

Effects Of Corporate Governance Level On The Financial Performance Of Companies: A Research On BIST Corporate Governance Index (XKURY)

Kurumsal Yönetim Düzeyinin İşletmelerin Finansal Performansı Üzerindeki Etkisi: Borsa İstanbul Kurumsal Yönetim Endeksi (XKURY) Üzerine Bir Araştırma

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ABSTRACT

Purpose of the study is to analyze the effect of corporate governance on financial performance. For this purpose, the relationship between the financial performance and corporate governance level of companies listed on XKURY index in the period of 2006-2012 have examined using panel data analysis. Financial data used in the study is derived from annual financial reports published on Public Disclosure Platform web site and corporate governance rating scores are derived from Turkish Corporate Governance Association. Results show that; there is a statistically meaningful and positive relationship between corporate governance rating score and Tobin's q value and also leverage ratio. On the other hand, results are showing that there is no meaningful relationship between corporate governance level and return on equity ratio, return on assets ratio, return on sales ratio and net profit.

Keywords: Corporate Governance; Financial Performance; Corporate Governance Index; Panel Data Analysis; Turkey

ÖZET

Bu çalışmanın amacı kurumsal yönetim uygulamalarının finansal performans üzerindeki etkilerini analiz etmektir. Bu amaçla 2006-2012 yılları arasında XKURY endeksinde bulunan şirketlerin kurumsal yönetim seviyeleri ile finansal performansları arasındaki ilişki panel veri analizi kullanılarak açıklanmaya çalışılmıştır. Çalışmada kullanılan finansal veriler, şirketlerin Kamuyu Aydınlatma Platformunda yayınlanan yıllık finansal raporlarından ve Türkiye Kurumsal Yönetim Derneği'nin internet sitesinden elde edilmiştir. Bulgular, kurumsal yönetim derecelendirme notu ile Tobin's q oranı ve kaldıraç oranı arasında istatistikî olarak anlamlı ve pozitif yönlü bir ilişki bulunduğu göstermektedir. Diğer taraftan, özsermaye karlılığı, aktif karlılığı, satış karlılığı ve net kar ile kurumsal yönetim düzeyi arasında anlamlı bir ilişkiye rastlanmamıştır.

Anahtar kelimeler: Kurumsal Yönetim; Finansal Performans; Kurumsal Yönetim Endeksi; Panel Veri Analizi; Türkiye

1. INTRODUCTION

The concept of corporate governance, come into the agenda of companies especially after the financial reporting scandals such as Enron, Worldcom, Parmalat. Managers who work for their own interests instead of shareholders' interests were shown as the cause of these crises. It was argued that there are no adequate control mechanisms for managers in companies. As a result, Organization for Economic Co-operation and Development (OECD) constituted a working group in order to determine the views of its members' and identify non-binding guidelines about corporate governance in 1998. The purpose of setting these guidelines was to create a directive platform for its members about legal regulations and other regulatory operations related to "corporate governance" activities. Two main points were stressed; (1) principles were open to change by time and (2) although these principles were focused on

the publicly traded companies it would be also useful for companies that are not publicly traded or government-owned companies. After being approved in 1999, "OECD Principles of Corporate Governance" became an international source of reference for companies, investors, stakeholders and decisions-makers. Besides, many countries including developed economies, has reviewed their management activities. For example; United States of America (USA), has put a new law into action named "Sarbanes- Oxley Act" in order to improve corporate governance activities. In Germany, corporate governance principles are legislated. Similarly also in Russia and Japan corporate governance principles are started to be implemented (OECD, 1999; OEDC, 2004; Selvaggi and Upton, 2008).

Correspondingly, corporate governance practices have become widespread also in Turkey. In 2002, under the leadership of Turkish Industrialists and Businessmen's Association (Türkiye Sanayici ve İşadamları Derneği), Corporate Governance Working

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Group has been created. This working group has constituted "Corporate Governance-The Good Practice Code: The Structure and Functioning of Board of Directors". This code provided a roadmap for formation and agenda of board of directors' on issues such as creation, implementation, and establishment of corporate governance practices in companies within the framework of a corporate constitution. The principles of this code, has been considered as a starter for the implementation of corporate governance in Turkey. Moreover in 2003 Capital Markets Board of Turkey (CMB), based on the OECD principles, has published "Corporate Governance Principles" for Turkey and amended in 2005 and 2011 parallel to the revised OECD Principles (2004).

