## PERCEPTIONS OF AUDITORS AND MANAGERS ON AUDIT QUALITY: A STUDY IN TURKEY

#### A. Taylan Altıntaş<sup>1</sup>

#### ABSTRACT

The aim of audit of financial statements is to decrease information risk by increasing the reliability of financial information provided by the entities. This can only be achieved through high quality audits. The purpose of this study is to determine the perceptions of auditors and managers in Turkey on audit quality. A survey had been conducted with auditors and managers of listed companies in the Istanbul Stock Exchange (ISE) in order to determine their perceptions on the audit. Subsequently, the data was analyzed by using statistical methods like factor analysis and t-test. According to this research, the factors affecting the perceptions of auditors and managers on audit quality in Turkey were stated as "regulations of the professional bodies", "competence level of the auditor", "reputation of the audit firm" and the "audit firm having its own working standards". According to the results of the analysis, the auditors consider all factors except for the "reputation of the audit firm" more important than the managers.

Key Words: Audit, audit quality, listed companies, Istanbul Stock Exchange

## DENETÇİLERİN VE YÖNETİCİLERİN BAĞIMSIZ DENETİMİN KALİTESİ HAKKINDAKİ ALGILARI: TÜRKİYE'DE BİR ARAŞTIRMA

### ÖZET

Finansal tabloların bağımsız denetiminin amacı işletmeler tarafından sağlanan bilgilerin güvenilirliğini arttırarak bilgi riskini azaltmaktır. Bu durum ise sadece yüksek kalitede denetim hizmeti verilmesi ile sağlanabilir. Bu çalışmanın amacı Türkiye'de denetçilerin ve yöneticilerin denetim kalitesine ilişkin algılarını belirlemektir. Bu amaçla İstanbul Menkul Kıymetler Borsası'nda işlem gören şirketlerin yöneticileri ve denetçileri ile bir anket çalışması yapılmıştır. Bunun sonucunda toplanan bilgiler faktör analizi ve t-testi gibi istatistik testler ile analiz edilmiştir. Araştırmanın sonuçlarına göre, denetçiler ve yöneticiler denetimin kalitesine etki eden faktörleri "meslek kuruluşlarının düzenelemeleri", "denetçinin yetkinliği", "denetim firmasının itibarı" ve "denetim firmasının kendi çalışma standartları olması" olarak belirtmişlerdir. Denetçiler, "Denetim firmasının itibarı"

Anahtar Kelimeler: Denetim, denetimin kalitesi, halka açık şirketler, İstanbul Menkul Kıymetler Borsası

<sup>&</sup>lt;sup>1</sup> Istanbul University School of Business

### **1. INTRODUCTION**

This study aims to provide a framework on Turkish regulatory landscape and to determine perceptions on audit quality by conducting a survey of auditors and managers of Turkish listed companies. The paper provides brief information about the regulatory and professional bodies of the Turkish audit market and regulations related to audit and audit quality. Thereafter, previous studies about the subject were mentioned. This study uses survey method to investigate factors affecting perceptions of the auditors and managers on audit quality and also to determine the differences in perceptions of these groups. The factors affecting the perceptions of auditors and managers on audit quality were determined as "regulations of the professional bodies", "competence level of the auditor", "reputation of the audit firm" and the "audit firm having its own working standards". The results of the study support the hypotheses that there are differences in perceptions of auditors and managers on the factors affecting the audit quality except for the factor of "reputation of the audit firm".

# 2. REGULATORY FRAMEWORK FOR AUDITING IN TURKEY

The most important regulations regarding the auditing in Turkey are the Capital Market Law, Law No. 3568, regulations of the "Union of Chambers of Certified Public Accountants of Turkey" (UCCPAT), regulations of the "Banking Regulation and Supervision Agency" (BRSA), regulations of the Undersecretariat of Treasury and Turkish Commercial Code (TCC).

Based on the authorization by Capital Market Law of 1981, the Capital Markets Board (CMB) of Turkey issues audit communiqués related to auditing of listed companies. The communiqué on the audit of public companies in effect is the "Communiqué on the Standards of Independent Audit of the Public Companies; Serial: X, No:22" (Official Gazette; 12.06.2006 Nr. 26196). With this communiqué coming into force, the regulations related to audit of listed companies have become partially compatible with the International Auditing Standards of International Federation of Accountants (IFAC). The "Quality Control of Independent Audit" part (Article 1-14) of this communiqué conforms to the "International Standards on Auditing (ISA) 220: Quality Control for Audits of Historical Financial Information". However, there is no arrangement regarding the "International Quality Control Standard 1" which is applicable to all assurance services.

The most important law in Turkey regarding the profession of accounting and auditing is the "Law on Independent Accountants, Certified Public Accountants, and Sworn-in Certified Public Accountants" of 1989. According to the Law No 3568, the right to perform audit in Turkey has been granted to those who have received the license as "Certified Public Accountant" or "Sworn-in Certified Public Accountants". Therefore, this law has introduced arrangements regarding the qualifications of the auditor and defined the general framework of requirements about educational background, examination and apprenticeship and the rules they have to comply with.

The Union of Chambers of Certified Public Accountants (will be referred as "TÜRMOB" hereafter) is the umbrella organization of chambers of CPA all around Turkey. Established under the Law No. 3568, it has undertaken a very important role with regard to the profession of auditing and accounting. The Board of the Union established and authorized the Turkish Auditing Standards Board which has been adapting auditing standards of IFAC and also some regulations of the American Institute of Certified Public Accountants (AICPA). This Board has been translating and publishing the "International Auditing Standards" of International Auditing and Assurance Standards Board of IFAC as "Turkish Auditing Standards" (TÜDESK, International Auditing Standards, TÜRMOB Publications, Edition Nr.: 238, 2003). The Union also issued Code of Professional Conduct which is loosely based on the Code of Conduct of AICPA. However, the Code of Professional Conduct of the Union is far from facilitating the application of the detailed rules of the professional ethics (Güredin, 2007). The lack of detailed rules has decreased the enforceability of these rules.

