

## **Relationship Between Audit Quality and Corporate Governance: An Empirical Research in Borsa Istanbul**

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**Abstract:** *In this study, the impact of corporate governance on audit quality in industrial companies is investigated. For this purpose, datas of industrial companies traded in Borsa Istanbul in 2015. Variables in this study is obtained from the companies' annual reports, financial statements and also their institutional web sites. As a result of analysis by logistic regression method, firm size, the rate of institutional ownership, duration of trading time in stock exchange market, and company history variables are are found statistically positive on audit quality.*

**Keywords:** *Audit Quality, Corporate Governance, Logistic Regression*

**Jel Codes:** *M42, G34*

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### **I. Introduction**

Companies are gaining weight in economic area. In the prior period, companies were established by one person or a family; but now companies are operating around the world gaining stakeholders and shareholders because of globalization. Therefore, bussinesses are keeping in touch with them and have to meet their expectations. Interest groups related to companies want to have informations about business operations. Informations that given to interest groups have the informations by financial reports prepared by companies accounting service. Financial reports must be prepared with Generally Accepted Accounting Principles (GAAP). And the independent external audit firms get some opinions about the financial reports that they prepared with GAAP or not. It is accepted that financial reports are faithful representation if the audit firms' service are quality. Therefore, companies are going to get a a lot of invetors and increase their operations. The most important charecteristic of the independent external auditing is to focus the interest groups' benefits (Uzay, 2009: 4). Audit service may be separated from other professions with two primary reasons. First of all, audit fees are paid by companies that audited, but auditing service is for interest groups, not for companies. And second, auditing reports that the ouput of auditing service are seen after the auditing service. So, companies don't see the report before interest groups (Zerni, 2009: 17). In other words, investors invest in companies if they accept that financial reports are reliable, because they get good auditing service.

In the beginning of 2000, Arthur Anderson Auditing Firm hide the truth about the financial reports of Enron. Enron was in trouble and Arthur Andersen reported that Enron was in a good condition and people could invest in this company. After the collapse of Enron, people lost their confidence to capital market in United States because of the external auditing service. In this context, regulatory bodies in United States began to regulate the external auditing service because of the increasing the confidence to capital markets. The reliability of financial reports which are output of of the accounting process are widely related to the quality of external auditing (Balsarı and Varan, 2014: 86). Auditing quality is defined as an appropriate expression about financial reports and to prove this expression with essential evidences (Durukan and İkiz, 2007: 35). If there is a quality auditing service, companies can adjust their internal process to prepare reliable financial reports (Saleh and İsmail, 2). Independent external auditing activities increase the reliability of financial reporting traditionally and the preparing the reliable financial reports are related to corporate governance sytem in companies (Goodwin and Seow, 2002: 196). Quality auditing service push the companies to manage their company with governance, not arbitrary (Beisland et.al., 2015: 4). Therefore, corparate governance in companies help the auditors to get true evidences about the financial reporting process.

### **II. Literature Review**

The aim of auditing is to prevent the fraudulent financial reporting and also to stop managers from getting privilages. Perceived auditing quality is as important as the efficient of auditing activities by users of financial reports (Adeyemi and Fagbemi, 2010: 171). Accordinly, companies consider the shareholders' expectations by enabling corporate governance; and after that the auditing opinion reflect the financial reporting is accurate Auditing quality is defined by DeAngelo "the ability to report their accounting errors and fraud and uncovering them on the audited businesses" (DeAngelo, 1981: 186). Possibility of errors in the accounting

system to uncover and its reporting is related to independence of auditors (Lin and Tepalagul, 2009: 2). And if auditors are independent with their job, that will be positive effect to capital markets (Tobi, et. al., 2016: 14).

Shoreder et. al. (2006) studied on chairmans of audit committee and examined their opinions about audit quality. In the study, it is found that factors like audit independence and managers' attitude are most important factors according to chairmans. Hay et. al. (2008) said that audit quality and corporate governance are related to each other; but there is a two different view about the relationship. According to the authors, high quality auditing is not necessary when there is a good control mechanism in companies; but as another view high quality auditing can push companies to have governance. Abdullah et. al. (2008) stated that corporate governance system is important in terms of financial reporting. It is also stated that independent external auditing is important in terms of credibility of corporate governance system. Adeyemi and Fagbemi (2010) studied on Nigerian listed companies and also found that independent board members had a positive effect on audit quality. And also it is found that firm size and financial leverage had positive effect on audit quality.