Becoming an important topic for investors, companies and governments corporate governance is now recognized as one of the most important criteria for creating economic growth both at country and company level (The HHH Royal Commission Report, 2003). OECD, declares that the existence of corporate governance system increases the effectiveness of market economy. As it is emphasized by LaPorta et al. (1999); companies in developing economies have weak governance, but good corporate governance can give the opportunity of achieving foreign companies and markets for domestic companies. Also; by this way foreign companies can have the chance of enhancing investment opportunities. Rajagopalan and Zhang (2009) states that companies having good corporate governance level are more attractive for investors than the ones which do not practice corporate governance efficiently (Selvaggi, M and Upton, 2008). Also it is stated that if the rights of them are protected, investors will be more willing to invest in companies Brown and Caylor, 2006; LaPorta et al., 2000). According to all these, it is assumed that corporate governance activities of companies have a positive impact on firm performance. Based on this, this study aims to investigate this relationship in a developing country, Turkey. For this purpose, the relationship between the financial performance and corporate governance level of companies listed on XKURY index in the period of 2006-2012 have examined using panel data analysis. The results of the study show that; there is a statistically meaningful and positive relationship between corporate governance rating score and market-to-book ratio and also leverage ratio. On the other hand, results of the study reveal that there are no meaningful relationships between corporate governance level and return on equity ratio, return on assets ratio, return on sales ratio and net profit.

The remainder of the paper is structured as follows: In section two, the relevant literature was analyzed. Section three presents the data and the methodology of the study and includes the empirical analysis. And the final section concludes with the results and discussions.

2. LITERATURE REVIEW

In the literature, there are various definitions of corporate governance emphasizing different aspects. For example; Kirkpatrick and Jesover (2005) defines corporate governance in a financial and economic aspect and states that "corporate governance is a set of rules and applications governing the relations between employees and creditors as well as managers and shareholders; contributes to the growth and financial stability by supporting market confidence, integrity of financial markets and economic efficiency". On the other hand, there are also definitions in macro level. For example, Oman et al. (2003) defines corporate governance in a country related aspect and declares that "corporate governance comprises a country's private and public institutions which together govern the relationship between the people who manage corporations and all others who invest resources in corporations in the country. Also in Cadbury Report (1995) it is stated that "corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals". Corporate governance has also been defined as "a system which corporations are directed and controlled focusing on the internal and external corporate structures with monitoring managerial activities and minimizing the agency risks which may stem from the misdeeds of corporate officers" (Sifuna, 2012).

Addition to these; the definition of corporate governance is given in OECD Reports: "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs" (OECD,1999; OECD, 2004).

Corporate governance can be accepted as a critical factor for improving efficiency and growth by attracting investors to the company. Investors can feel confidence in investment decisions with companies having a high level of corporate governance. Also corporate governance can shape the relationships between company's managerial level, its board, its shareholders and other stakeholders (OECD, 2004).

Besides, corporate governance helps organization for setting/achieving goals and monitoring performance of companies operations.

The Corporate Governance Principles published by OECD in 1999 consist of four basic sections; shareholders, disclosure and transparency, stakeholders and board of directors. First section discusses the principles on shareholders' rights and their equal treatment. Issues such as shareholders right to obtain and evaluate information, right to participate in the general shareholders' meeting and right to vote, right to obtain dividend and minority rights are included in detail in this section. Second section discusses the principles for establishment of information policies in companies with respect to shareholders and the adherence of companies to these policies. Third discusses the principles to regulate the relationship between the company and its' stakeholders. The last section discusses principles concerning functions, duties, obligations, operations and structure of the board of directors; remuneration thereof, as well as the committees to be established to support the board operations and the executives (OECD,1999).