Banking Regulation and Supervision Agency (BDDK), which is the authorized body for making banking regulations in Turkey, issued a communiqué, "Directive on the Authorization and Operations of the Organizations which Carry Out Audit of the Banks", which was published on 1 November 2006. With this directive, the Board has required a quality control system to be set up by the audit firms, and thereby referred to the international auditing standards.

The most significant regulations of the Undersecretariate of Treasury regarding the auditing profession are "Regulations on the Principles of Independent Audit of Insurance Companies" and "Regulations on the Independent Audit of Insurance and Reassurance Companies". The "Regulations on the Principles of Independent Audit of Insurance Businesses" has defined the quality control principles of audit. As per this, the audit firm and the auditor must do their best to perform a quality audit and comply with the principles which secure and maintain the audit quality.

The Turkish Commercial Code (TTK) Draft which was announced on 24 February 2004, contains requirements regarding the audit. The draft prescribes that the financial statements and annual reports of the joint stock companies and groups of companies have to be inspected by an independent auditor. Moreover, the draft specifies that such an audit will be executed with due care and in according to the professional requirements and the professional ethics and in accordance with the international standards. However, the ambiguity in the reference to "international standards" is a significant shortage of this draft.

### 3.1. Previous Research On The Audit Quality

The quality of audit was first described by DeAngelo (1981a) as "a composition of the ability of the auditor to distinguish a fault (error or fraud) in the financial accounts and the possibility of explaining such a fault".<sup>2</sup> Such a possibility, is a possibility that can be evaluated by those who are interested in the results of the audit ("market assessed"). Therefore, in order for an audit to be of high quality, the auditor both needs to bear the competences and carry out a careful work, and to be independent from the business he/she inspects. This means that the quality of audit is as function of competence and independence of the auditor. With this work, DeAngelo has studied the perceived quality of audit instead of its actual quality.<sup>3</sup>

Like DeAngelo (1981a), Dopuch and Simunic (1982), Simunic and Stein (1987) have defined the quality of audit on the basis of the possibility that the audited financial accounts bear significant faults. The most important setback with regard to these definitions is the fact that it is largely impossible to examine such a possibility, and, hence, its restricted usage in empirical works.<sup>4</sup> Since it is not possible to examine the quality of audit before and during the audit, elements thought to be representing the audit quality have been used in the studies of audit quality..

Studies which examined the quality of audit indirectly, have used various approaches. As the audit quality is a complicated concept which is hard to measure directly (DeAngelo 1981a), the researchers have examined the elements which represent the audit quality and evaluated them. These constitute of various elements like the size of the audit of company (Shockley and Holt 1983), reputation of the audit firm (Beatty 1989), audit fee (Copley 1991), filed lawsuits (Palmrose 1988) etc..

Studies carried out by Mock and Samet (1982), Schroeder, Solomon and Vickrey (1986), Sutton and Lampe (1990 and 1991) and Carcello, Hermanson and McGrath (1992) to determine the features of a quality audit, studied the perceptions of various groups who were both a part of the audit service and interested in the audit results.<sup>5</sup>

Carcello, Hermanson and McGrath (1992) have specified the variables regarding the perceptions of the audit quality through the help of behavioral research. In this research, they studied the auditors, those preparing the financial accounts and their users and adopted the most important factors which affect the audit quality as (1) history of cooperation between the audit team and the audit firm with the customer, (2) sectoral awareness, (3) audit firm's ability to meet the customer de-

<sup>&</sup>lt;sup>2</sup> Linda Elisabeth DeAngelo (a), "Auditor Independence, Lowballing and Disclosure Regulation", **Journal of Accounting and Economics**, 1981, 3, p.115.

<sup>&</sup>lt;sup>3</sup> Li Dang, Assessing Actual Audit Quality, PhD Thesis, May 2004, Drexel University, p.4.

<sup>&</sup>lt;sup>4</sup> Paul A. Copley, Mary S. Doucet, "The impact of competition on the audit quality of governmental audits", **Auditing**, Spring 1993, Vol.12, Issue 1, p. 89.

<sup>&</sup>lt;sup>5</sup> Lerzan Kavut, <sup>4</sup>Views of the Companies Which Have Benefited from the Independent Audit Services Regarding the Service Quality, **Yönetim**, Year: 12, Issue: 40, 2001a, p.8.

mands and (4) the compliance on the part of the audit firm with the generally accepted audit standards.<sup>6</sup>

Behn, Carcello, Hermanson and Hermanson (1997) studied the audit quality factors which affect the satisfaction of the customer business.<sup>7</sup> Samelson, Lowensohn and Johnson (2006) on the other hand, have reached close results in their study of perceptions of quality in the audit of local administrations; according to these results, the mean features in perceptions the quality of audit are: (1) sectoral experience (2) ability to satisfy the customer's demands (3) participation of the responsible auditor in the activity and (4) in-site work.