Soliman and Elsalam (2012) studied on 50 Egypt listed companies and the data were collected between 2007-2009. According to the findings of the study, there were significant relationship between independency of board members and the existence of Chief Executive Officer and audit quality. Karaibrahimoğlu (2013) studied on 805 Turkish listed companies in Istanbul Stock Exchange Market (IMKB) between 2005-2009. It is stated that big four auditors and senior auditor's choice is affected by corporate governance mechanism like board of members and shareholding structure. Terzi et. al. (2014) examined the effect of corporate governance on audit quality. They found that the structure of board and institutional investors had a significant positive effect on audit quality. Beisland et. al. (2015) studied the microfinance industry in 70 emerging country and stated that the existence of internal audit mechanism and big four audit companies is an indicator of audit quality. But also they stated that internal audit mechanism is more important in terms of audit quality than big four audit companies. Husnin et. al. (2016) studied the corporate governance practices and auditor choice before the pre-and post Corporate Governance Law (2007) in Malaysia. They analyzed 300 companies between 2006-2008 and stated that the corporate governance law enhanced the corporate governance mechanism in Malaysia. And also this law had a positive effect on auditor choice.

### **III. Data and Analysis**

The aim of the study is to explore the corporate governance factors on audit quality in Turkish nonfinancial listed companies. Nonfinancial companies are used in this study because of stage of development of corporate governance according to financial companies. Nonfinancial listed companies in Turkey are dependent on Capital Market Law. There are some corporate governance requirements for listed companies in Capital Market Law in Turkey. And also there are some requirements in new Turkish Commercial Code for listed and non listed nonfinancial companies. In this context, it can be said that corporate governance principles are mandatory for all companies in Turkey. Different variables were used to represent the audit quality in the literature, Audit fees were used to represent the audit quality in some studies (O'Sullivan, 2000; Carcello et. al. 2002; Salleh et. al., 2006). there were investigated the effects of audit quality on the structure of the Board of Directors in these studies. Also audit firm size was used to represent the audit quality in some studies (DeAngelo, 1981; Hussainey, 2009; Memiş and Çetenak, 2012; Sawan and Alsaqqa, 2012; Yaşar, 2013). It can be said that if companies are audited by one of the big four audit firms ((Deloitte, Earnst and Young, KPMG ve PricewaterhouseCoopers), there will be quality audit service, because, big for audit companies will care about their reputation. In this study, audit firm size (big four company) is used to represent the audit quality.

The independent variable used in the study is considered to be corporate governance practices that the effect on audit quality. It can be said that the corporate governance variables effects on audit quality in the literature are like firms size, financial leverage, duality, free float rate, independent board members, age of company and rate of institutional investors. Definitions of some of these variables are listed below:

- **Independent Board Members:** It is considered that there is a relationship between number of independent board members and audit quality. Independent board members have important roles when there is a problem between owner of the company and manager according to agency problem (Terzi et. al., 2014: 196). Independent board members can see the company from different perspective. Beasley and Petroni (2001) stated that independent board members have positive effect on audit quality. Sullivan (2000) and Salleh (2006) stated that there is a positive relationship between the number of independent board members and audit quality. In this study, it is expected that there is a positive relationship between independent board members and audit quality.
- **Rate of Financial Leverage:** Financial leverage ratio is calculated by dividing total debts to total liabilities. If the ratio is high, it can be said that company finance itself with high debt margin, and also it is a problem. It is accepted in recent studies that there is a positive relationship between audit quality and financial leverage ratio, because companies have a lot of debts have to audit carefully (Broye and Weill, 2008;

Knechel et. al. 2008). In this study, it is expected that there is a positive relationship between audit quality and financial leverage ratio.

- **Firm Size:** It is considered that there is a positive relationship between firm size and audit quality. Velury et. al. (2003) and Hsu et. al. (2015) stated that big companies will get quality auditing service and said that there is a positive relationship between audit quality and firm size. In this study, it is expected that there is a positive relationship between firm size and audit quality.
- **Age of Company:** Tuan (2016) found that there is a positive relationship between audit quality and company age. So, it is expected that there is positive relationship between company age and audit quality.
- **Duality:** There are two theories about duality in some studies (Aygün and Sayın, 2016: 53). In agency theory, it is assumed that if CEO is a board member (duality), board of directors will not control the company well. So, companies can not be in good performance (Aygün and İç, 2010: 194). But in agent theory, if there is a duality, CEO will be efficient and there will be a good performance (Donaldson and Davis, 1991: 52). Soliman and Elsalam (2012) and Karabrahimoğlu (2013) found that there is a poor audit quality if there is a duality. In this study, duality is taken by agency theory, so it is expected that there is a negative relationship between audit quality and duality.
- **Institutional Investors:** The existence of institutional investors in a company will enhance the audit quality. Because, institutional investors want controlled companies (Aygün and Sayın, 2016: 54). Adeyemi and Fagbemi (2010), Solliman and Elsalam (2012), Terzi et. al. (2014) found that there is a positive relationship between audit quality and rate of institutional investors. It is expected positive relationship between audit quality and rate of institutional investors in this study.