The 1999 Principles had revised by OECD considering varying legal, economic and cultural circumstances in 2004. The extended principles include six sections namely: I) Ensuring the basis for an effective corporate governance framework; II) The rights of shareholders and key ownership functions; III) The equitable treatment of shareholders; IV) The role of stakeholders; V) Disclosure and transparency; and VI) The responsibilities of the board.

It is emphasized that there is no single model prevailing for every country about applying principles. According to this; policy makers can consider their own country specific circumstances such as economic, social, legal and cultural aspects. However in all corporate governance approaches equality, transparency, accountability and responsibility concepts are essential. In Turkey, the principles that declared by CMB (2011) are categorized in four main sections as; shareholders, public disclosure and transparency, stakeholders and board of directors. The aim of shareholders section is to improve and protect shareholders rights. According to this, this section discusses facilitating the exercise of shareholders' statutory rights, shareholders right to obtain and evaluate information, the right to participate in the general shareholders' meeting, voting rights, minority rights, dividend rights, transfer of shares, equal treatment of shareholders. The aim of the principle on public disclosure and transparency is to provide shareholders and investors accurate, complete, comprehensible and easy

to analyze information which is also accessible at a low cost and in a timely manner. Based on this, public disclosure and transparency section discusses principles and means for public disclosure, web site, annual report section. The aim of stakeholders section is to compose the relations between the company and stakeholders. For this purpose this section discusses company policy regarding stakeholders, stakeholders' participation in the company management, and company policy on human resources, relations with customers and suppliers social responsibility and ethical rules. The aim of board of directors' section is to organize the functions, duties, responsibilities and structure discuss fundamental functions of the board of directors, operating principles of board of directors, organizational structure of board of directors, form of board of directors' meetings, committees established by board of directors, financial benefits provided to board of directors, its members and senior executives (Official Gazette n. 28158, d. 2011).

In related literature, the discussion on the effect of corporate governance on firm's are analyzed in three aspects: the situation of developed countries, the situation of developing countries and the effects of crises. Although most of the studies confirm a positive link between good corporate governance practices and firm performance, there are also studies suggesting mixed results or even no relationship between two concepts.

There are various studies analyzing the relationship between corporate governance and firm performance. Wilkes(2004) looks at the issue of governance measurement and how performance measures need to be supplemented by contextual information on the business and its situation. According to Wilkes(2004), measures should be unique to the organization and its competitive strategy. Also, boards need to measure the external perception of their governance practices. For example, in their studies Brown and Caylor (2004) created a measure of corporate governance (Gov-Score) which is a composite measure of 51 factors encompassing eight corporate governance categories: audit, board of directors, charter/bylaws, director education, executive and director compensation, ownership, progressive practices, and state of incorporation. They related Gov-Score to six performance measures over three categories: operating performance (return on equity, net profit margin, sales growth); valuation (Tobin's q); and shareholder payout (dividend yield, stock repurchase). Analyzing the 2327 US companies based on data of Institutional Shareholder Service (ISS) their findings indicate that better governed companies are relatively more prof-

itable, more valuable and pay more cash to their shareholder while poorly governed companies had lower operating performance and paid out less cash to shareholders.

In Great Britain, Selvaggi and Upton (2008) examined the correlation between good corporate governance, operating performance and share-price returns for United Kingdom listed companies between 2003 and 2007. Their findings show a positive relationship between good corporate governance and superior company performance (Selvaggi and Upton, 2008). According to Berthelot et.al.(2010), the corporate governance rankings of companies are also one of the considerations of investors when evaluating stock prices. Analyzing 289 Canadian firms in the four-year period 2002-2005, Berthelot et.al.(2010) show that the corporate governance rankings published by the market information intermediary are related to not only firm market value, but also to accounting results. Analyzing the relation between good corporate governance and firm performance, Shank et al (2013) show that good governance is correlated with risk-adjusted returns on the stock price in periods of three, five and ten years in small cap stocks of the US stock market.

Brown (2009) focused on the association between corporate governance and financial performance for the top 300 companies in Australia. Examining the relationship between a company's adoption of the Australian Securities Exchange (ASX) Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations (ASX Corporate Governance Principles) and financial performance she found that companies with better corporate governance outperform than poorly governed companies, particularly in relation to earnings per share and return on assets (Brown, 2009).