Imhoff (2003), revealed that those who practice such careers have come under significant criticism both regarding their accounting knowledge and regarding the quality of audit and, referring to the connection between the corporate governance and the audit quality, pointed out the quality of these two operations will increase only in case of the existence of organizations which are independent of the management of the business He emphasized the importance of auditor's rotation to secure the independence of the auditor.<sup>8</sup> Lennox, focused on the audit failures in the United Kingdom and stated that no significant connections exists between the audit reports and the company bankruptcies. He points out that non-obligatory auditor changes practically serves as a pressure tool used by the company management to force the auditor to issue positive reports, but that obligatory auditor rotation enhances the quality of audit. In any case, the audit quality will increase if the selection of the auditor is done by the formations like an audit committee in the company instead of the company management.<sup>9</sup>

In the research carried out by Hermanson, Plunkett and Deborah (1994) on the selection of the audit firm, it is pointed out that the companies' tendency to consider the reputation of the auditor instead of the audit fee while choosing the auditor has been an increasing trend.<sup>10</sup> Catanach and Walker (1999) have advised in their study which aimed at determining the specifications of a quality audit, that there is a direct relationship between the professional skills of the auditors and the audit quality.<sup>11</sup> Examining the researches regarding the auditor reputation and audit quality Moizer (1997) have pointed out that the companies with high quality audit services enjoy a good reputation; however, according to the findings of his research, there is a weak cause-effect relationship between the audit quality and the auditor's reputation.<sup>12</sup>

In the work carried out by the Institute of Chartered Accountants in England and Wales in 2002, the most important factors which affect the audit quality have been listed as (1) leadership, (2) human beings (auditors), (3) relations with the customer, (4) working rules, (5) internal monitoring and (6) external monitoring.<sup>13</sup> The organization that may perform the external monitoring can be a professional body or a regulatory authority.

## **3.2. Previous Studies In Turkey Regarding** The Quality Of Audit

There are very few studies on the quality of audit in Turkey. Ergun (1999) has aimed at creating a database which provides the opportunity to determine the structure of audit organizations which carry out audits under the Capital Market Law and reach an idea on the level of audit services in all stages of audit. This work has analyzed the structural features of the audit organizations according the audit firm being a local or an international one. In this work which was done in

<sup>&</sup>lt;sup>6</sup> Joseph V. Carcello, Roger H. Hermanson, Neal T. McGrath, "Audit Quality Attributes: The Perceptions of Audit Partners, Preparers and Financial Statement Users," **Auditing: A Journal of Practice & Theory,** Vol.11 No.1, 1992, p.11.

<sup>&</sup>lt;sup>7</sup> Bruce K. Behn, Joseph V. Carcello, Dana R.Hermanson ve Roger H. Hermanson, "The Determinants of Audit Client Satisfaction Among Clients of Big 6 Firms," **Accounting Horizons,** Vol. 11, No.1, March 1997, p.1.

<sup>&</sup>lt;sup>8</sup> Eugene A. Imhoff, Jr, "Accounting Quality, Auditing and Corporate Governance," Accounting Horizons: Special Issue on Accounting Quality, Supplement 2003, pp.117-128. (Online)

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=374380, 2 March 2007.

<sup>&</sup>lt;sup>9</sup> Clive Steven Lennox, Audit Quality and Auditor Switching: Some Lessons for Policy Makers, (Online)

http://papers.ssm.com/sol3/papers.cfm?abstract\_id=121048, 9 Mart 2007.

<sup>&</sup>lt;sup>10</sup> Roger H. Hermanson, Linda M. Plunkett, H. Deobrah, "A Study of the Importance of Certain Attributes to Clients' Initial Selections of Audit Firms: A Longitudinal and Stratified Approach," **Journal of Applied Business**, Winter 1994, Vol: 10, Issue: 1, p.114.

<sup>&</sup>lt;sup>11</sup> Anthony H. Catanach, Paul L. Walker, "The International Debate Over Mandatory Audit Rotation: A Conceptual Research Framework," **Journal of International Accounting, Auditing & Taxation,** Vol.: 8, Issue 1, p.61.

<sup>&</sup>lt;sup>12</sup> Peter Moizer, "Auditor Credibility: the International Empirical Evidence," **International Journal of Auditing,** Vol.: 1, Issue: 1, p.62.

<sup>&</sup>lt;sup>13</sup> Institute of Chartered Accountants in England and Wales, **Audit Quality**, (Online) http://www.icaew.com/index.cfm?route=133573.

1999, a survey was made to understand the views of the managers of 33 audit firms which supply audit services according to the Capital Market Law regarding the audit quality through the questions they replied.

According o the study performed by Kavut (2001a) on the opinion of the companies who receive audit services regarding the quality of the service they receive, there is no significant difference in the opinions of the managers of audited companies depending on whether these firms belong to the service or to manufacturing sector.<sup>14</sup> According to this study, the business jointly share the idea that, (1) careful selection of the assistant auditors in the audit firms, (2) the quantity and quality of in-service trainings supplied to the audit staff of all ranks, and (3) formation of appropriate audit teams according to the characteristics of the working environment has an important effect on the quality of audit.<sup>15</sup>

Kavut (2001b) has specified that there is a significant difference between the opinions and attitudes of the auditors and the managers of businesses which receive audit services regarding the audit quality.<sup>16</sup> According to the findings of this research, these differences mostly emerge in cases like the auditors' knowledge and experience about the audited sector and business, showing professional attention and vigilance in all stages from choosing the customer to making up the auditor's view, the methods and personnel policies adopted by the audit firm, technical equipments of the audit firm, legal cases raised against the auditors, the degree of satisfaction of the customers' expectations in areas other than the audit service, workforce planning, evidence collection, getting a new audit job and/or renewing the audit contract with the same customer for the new period.<sup>17</sup>

The study done by Kavut (2002) on the attitudes of the auditors working in local and international audit firms regarding the audit service quality, examines the differences between the attitudes of these two groups and finds significant differences.<sup>18</sup>

## 4. A RESEARCH ON THE PERCEPTIONS OF QUALITY OF AUDIT BY THE PUBLIC COMPANIES IN TURKEY

In this research, the perceptions regarding the quality of audit in Turkey have been observed and evaluations have been made about the audit quality. The subject of this study, is to determine the perception of the managers of public companies and the auditors about the audit quality.