To determine the relationship between variables that represent the existence of corporate governance with audit quality, the following hypotheses were formed:

- H<sub>1</sub>: There is a positive relationship between firm size and audit quality.
- H<sub>2</sub>: There is a positive relationship between financial leverage rate and audit quality.
- H<sub>3</sub>: There is a negative relationship between duality and audit quality.
- H<sub>4</sub>: There is a positive relationship between free float rate and audit quality.
- H<sub>5</sub>: There is a positive relationship between independent board members and audit quality.
- H<sub>6</sub>: There is a positive relationship between company age and audit quality.
- H<sub>7</sub>: There is a positive relationship between institutional investors and audit quality.

The variables used in the study, their contraction and description are provided in Table 1:

**Table 1:** Variables, Contractions and Explanations in the Study

	Variables	Contractions	Explanations
<b>Dependent Variable</b>	Audit Quality	AQ	If one of big four audit companies 1; if not 0
	<b>Independent Variables</b>		
	Firm Size	FS	Logaritm of total assets
	Financial Leverage	FL	Total debts/Total liabilities
	CEO Duality	CD	If chairman and CEO are same person 1; if not 0
	Free Float Rate	FLR	Stock in circulation
	Independent Board Member	IB	Number of independent members/total members
	Company Age	CA	Company age
	Institutional investors	II	Rate of Institutional Investors

In the study, data were used from 139 companies in the manufacturing sector in 2015. The data for this study were analyzed by logistic regression method. The reason for using the logistic regression method, the dependent variable (audit quality) is a categorical variable. The model used in the study were created in the following way:

$$AQ = \beta_0 + \beta_1 FS + \beta_2 FL + \beta_3 CD + \beta_4 FLR + \beta_5 IB + \beta_6 CA + \beta_7 II$$

Descriptive statistics for the data are listed in Table 2:

**Table 2:** Descriptive Statistics

	Number	Minimum	Maksimum	Average	Standard Variation
AQ	139	,00	1,00	,5468	,49961
FS	139	7,22	10,41	8,6532	,63110
FL	139	,06	1,11	,4738	,21781
CD	139	,00	1,00	,0576	,23374
IB	139	,14	,67	,3125	,07965
CA	139	,60	81,00	39,9108	15,21114
II	139	,00	99,46	49,6067	32,37747
FLR	139	,54	89,36	31,5051	20,01262

The results of the logistic regression analysis are included in Table 3:

**Table 3: Logistic Regression Analysis Result**

	B	S.E.	Wald	df	Sig.	Exp(B)
FS	1,270	,452	7,900	1	,005	3,559
FL	-,232	1,058	,048	1	,826	,793
CD	,667	1,083	,379	1	,538	1,948
IB	-6,705	3,090	4,709	1	,030	,001
CA	,041	,018	4,938	1	,026	1,042
II	,023	,009	6,453	1	,011	1,024
FFR	-,010	,014	,462	1	,497	,990
$\alpha$	-11,049	4,149	7,092	1	,008	,000
Nagelkerke R <sup>2</sup>	0,525					
Cox&Snell R <sup>2</sup>	0,393					

According to the results, the model is as follows:

$$AQ = -11,049 + 1,270FS + 0,232FL + 0,667CD - 0,010FFR - 6,705IB + 0,041CA + 0,023II$$

As seen in Table 3, variables like firm size, independent board member, company age and institutional investors' significance was less than 0.05. This means that the variables have a significant impact on the audit quality. Accordingly, the H<sub>1</sub>, H<sub>6</sub> and H<sub>7</sub> hypothesis is accepted, while the other hypotheses are rejected. Nagelkerke R<sup>2</sup> and Cox&Snell R<sup>2</sup> are used for disclosing the model with the all variables. Nagelkerke R<sup>2</sup> value is used usually because it is accepted more standardized than Cox&Snell R<sup>2</sup>. Accordingly, the model is explained %52,5 with this variables in the model. Therefore, it can be said that the explanation power of the variables of the model are high.

#### IV. Conclusion

Informations about companies reach to stakeholders and shareholders after independent auditing process. Information obtained after auditing can effect the decision making of interest groups. If the independent auditing has a quality process, interest groups can make an effective decision. And also it is accepted that if there is corporate governance has a positive effect on auditing quality. In this study, it is explored the relationship between corporate governance and audit quality in the publicly listed companies in manufacturing sector. Variables that represent corporate governance firm size, duality, company age and institutional investors are found that have positive effect on audit quality. Therefore, it can be said that the increase in this variables increases the auditing quality in manufacturing sector. This study has just one year data. So, more datas includes more than one year can be studied in the future. And also, another companies from another sectors can be added to the future works about relationship between audit quality and corporate governance.

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