Mitton (2002) emphasizing the effect of crises, found that corporate governance has strong impact on firm performance during East Asian Crisis in 1997 and 1998 using firm level data on 398 listed companies from Indonesia, Korea, Malaysia, Philippines and Thailand. Also, Johnson et al. (2000) found that weak legal institutions for corporate governance have an effect of exacerbating the stock market declines during the 1997 East Asian financial crisis. They report that in countries with weaker investor protection, net capital inflows were more sensitive to negative events that adversely affect investors' confidence (Johnson et al., 2000). Similarly Bae et al. (2012) presented that during the Asian financial crisis, companies with weaker corporate governance experience a larger drop in their share value. Kowalewski (2012)

also emphasized that corporate governance showing its importance, especially during a financial crisis.

In his study Black (2001), drawing attention to developing countries' situation argues that larger effects of corporate governance practices on firm performance are likely to be found in developing countries because these countries often have weaker rules and larger variations between companies in corporate governance practices. In Korea, Black, Jang and Kim (2003) constructed a corporate governance index based on six dimensions: shareholder rights; board of directors; outside directors; audit committee and internal auditor; disclosure to investors; and ownership parity (Black et al., 2003). Analyzing 526 companies they found that better corporate governance ratings were linked to higher firm value (measured by Tobin's q), and higher security prices for Korea Stock Exchange companies. Similarly Ntim(2003), in his study examining 169 companies between 2002 and 2007 in South Africa found that statistically significant and positive association between good corporate governance practices and financial performance.

There are also mixed results about corporate governance practices on firm performance. For example in his study Amba (2012) found that while CEO duality, proportion of non-executive directors and leverage has negative influence, board member as chair of audit committee and proportion of institutional ownership has positive influence on companies' financial performance. Similarly, in their study Wu et al. (2009) demonstrated that firm performance is in negative and significant relation with CEO duality, board size, stock pledge ratio and deviation between voting right and cash flow right. On the other hand, firm performance is in positive and significant relation to board independence and insider ownership.

There are also studies examining this relationship in Turkey context. Meydan and Basım (2007)'s study show that companies implementing corporate governance principles, especially the principles of transparency and shareholder rights tend to have high financial performance. Despite to this, other sub-headings of the corporate governance principles found to be inconsistent with each other (Meydan and Basım, 2007). Gürbüz et al. (2010) analyzing 164 Real Sector companies on the Istanbul Stock Exchange (ISE) for 4 year period from 2005-2008 with panel data analysis found a positive impact of corporate governance and institutional ownership on financial performance. Examining the period of 2006-2010 time, Ergin (2012) also suggests that corporate governance rankings are positively and significantly associated with the financial performance of companies. On the other hand,

studies that suggest no significant relationship between corporate governance and firm performance also exists. For example in their study Coşkun and Sayılır (2012), analyzed the relationship between profitability performance and corporate governance of 31 Turkish companies and found that corporate governance does not have a statistically significant relationship with ROE or ROA.

Examining the Turkish literature, it is noteworthy that there are a small number of studies analyzing this relationship for a certain period of time with longitudinal research. Therefore, considering the period of 2006-2012, this study examines the relationship between the level of corporate governance and financial performance of companies listed on Borsa Istanbul (BIST) Corporate Governance Index using panel data analysis. In this context, it is expected that this study will contribute to Turkish literature.

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Data Set

Data used in the study are corporate governance rating scores belonging to institutions incorporated in the study and generally accepted financial performance indicators having high generalization degree.

Parallel to applications in the World, in our country, corporate governance principles have been comprised by Capital Market Board (CMB, 2003). Principles are composed of four main sections: shareholders, public disclosure and transparency, stakeholders and board of directors. Corporate governance principles rating score are given by rating agencies listed on CMB notified rating agencies list as a result of evaluation of compliance to all corporate governance principles of the company (www.borsaistanbul.com). In case rating agencies give 7 point over 10 according to evaluations in regards to company's corporate governance, the company is included to BIST Corporate Governance Index (www.borsaistanbul.com). For any company, calculation of corporate governance rating score is shown on Table 1.