### 4.1. Objective of the Research

The main objective of this work is to determine the perceptions of the managers of companies which receive audit services and the auditors regarding the quality of audit the public companies in Turkey. The study has aimed at determining the factors which affect the perception of the managers of the audited companies and the auditors and specify whether there are any differences between these perceptions.

#### 4.2. Scope and Limits of the Research

Since it is very difficult both financially and technically to cover the whole of the main mass in our research, we have limited our target group to the province of Istanbul. Therefore, another limitation of the study is the fact we have only selected the auditors working in the audit firms seated in Istanbul and the managers working in the companies located in Istanbul for the survey planned under this research.

The scope of this research also has been subjected to s restrictions with regard to its subject. The effects of audit charge, sectoral expertise and auditor rotation on the quality of audit have been excluded. The reason for this is that the audit fees and charging policies are generally kept confidential in Turkey and, thus, it is not thought that a confidential information would affect the perception of individuals in an objective manner; on the other hand the seven-year transient period envisaged by the communiqué no. 22 of the Capital Market Board for the auditor rotation is still continuing in the date of this research and such a rota-

<sup>&</sup>lt;sup>14</sup> Kavut (2001a), p.15.

<sup>&</sup>lt;sup>15</sup> Kavut (2001a), p.17.

<sup>&</sup>lt;sup>16</sup> Lerzan Kavut, "Opinions and Attitudes of Independent Auditors and the Managers of Companies which Receive Audit Services," **IMKB Magazine**, Vol.: 5, Issue:20, October/November/December 2001b, p.26.

<sup>&</sup>lt;sup>17</sup> Kavut, (2001b), p.26.

<sup>&</sup>lt;sup>18</sup> Lerzan Kavut, "Attitudes of the Auditors Working in the Local and International Independent Audit Firms Regarding Quality of Independent Audit Services", Yönetim, January 2002, p.15.

tion will be done in a later date and, hence, it has not been put into effect yet.

### 4.3. Methodology of the Research

## 4.3.1. Data and Information Collection Method

This research has used the survey method as its method of gathering data. Two separate survey forms have been drawn up for the managers and auditors. Data has been collected through the regular mail and electronic mail.

### 4.3.2. Sampling Procedure

According to the information posted on the website of Istanbul Stock Exchange, there are 328 public companies operating in Turkey on 2006. The headquarters of 214 of these companies are is the province of Istanbul. In 2006, 43 audit firms audited the public companies located in Istanbul. The headquarters of 31 of these companies are located in Istanbul .

From the 152 surveys which were sent back to us from the audited companies, 140 of them were found adequate and included in the analysis. 225 auditors in the audit firms to whom the surveys were sent participated in the survey and 210 of these surveys were included in the analysis. The surveys which were excluded from the analysis were replied incompletely.

The research measured the variables regarding the perceptions of the audit quality through 32 statements made by the Likert criteria. These statements, have been taken from the works contained in the literature, International Audit Standards and Quality Control Standards as well as from the information taken from the auditors and the managers in the pre-survey.

#### 4.3.3. Hypotheses of the Research

Below are the basic hypotheses developed in line with the research model and research objectives:

 $H_1$ : There is a significant difference between the perceptions of the auditors and the managers of audited companies regarding the factors affecting the audit quality.

 ${\rm H}_{1a}$ : There is a significant difference between the perceptions of the auditors and the managers of audited companies regarding the regulations of the professional bodies.

 $H_{1b}$ : There is a significant difference between the perceptions of the auditors and the managers of

audited companies regarding the level of competence of the employees of the audit firm.

 $H_{1c}$ : There is a significant difference between the perceptions of the auditors and the managers of audited companies regarding the reputation of the audit firm.

 $H_{1d}$ : There is a significant difference between the perceptions of the auditors and the managers of audited companies regarding the audit firm having its own working standards.

# 4.4. General Specifications of the Auditors Participating in the Research

The frequency and percentage distribution regarding the specifications of the auditors who participated in the research and their companies is given below.

Table 4.1. Auditors Break Down According to
their Experience

			Cumulative
	Frequency	Percentage (%)	Percentage (%)
Less than 3 years	89	42,4	42,4
3 - 5 years	38	18,1	60,5
6 - 8 years	33	15,7	76,2
9 - 11 years	23	11,0	87,1
12 – 14 years	19	9,0	96,2
15 years and more	8	3,8	100,0
Total	210	100,0	

Table 4.3. The Participating Auditors' Break Down Regarding Whether Their Employers Have a Foreign Partner Or Not

			Cumulative
	Frequency	Percentage (%)	Percentage (%)
Turkish Audit Firms with	140	((7	(( 7
Foreign Partners	140	66,7	66,7
Turkish Audit Firms Without	70	22.2	100.0
a Foreign Partner	70	33,3	100,0
Total	210	100,0	

Table 4.4. Auditors' Break Down According to

Their Positions

		Percentage	Cumulative
	Frequency	(%)	Percentage (%)
Responsible Lead Auditor Partner	15	7,1	7,1
Auditor or Assistant Auditor	195	92,9	100,0
Total	210	100,0	

## 4.4. General Specifications of the Managers Taking Part in the Research

The frequency and percentage distribution of the managers who are covered by the research according a series of general features is as follows.

