP System Environments: The Current State and Future, Directions, *Journal of Information Systems*, 24(1), 91-112.

Rezaee, Z., Sharbatoghlie, A., Elam, R. & P. L. McMickle. (2002). Continuous Auditing: Building Automated Auditing Capability, *Auditing: A Journal of Practice and Theory*, 21(1), 147-163.

Rezaee, Z.; Elam, R. & Sharbatoghlie, A. (2001). Continuous Auditing: The Audit of The Future, *Managerial Auditing Journal*, 16 (3),150-158.

Searcy, D., Woodrof J. & Behn B. (2003). Continuous Audit: The Motivations, Bnefits, Problems and Challenges Identified by Partners of a Big 4 Accounting Firm, Proceedings of the 36th Hawaii International Conference on System Sciences.

http://www.ifac.org

http://www.oecd.org/dataoecd/20/60/40823806.pdf

http://www.spk.gov.tr

### **Copyright Disclaimer**

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).