Table 1: Calculation of Corporate Governance Rating Score of Companies

Corporate Governance Principles	Weight	Note Given by The Rating Committee (Average)	Allocated Note
Shareholders	25%	84,58	21,145
Public Disclosure and Transparency	35%	79,45	27,8075
Stakeholders	15%	89,68	13,452
Board of Directors	25%	70,96	17,74
Total	100%		80,1445

Financial performance refers to the act of performing financial activity and the degree to which financial objectives being or has been accomplished. In order to evaluate financial condition and performance of a firm, the financial analyst needs some financial indicators to be applied on various financial aspects. Financial performance indicators used in this study are as follows:

- 1) Market-to-Book Ratio
- 2) Return on Equity (ROE) Ratio: $\text{Net Profit After Taxes} / \text{Total Shareholders' Equity}$
- 3) Return on Assets (ROA) Ratio: $\text{Net Profit After Taxes} / \text{Total Assets}$
- 4) Return on Sales (ROS) Ratio: $\text{Net Profit After Taxes} / \text{Net Sales}$
- 5) Leverage Ratio: $\text{Total Debt} / \text{Total Assets}$
- 6) Net Profit

3.2. Purpose and Scope of the Research

Purpose of the study is to analyze the effect of

corporate governance on financial performance of XKURY companies between years 2006-2012. The reason that the study covers years 2006-2012 is that, XKURY index has been started to be calculated as of year 2006 in our country. In the study firstly public companies have been determined which are on XKURY index between years 2006-2012 continuously. As the reporting system is different, banks and financial leasing companies have not been included in the analysis, analysis has been realized on 33 companies. Companies included in the analysis are listed on Appendix-1. Financial data used in the application of the study are derived from annual financial reports published on Borsa Istanbul web site (www.borsaistanbul.com) and Public Disclosure Platform web site (www.kap.gov.tr); and corporate governance rating scores are derived from Turkish Corporate Governance Association (www.tkyd.org.tr). Analysis is made by using Stata 10 program.

3.3. Research Method and Models

In this study to determine the effect of corporate governance on financial performance, panel data analysis method that combines horizontal profile observations of the companies between years 2006-2012, has been used.

As the number of institutions included in Corporate Governance Index varies per years, panel data set used has unbalanced panel data characteristic and regression models used are as follows:

Model 1: Corporate governance level effect on market-to-book ratio

$$MBR_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

Model 2: : Corporate governance level effect on ROE

$$ROE_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

Model 3: Corporate governance level effect on ROA

$$ROA_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

Model 4: Corporate governance level effect on ROS

$$ROS_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

Model 5: Corporate governance level effect on leverage ratio

$$D/A_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

Model 6: Corporate governance level effect on net profit

$$NP_{i,t} = \beta_0 + \beta_1 CGR_{i,t} + \epsilon_i$$

In the models, corporate governance rating score (CGR) is independent variable; whereas market-to-book ratio, return on equity, return on assets, return on sales, leverage ratio, rate of increase in net profit value data related to financial performance indicators, are dependent variables.

3.4. Analysis and Findings

3.4.1. Descriptive Statistics

In Table 2, descriptive statistics of independent and dependent variables are given.

Table 2: Descriptive Statistics

VARIABLE	MIN	MAX	MEAN	STD. DEV.
CGR	70.75	92.44	84.08311	4.392323
MBR	0.0093	4.9202	1.680776	1.065877
ROE	-1.1261	0.4657	0.0969706	0.2017911
ROA	-0.2556	0.2241	0.050488	0.783684
ROS	-0.4574	8.9138	0.205732	0.8915673
D/A	0.0018	0.8511	0.519261	0.2060641
NP	-235.684.263	293.202.668	24.092.638	64.345.795,39