Table 4.8. Managers' Break Down According to the Sectors in which Their Companies Operate

			Cumulative
		Percentage	Percentage
	Frequency	(%)	(%)
Service sector	79	56,4	56,4
Manufacturing sector	27	19,3	75,7
Manufacturing and service sector	34	24,3	100,0
Total	140	100,0	

Table 4.9. Managers' Break Down According to their Administrative Ranks

			Cumulative
		Percentage	Percentage
	Frequency	(%)	(%)
Middle Rank	101	72,1	72,1
High Rank	24	17,1	89,3
Low Rank	15	10,7	100,0
Total	140	100,0	

			Cumulative
		Percentage	Percentage
	Frequency	(%)	(%)
Member of the Board			
of Managers or Gen-	9	6,4	6,4
eral manager			
Accounting, Finance,			
Financial Affairs Man-	70	50,0	56,4
ager/Deputy Manager			
Internal Audit	37	26,4	82,9
Other	24	17,1	100,0
Total	140	100,0	

# Table 4.11. Managers' Break Down According to Their Positions

### 4.5. Analysis of the Research Data

The findings obtained as a result of the research have been analyzed in line with the objectives of the research. The reliability and validity of the measure used for the research was analyzed before testing the research hypothesis. The reliability of the measure was tested through Cronbach Alpha coefficient approach. After the reliability analysis, the structural validity of the measure was tested. The structural validity test used the exploratory factor analysis. This analysis, categorizes the variables by their common features. In the reliability analysis on the other hand, the statements used in the survey were subjected to factor analysis and their variables have been categorized. Subsequently, a reliability test was applied on the measure formed by the factors.

After the reliability and validity of the factors were tested, the auditor and the managers quality perceptions were tested using the T-test to examine whether there is a significant difference with regard to the specified factors. The survey data were analyzed using the SPSS 13.0 software pack.

## 4.5.1. Reliability Analysis of the Measure Present in the Research

The term Reliability specifies the degree to which the collected data are free from accidental (or caused by sampling error) faults. The criteria for this are the frequency of identical results by the measure in different times or different groups.<sup>19</sup>

The most used method for testing the reliability of the measure is alpha coefficient (Cronbach Alpha) approach. According to this method, the alpha coefficient should be 0,70 or more to accept the measure as reliable. In some exploratory researches the minimum value is 0.60.<sup>20</sup> Alpha coefficient indicates the internal integrity of the measure.

This research has used the alpha coefficient approach to test the reliability of the measures.

According to the results of the reliability analysis, the rate of representation of the concept which is subject to measurement by this measure which consists of thirty two measures, or, in other words, the internal integrity of the measure is 0,851. This rate is above the 0.70 which is accepted as the minimum value in the reliability analyses. When the analysis results are valuated, it is seen that the measure has internal integrity and is, hence, a reliable measure.

4.5.2. Validity Analysis of the Measure Present in the Research

<sup>&</sup>lt;sup>19</sup> Kurtuluş, p.303.

<sup>&</sup>lt;sup>20</sup> Joseph F. Hair, Rolph E. Anderson, Ronald L. Tatham, William C. Black, **Multivariate Data Analysis**, 5.bs., Prentice Hall Int., London, 1998, p.118.

Validity, according to the science of behaviors, is the measure of fairness of the collected data and its conformity with the attributes of the measured event or the variable. In other words, validity is the fact that the measure measures what is meant to be measured.<sup>21</sup>

Content validity is the level of validity of the content or at least the appearance of the measure.<sup>22</sup> This can be provided by creating the measure statements according to the literature of the area of research and getting the views of the experts who confirm the adequacy of the measure for the subject of the research. In order to secure the validity of the content, expert academicians have been consulted. Since the results of these consultations made it clear that some questions in the survey can cause misunderstandings or evokes more than one meaning, some additions and changes were made to the survey.

Structural validity is the indicator of what the measure will gauge in the future. Structural validity is important because it enables generalizations regarding the measure. In order to test the structural validity of the measure used in the research and determine and resize the factor loads of the statements included in the measure, exploratory factor analysis was used.

Factor analysis, is a type of multivariable statistic analysis which makes it possible to submit the data in a more meaningful and brief manner on the basis of the relationships between the data. The target is to study the roots of reciprocal attachment between the variables. Various techniques have been developed for the application of factor analysis. The most widely used one of these techniques is the principal components analysis.<sup>23</sup>

In order to determine whether the Exploratory factor analysis is an adequate statistical technique, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity have been applied. In order for the exploratory factor analysis to be accepted as the adequate statistical technique, the value of KMO measure should be at least 0,50 and the Bartlett's test should have an statistically meaningful result.<sup>24</sup>

As seen in Table 4.20, the KMO value of the measure is recorded as 0,806, this value is more than 0,50 which means that the factor analysis can be accepted as the adequate statistical technique. The results of Bartlett's test which was taken in order to see whether the data show a distribution close to the normal distribution were below 0,05 which means that the normalcy assumption was also secured. This means that exploratory factor analysis is a adequate statistical technique for the measure.

Table 4.20. Measurement of KMO Sampling Adequacy of the Measure and Bartlett's Test

Kaiser-Meyer-Olkin pling Adequacy	,806	
Bartlett's Test of Sphericity	Approx. Chi- Square	1324,928
	Df	136
	Significance	,000

Factor analysis, is executed by using the principal components analysis and varimax rotation. The correlation matrix which shows the correlation between the variables was formed and the factor loads was determined by subjecting this matrix to varimax rotation. With the help of principal components analysis, variables with factor loads lower than 0,40 during the reduction of the factors were eliminated. During the factor analysis, factors with values greater than 1 which were answered by at least 3 questions were taken into consideration. As a result of the executed factor analysis, four different factors which consist of seventeen variables emerged. Table 4.21 indicates the results of factor analysis.

The internal integrity coefficient of the measure which took its final shape after the factor analysis was calculated. The alpha coefficient of the measure which is made of seventeen variables and four factor was calculated as 0,796. a measure is reliable if its alpha coefficient is 0,70 or higher. Therefore this measure which consists of factor is reliable.

As a result of the factor analysis it was noticed that the emerging four factors explain %51,256 of the total variance. (the total variance explained by the four factors is %51,256.) Independent from the other factors, the first factor represents %24,466 of the variance,

<sup>&</sup>lt;sup>21</sup> Kurtuluş, p.302.

<sup>&</sup>lt;sup>22</sup> Kurtuluş, p, 302.

<sup>&</sup>lt;sup>23</sup> Kurtuluş, p.398.

<sup>&</sup>lt;sup>24</sup> Hair, Anderson, Tatham, Black, p.99.

the second factor explains %11,275, while the third an the fourth ones respectively explain %9,166 and %6,348 of the total variance. As seen in Table 4.21, the first factor is made of 6 variables, the second is made of three variables, the third is made of five variables and the fourth one is composed of three variables. The four factors emerging as a result of the factor analysis have been named in accordance with the factor loads they took.

Table 4.21. Results of Factor Analysis (Principal Components Approach-Varimax Rotation)

	Components			
	Factor 1	Factor 2	Factor 3	Factor 4
STATEMENT 30	,774			
STATEMENT 16	,770			
STATEMENT 24	,756			
STATEMENT 5	,618			
STATEMENT 12	,575			
STATEMENT 27	,470			
STATEMENT 1		,796		
STATEMENT 15		,776		
STATEMENT 29		,699		
STATEMENT 22			,658	
STATEMENT 21			,657	
STATEMENT 28			,627	
STATEMENT 31			,542	
STATEMENT 17			,408	
STATEMENT 6				,729
STATEMENT 8				,686
STATEMENT 19				,589

When the factor loads are examined, it is seen that the firth factors made of the variables regarding the regulations of the professional bodies, and the second factor is made of variables regarding the competence level of the auditors, while the third and the fourth factors are respectively made up of variables related to the reputation of the audit firm and the audit firm having its own working standards. That's why the factor consisting of statements 30, 16, 24, 5, 12 and 27 is named "regulations of the professional bodies", the factor consisting of statements 1, 15, 29 is called "competence level of the auditors", the one made up of statements

22, 21, 28, 31 and 17 is named "reputation of the audit firm" and the factor consisting of statements 6, 8, 19 is named "audit firm having its own working standards". Table 4.24 contains the list of variables included in the factors.

Table 4.24. Variables Included in the Factor Analysis Results

FACTOR 1- Regulations of the Professional Bodies

STATEMENT 30 Existing of a rate tariff specified by the professional bodies for the audit activities

STATEMENT 16Existence of measures which prevent the job acceptance in the rate tariffs prepared by the professional bodies

STATEMENT 24 Serious compliance by the audit firm with the fee tariffs specified by the professional bodies

STATEMENT 5 Existence of sanctions which prevent unfair competition between the audit firms

STATEMENT 12 Transparency in the personnel policies of the audit firms

STATEMENT 27Existence of measures which prevent the audit firms from accepting jobs beyond their capacity

FACTOR 2- Competence Level of the Auditors STATEMENT 1 Auditors' having adequate professional knowledge

STATEMENT 15 Auditors' having comprehensive information on the audit standards STATEMENT 29 Auditors' having comprehensive knowledge of accounting standards FACTOR 3- Reputation of the Audit Firms

STATEMENT 22 Degree of institutionalization of the audited companies

STATEMENT 21 Existing of no legal actions against an audit firm due to inadequate audit performance

STATEMENT 28 Taking the market reputation of the client when choosing a new customer or deciding to continue with the existing customer

STATEMENT 31 Regular declaration of property by the auditors to the professional bodies in certain intervals

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STATEMENT 17 Predetermination of the qualities needed for each position in the audit firm FACTOR 4- Audit Firm Having Its Own Working Standards

STATEMENT 6 Realistic time planning by the manager of the audit time for each audit site

STATEMENT 8 Existence of certain policies in the audit firm regarding the working periods of the staff

STATEMENT 19Existence of independence criteria made up by the audit firm itself apart from thr legal regulations and the regulations by the professional bodies

4.6. Findings about the Hypotheses

Analysis of the Differences Between the Perceptions of the Auditors and the Managers Regarding the Factors which Affect the Audit Quality

The first among the fundamental hypotheses of the research, is related to whether or not there is a difference in the perceptions of the auditors and the managers regarding the factors which affect the audit quality. In this regard, the sub-hypotheses related to the main hypothesis were tested and a study was done to see whether there is a difference of perceptions between the auditors and the managers regarding the regulations of the professional bodies, reputation of the audit firm, existence of own working standards within the audit firm and the competence level of the auditors of the audit firm. The sub-hypotheses related to this fundamental hypothesis are as follows:

During the analysis of the data, in case the data was parametric and related to two main mass t-test was used, while in case there was more than two main masses, ANOVA was adopted. Furthermore, Levene's Test for Equality of Variances" was used to examine whether the variances were equal or not. As seen in Table 4.25, the results of t-test show that there is a meaningful statistical difference of  $\alpha$ =0,05 between the average values of perceptions of the auditors and the managers regarding the quality of the audit for all factors except for the factor of reputation.

Table 4.25. Difference Between the Average of the Perceptions of the Auditors and Managers Regarding the Quality of Audit - T- Test

		Levene's Te				
		Equality of V	/ariances	T-test for	Equality of N	leans
		F	Sig.	t	df	Sig. (2-tailed)
Regulations by the professional bodies	Equal vari- ances as- sumed Equal vari- ances not assumed	4,286548	0,039	3,862		
Competence Level of the Auditors	Equal vari- ances as- sumed	41,36922	0,000			
	Equal vari- ances not assumed			5,433	240,9626	0,000
Reputation of the Audit Firm	Equal vari- ances as- sumed	6,796974	0,010	0,147	348	0,883
	Equal vari- ances not assumed			0,154	340,702	0,877
Audit Firm Having Own Working Stan- dards	Equal vari- ances as- sumed	3,886511	0,049	2,032	348	0,043
	Equal vari- ances not assumed			2,112	332,8074	0,035

According to analysis results, as can be seen in Table 4.26, auditors pay more attention to the regulations of the professional bodies, the level of competence of the employees of the audit firm and the existence of own working standards within in the audit firm than the managers do.