As shown on Table 2, corporate governance rating score for included institutions in the analysis is 92.44 the highest and 70.75 is the lowest. For years included in the analysis, one of the growth indicators of institutions, market-to-book ratio has the lowest value 0.0093, the highest value 4.9202 and mean value 1.68. Return on equity ratio, comparing after tax profit of the institution and owner's equity paid to institution by shareholders (Van Horne and Wachowicz, 1995), is approximately 9%. Return on assets ratio,

showing how effective the institution uses its actives in its operations, in other words, how much income derived from actives (Peterson, 1994) is approximately 5%. Return on sales ratio, reflecting net income received from sales over each money unit is approximately 20% (Van Horne and Wachowicz, 1995). Leverage ratio, reflecting actives financed with debt (Robinson et al., 2004) has the highest value of 0.85 and lowest value of 0.0018. The lowest net profit is -235.684.263 TL whereas the highest net profit is 293.202.668 TL and averagenet profit is 24.092.638 TL.

3.4.2. Panel Data Analysis

The results of Breusch- Pagan Lagrange Multiplier Test is shown on Table 3 applied to determine either

the simple OLS regression or fixed effect regression is more convenient in estimation of models used in the analysis:

Table 3: Breusch- Pagan Lagrange Multiplier Test

VARIABLE	chi2(1)	Prob>chi2
MBR	51.27	0.0000
ROE	34.68	0.0000
ROA	38.18	0.0000
ROS	16.03	0.0001
D/A	106.36	0.0000
NP	36.5	0.0000

When the results on Table 3 is examined, H_0 (Breusch- Pagan Lagrange Multiplier Test pool model shall be used for all models) is rejected meaning that the random effect regression is more appropriate for our data for all models.

Subsequently, Hausman's specification test is performed to compare fixed effect and random effect regressions in estimation of models. The results of Hausman Test are shown on Table 4:

Table 4: Hausman Test

VARIABLE	chi2(1)	Prob>chi2
MBR	0.01	0.9111
ROE	1.08	0.2983
ROA	0.2	0.6554
ROS	2.67	0.1021
D/A	0.03	0.8590
NP	0.03	0.8615

According to the Hausman test, the null hypothesis is not rejected, and the random effect regression is appropriate for the models. To obtain unbiased statistical inference, the estimated random effects models are analyzed in terms of autocorrelation and heteroscedasticity. Autocorrelation existence in models is tested with Durbin-Watson test. Test results may be seen on Table 5.

Table 5: Durbin-Watson Test

VARIABLE	Durbin-Watson
MBR	1.4392003
ROE	2.0039575
ROA	1.8624767
ROS	2.8419275
D/A	1.6833369
NP	1.6861827

Table 7: Panel Corrected Standard Errors Models

VARIABLE	COEFFICIENT	STD.DEV.	z-statistics	p-value	R-squared	Prob>chi2
MBR	0.0606322	0.212098	2.86	0.04	0.0624	0.0043
ROE	0.0057509	0.003713	1.55	0.121	0.0157	0.1214
ROA	0.0019878	0.001317	1.51	0.131	0.0124	0.1312
ROS	-0.0095131	0.011945	-0.8	0.426	0.0022	0.4258
D/A	0.0071812	0.002815	2.55	0.011	0.0234	0.0107
NP	1.797.763	1.324.293	1.36	0.175	0.0151	0.1746

According to random effects model corrected with panel PCSE, there is a meaningful and positive relationship, at the 5% level, between corporate governance rating score and market-to-book ratio and leverage ratio. In other words, as corporate governance level increases, market value and leverage ratio of the institution increases. However, there is no meaningful relation between corporate governance level and institutions' return on equity ratio, return on assets ratio, return on sales ratio and net profit.

4. CONCLUSION

In this study, corporate governance level effect is researched on financial performance of institutions included in BIST Corporate Governance Index between years 2006-2012 and data of the said institutions have been analyzed with panel data analysis.

When test results are examined, we can see on models 1, 3, 5 and 6, there is autocorrelation.

Heteroscedasticity problem existence in models is tested with Levene, Brown and Forsythe's tests. Test results can be seen on table 6:

Table 6: Levene, Brown and Forsythe's Tests

$w_0=4.3118429$	df(32,86)	Pr>F=0.00000003
$w_{50}=2.8037344$	df(32,86)	Pr>F=0.00008217
$w_{10}=4.3118429$	df(32,86)	Pr>F=0.00000003

By comparing Levene, Brown and Forsythe test statisticals (w_0, w_{50}, w_{10}) with Snedecor F table with (32,86) degrees of freedom, H_0 (variance of units are equal) is rejected. As a result, there is heteroscedasticity problem in the models. When the results on Table 3 is examined, H_0 (Breusch- Pagan Lagrange Multiplier Test pool model shall be used for all models) is rejected meaning that the random effect regression is more appropriate for our data for all models.