The differences of perception between the auditors and the managers have also been examined with regard to the variables of factors. For this purpose, the perceptions of the auditors and the managers were analyzed by t-test to specify the variables on which there were difference of perceptions.

-0	the Audit 1- Test			1		
		Levene's ' for Equali				
		Variances		T-test for	Equality	of Means
STATEMENT		F	Sig.	t	df	Sig.(2- tailed)
30	Equal variances assumed	2,96	,086	,937	348	,349
	Equal variances not as- sumed			,986	340,74	,325
16	Equal variances assumed	,11	,736	4,56	348	,000
	Equal variances not as- sumed			4,61	307,52	,000
24	Equal variances assumed	1,54	,216	3,21	348	,001
	Equal variances not as- sumed			3,17	283,36	,002
5	Equal variances assumed	6,92	,009	1,78	348	,076
	Equal variances not as- sumed			1,85	331,90	,066
12	Equal variances assumed	,11	,736	1,86	348	,064
	Equal variances not as- sumed			1,91	324,21	,057
27	Equal variances assumed	12,92	,000	3,93	348	,000
	Equal variances not as- sumed			3,91	294,10	,000
1	Equal variances assumed	133,44	,000	6,58	348	,000
	Equal variances not as- sumed			6,05	214,52	,000
15	Equal variances assumed	19,99	,000	4,19	348	,000
	Equal variances not as- sumed			4,04	262,02	,000
29	Equal variances assumed	12,34	,001	3,18	348	,002

Table 4.27. Difference Between the Average of
Perceptions of the Auditors and the Managers Regard-
ing the Audit T- Test

		-		-	-	
	Equal variances not as- sumed			3,10	270,65	,002
22	Equal variances assumed	6,85	,009	1,26	348	,209
	Equal variances not as- sumed			1,30	324,75	,196
21	Equal variances assumed	,01	,939	-,05	348	,958
	Equal variances not as- sumed			-,05	302,30	,958
28	Equal variances assumed	,04	,846	1,35	348	,178
	Equal variances not as- sumed			1,39	325,90	,165
31	Equal variances assumed	9,93	,002	-2,54	348	,012
	Equal variances not as- sumed			-2,67	340,86	,008
17	Equal variances assumed	,13	,718	1,36	348	,174
	Equal variances not as- sumed			1,36	292,81	,176
6	Equal variances assumed	1,92	,167	2,06	348	,040
	Equal variances not as- sumed			2,10	313,58	,037
8	Equal variances assumed	18,99	,000	,68	348	,498
	Equal variances not as- sumed			,73	346,70	,469
Table 4.27 (continued)						
19	Equal variances assumed	4,09	,044	1,74	348	,083
	Equal variances not as- sumed			1,77	316,92	,078

The results of t-test regarding the perception differences between the auditors and the manager with regard to the quality of the audit is indicated in Table 4.27. This table, t-test results for each statement are supplied. According to these results, there is a meaningful difference of  $\alpha$ =0,05 between the perceptions of the auditors and the manager for the statements 16, 24, 27, 1, 15, 29, 31 and 6. On the other hand, There is no meaningful difference of perceptionss between the auditors and the administrates for the statements 5, 12 and 19 with  $\alpha$ =0,10. No meaningful difference was found for the statements 30, 22, 21, 28, 17and 8.

Table 4.28 shows the average and standard deviation of the variables of factors. In Table 4.27 in the statements which have a significant difference, as seen in Figure 4.17, the auditors have given more weight than the managers to the statements except for the 31st one. According to this, the auditors see it less important than the managers from the viewpoint of the audit quality that the auditors should declare their property. Compared to the managers, the auditors consider the other statements more important from the viewpoint of audit quality.

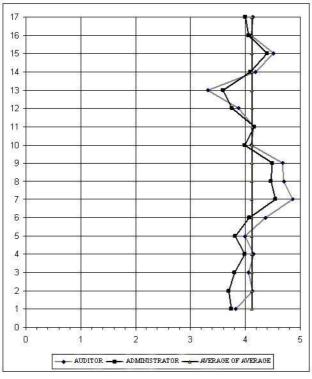


Figure 4.17. Profile of Attitudes of the Auditors and Managers Regarding the Factors Affecting the Audit Quality

Statements listed from 1 to 17 in Figure 4.17, are the statements no. 30, 16, 24, 5, 12, 27, 1, 15, 29, 22, 21, 28, 31, 17, 6, 8 and 19 respectively.

### CONCLUSION

Audit is of paramount importance as a professional operation that alleviates the information risks of the interest groups of the businesses and helps them get the correct decisions while also preventing the waste of public resources. The audit can yield the expected benefit only if the given service enjoys of a high quality.

In this study, the objective has been to analyze the quality of audit in the public companies in Turkey. Notwithstanding the fact that numerous studies have been done in this regard in the foreign countries, the scarcity of such studies in Turkey increases the importance of the present research. This work has aimed at determining the perception of audit quality among the parties who benefit from this service in Turkey and specify the notable factors and problems regarding the audit quality.

As a result of the statistical analysis of the executed survey, it was noticed that the meaningful factors in the perception of audit quality in Turkey are the "regulations by the professional bodies", "competence level of the auditors", "reputation of the audit firm" and the "audit firm having its own working standards".

According to the findings of the research, there are significant statistical differences between the perceptions of the auditors and the managers regarding the "regulations by the professional bodies", "competence level of the auditors", "reputation of the audit firm" and the "audit firm having its own working standards. The auditors care more about the regulations by the professional bodies, existence of own working standards in the audit firm and the competence level of the employees of the audit firm than the managers do. It is interesting that the employees of audit firms give more importance to the establishment of working rules than the partners of such audit firms do. This finding of the research, supports the idea that the working conditions in the audit firms are hard.

According to the research, the auditors consider all factors except for the "reputation of the audit firm" more important than the managers to. It is stated that when a comparison of the perceptions of the auditors and the managers is done with regard to the measure variables generated after factor analysis, the auditors have considered the variable of "declaration of property by the auditors to the professional bodies in certain intervals" less important from the viewpoint of audit quality than the managers do. Auditors have attached less importance to the effects of declaration of their property to the professional bodies in certain intervals on the audit quality.

According to the results of the analyses, both the auditors and managers who participated in the research believe that the regulations made by the professional bodies with regard to the profession of audit are insufficient, and that the formation of professional ethic rules and similar principles by the professional bodies will increase the quality of audit in Turkey. This refers to the need for regulations on audit standards in Turkey. This need can be satisfied by adapting the International Audit Standards to the professional bodies, setting up specific professional ethics rules, and the application of such rules. It is highly important that the professional bodies should posses the necessary legal authorities in this regard.

The auditors and managers believe that the "existence of own working standards in the audit firm" which is one of the factors specified in the study has an important role in increasing the quality of the audit. This means that the audit firms should not restrict themselves to the legal arrangements and other regulations, but should also have their own written rules.

Another factor which affected the audit quality according to this research is the reputation of the audit firm. The reputation of the audit firm, depends on various issues such as the conducts and behaviors of the auditors, their professional performance and policies in choosing the customers. It is normal that low reputation of audit firm affects the understands regarding the quality of services it provides. This result is in conformity with the works in literature.

We suggest that future studies on this subject expand the scope of this research by covering the interest groups such as the fund managers or financial analists who use the financial accounts professionally. Also, a comparison of the factors that affect the perception of the quality of audit with the quality of actual audit may also be suggested.

### REFERENCES

Behn, Bruce K., Joseph V. Carcello, Dana R.Hermanson ve Roger H. Hermanson, "The Determinants of Audit Client Satisfaction Among Clients of Big 6 Firms," Accounting Horizons, Vol. 11, No.1, March 1997.

Carcello, Joseph V., Roger H. Hermanson, Neal T. McGrath, "Audit Quality Attributes: The Perceptions of Audit Partners, Preparers and Financial Statement Users," Auditing: A Journal of Practice & Theory, Vol.11 No.1, 1992.

Catanach, Anthony H., Paul L. Walker, "The International Debate Over Mandatory Audit Rotation: A Conceptual Research Framework," Journal of International Accounting, Auditing & Taxation, Vol.: 8, Issue 1, p.61.

Dang, Li, Assessing Actual Audit Quality, PhD Thesis, May 2004, Drexel University, p.4.

Paul A. Copley, Mary S. Doucet, "The impact of competition on the audit quality of governmental audits", Auditing, Spring 1993, Vol.12, Issue 1.

DeAngelo (a), Linda Elisabeth, "Auditor Independence, Lowballing and Disclosure Regulation", Journal of Accounting and Economics, 1981.

Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham, William C. Black, Multivariate Data Analysis, 5.bs., Prentice Hall Int., London, 1998, p.118.

Hermanson, Roger H., Linda M. Plunkett, H. Deobrah, "A Study of the Importance of Certain Attributes to Clients' Initial Selections of Audit Firms: A Longitudinal and Stratified Approach," Journal of Applied Business, Winter 1994, Vol: 10, Issue: 1.

Imhoff, Jr, Eugene A; "Accounting Quality, Auditing and Corporate Governance," Accounting Horizons: Special Issue on Accounting Quality, Supplement 2003, pp.117-128. (Online)

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=374 380, 2 March 2007.

Institute of Chartered Accountants in England and Wales, Audit Quality, (Online) http://www.icaew.com/index.cfm?route=133573.

Kavut, Lerzan, "Opinions and Attitudes of Independent Auditors and the Managers of Companies which Receive Audit Services," İMKB Magazine, Vol.:

5, Issue:20, October/November/December 2001b.
Kavut, Lerzan, "Attitudes of the Auditors Work-

Firms Regarding Quality of Independent Audit Services", Yönetim, January 2002.

Kavut, Lerzan, "Views of the Companies Which Have Benefited from the Independent Audit Services Regarding the Service Quality, Yönetim, Year: 12, Issue: 40, 2001a.

Lennox, Clive Steven; Audit Quality and Auditor Switching: Some Lessons for Policy Makers, (Online) <u>http://papers.ssrn.com/sol3/papers.cfm</u>? abstract\_id=121048, 9 Mart 2007.

Moizer, Peter, "Auditor Credibility: the International Empirical Evidence," International Journal of Auditing, Vol.: 1, Issue: 1, p.62.

Regulations on the Principles of Independent Audit of Insurance Businesses, art.9, Official Gazette dated 8 September 2003, edition 25223

Repeated Official Gazette dated 12.06.2006 issue 26196.

Regulations on the Principles of Independent Audit of Insurance Businesses, art.9, Official Gazette dated 8 September 2003, edition 25223.

Turkish Commercial Code Draft.

TÜDESK, International Audit Standards,

TÜRMOB Publications, edition: 238, 2003.

Code of Professional Conduct, Official Gazette dated 18.10.2001, edition 24557 .

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