To obtain an unbiased statistical estimation, the panel corrected standard errors (PCSE) method is carried out. Results can be seen on Table 7:

Results show that, there is a statistically meaningful and positive relationship between corporate governance rating score and market-to-book ratio. This result can be interpreted as the price of stocks of institutions accommodating to corporate governance principles increases hence market value also increases. In other words, as investors are considering corporate governance level of the institutions while giving investment decisions, positive changes in corporate governance levels adds positive value on their market values.

Another fact received as a result of this analysis is the meaningful and positive relationship between corporate governance rating score and leverage ratio. According to this result, it can be said that institutions having higher corporate governance level are more reliable for creditors which means better managed

institutions can have more capability of borrowing as a result of reputation by investors' confidence in the institution. However, when leverage ratio is over market averages, the fact that it will increase the financial risk of the institution shall not be disregarded.

The other results of this study are showing that there is no meaningful relationship between corporate governance level and return on equity ratio, return on assets ratio, return on sales ratio and net profit. This result can be explained by the indirect relationship between financial performance indicators which are discussed (ROE, ROA, ROS, NP) and corporate governance activities of companies. Another reason can be the theme of corporate governance rating score. Because of this multi-component structure of corporate governance it might not be relevant for directly relating corporate governance variable to financial performance variables. More significant results can be expected with the use of single indicators of corporate governance.

Adding to these, it is obvious that corporate governance practices have not become sufficiently widespread in Turkey yet. It is undeniable that to examine the relationship between corporate governance level and financial performance in detail with more comprehensive analysis, the number of companies listed on BIST Corporate Governance Index should be more than today. In future years, along with the widespread application of corporate governance practices in Turkey it is expected that the growing number of companies listed in BIST Index will help to extend the scope of research in this area. We project that this study can provide insight about the situation of a country that the corporate governance practices are newly being widespread. In this context we believe that this study will set light to researches to be made in the future.

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Appendix-1: Company List

Anadolu Efes Biracılık ve Malt Sanayi A.Ş.	Logo Yazılım Sanayi ve Ticaret A.Ş.
Arçelik A.Ş.	Otokar Otobüs Karoseri A.Ş.
Aselsan Elektronik Ticaret A.Ş.	Park Elektrik A.Ş.
Aygaz A.Ş.	Petkim Petrokimya Holding A.Ş.
Boyner Büyük Mağazacılık A.Ş.	Pınar Entegre Et ve Un Sanayi A.Ş.
Coca Cola İçecek A.Ş.	Pınar Süt Mamulleri Sanayi A.Ş.
Dentaş Ambalaj ve Kağıt Sanayi A.Ş.	Tav Havalimanları Holding A.Ş.
Doğan Şirketler Grubu Holding A.Ş.	Tofaş Türk Otomobil Fabrikası A.Ş.
Doğan Yayın Holding A.Ş.	Turcas Petrol A.Ş.
Doğuş Otomotiv A.Ş.	Tüpraş Türkiye Petrol Rafinerileri A.Ş.
ENKA İnşaat ve Sanayi A.Ş.	Türk Prysmian Kablo ve Sistemleri A.Ş.
Global Yatırım Holding A.Ş.	Türk Telekomünikasyon A.Ş.
Hürriyet Gazete A.Ş.	Türk Traktör ve Ziraat Makineleri A.Ş.
İhlas Ev Aletleri A.Ş.	Vakıf Yatırım Ortaklığı A.Ş.
İhlas Holding A.Ş.	Vestel Elektronik A.Ş.
İş Gayrimenkul Yatırım Ortaklığı A.Ş.	Yazıcılar Holding A.Ş.
İş Yatırım Menkul Değerler A.Ş.	