The Effects of the Corporate Governance on the Level of Internet Financial Reporting: Evidence from Turkish Companies

Raif Parlakkaya, Umran Kahraman, Huseyin Cetin

Abstract—Internet financial reporting and corporate governance issues are in the focus of academic and professional studies due to their attributed importance by stakeholders of corporations. Major aim of this study is to reveal the relationship between internet financial reporting which is held as dependent variable and some indicators of corporate governance such as the ratio of managerial ownership, blockholder ownership, number of independent members in the board of directors, frequency of meetings by audit committee and education level of audit committee members which are held as independent variables. Main purpose is to reveal the effect of corporate governance on the voluntary efforts of Internet Financial reporting. The scope of the research is limited to the Turkish Corporations listed in Borsa Istanbul (Istanbul Stock Exchange) and findings which are generated by means of SPSS software are revealed in results section and interpreted in conclusions.

Keywords—Audit Committee, Corporate Governance, Internet Financial Reporting, Managerial Ownership.

I. INTRODUCTION

IT might be claimed that fully disclosed and reliable information plays an important role in representing management's transparency and accountability in conducting the business. Companies traditionally use a paper-based reporting system to share any information to their stakeholders and usually publish their financial position through a set of financial statements for a specific period of time for interested groups such as creditors and shareholders in order to depict their business performance. During the past twenty years internet became an alternative media for entities in order to disseminate any information to their stakeholders. Upon the rise of internet media, financial reports become easily accessible not only for interest groups but also for the government agencies for the sake of regulatory purposes.

Internet financial reporting might be defined as the use of firms' web sites to disseminate corporate financial and performance information. This new approach is thought to be facilitating the process of additional equity gathering efforts of firms and could be used as a new instrument which might increase information sharing process and lure a broader number of investors. From the economic perspective, internet

Prof. Dr. Raif Parlakkaya and Asst. Prof. Dr. Umran Kahraman are Lecturers in Department of Business Adminastration, Necmettin Erbakan University, Konya, Turkey (e-mail: rpkaya@hotmail.com, uteksen@gmail.com).

Asst. Prof. Dr. Huseyin Cetin is a Lecturer in Department of Tourism Management, Necmettin Erbakan University, Konya, Turkey (e-mail: cetin.hsyn@hotmail.com).

financial reporting has some advantages. Use of internet media brought some advantages for the adopters and beneficiary stakeholders such as favorable changes regarding to the cost of information process and dissemination of financial information in capital markets, improved availability of financial information to all users and reduced time spent on responding information requests [1], [2]. Meaning that, interested parties will be able to reach financial reports and other information about firms without any concern and with little cost. Additionally publishing more up-to-date information and as an ultimate goal increasing efficiency and effectiveness and reducing information asymmetry are other motives for the adoption of internet financial reporting. Thus, having these advantages, companies are more willing to utilize internet for financial reporting.

As the number of corporations using internet financial reporting increased worldwide, the situation in Turkey seemed to be progressing the same as the world and the number doubled in the years between 2003 and 2010 [3]. The new Turkish Commercial Code which is regulated in 2012 also requires audited firms with shared capital to have official web sites and disseminate information such as announcements designated for mandatory publishing by regulations on their own websites. Identities of chairs and board members of corporations, subscribed and paid-in capital amounts are some other basic obligations regarding to internet financial reporting mentioned in recently introduced commercial codes.

The issue of corporate governance has become crucial over the years for firms regarding to the declarations of their business performances and future expectations. It might be expressed that corporate governance refers to the set of systems, principles and processes by which a company is governed [4]. This set of components provide the guidelines as to how the company can be managed or controlled such that it can fulfill its goals and objectives in a manner that adds to the value of the company and are also beneficial for all stakeholders in the long term [4]. In other words corporate governance refers to a set of rules and releasing timely and reliable financial information is one of these rules. Upon the participation of some experts, academicians, auditors and regulators to the study of [5], the general consensus was thought to be that financial reporting package would be a general purpose and disseminated as standardized information. Financial information submitted to the examination of stakeholders might be evaluated as the outcome of corporate accounting system and external reporting efforts of the

corporations within the context of corporate governance [6]. Corporations interested in IFR are striving to make their financial information available to investors and regulators and other stakeholders in a transparent manner.

Reference [7] state that corporations adopt IFR based on specific motives, for instance publishing current information, can increase efficiency and effectiveness of firms. IFR is an example of total disclosure that is aimed at weakening the information asymmetry between shareholders and management of a firm [8]. This is a way to reduce agency problems. Agency problems arise if the manager of a firm is not engaged in maximizing shareholders 'market value and if the shareholders feel doubtful about manager's behavioral tendency [9].

The relation between internet financial reporting (IFR) and corporate governance in Turkey will tried to be analyzed in this study. Borsa Istanbul (Istanbul Stock Exchange) set up the Corporate Governance Index (CGI) in 2007 with the intent of measuring the level of firms' commitment with respect to corporate governance principles. The principles framework might be prescribed as: Shareholders' rights, Public disclosure and transparency, Interest groups (Stakeholders) and Board of Directors. Each company is rated according to their policies and procedures related to these issues.

This study is designed in order to reveal if there is negative relation between IFR and the ratio of the managerial ownership in a company; if large shareholders' ownership has negative impact on IFR; if there is a positive linkage between IFR and number of independent members in the board of directors; if there is a positive relation between IFR and the frequency of meetings by audit committee; and if there is a positive relation between IFR and the education level of members of auditing committee. Framework for the principles mentioned in the previous paragraph is taken into account as the focus of this research. Study design is based on the previous study of [10]. Data gathered from 31 Corporations listed in Borsa Istanbul are analyzed and findings are revealed and concluded in a comparative manner with the studies of [7], [10]-[12].

II. LITERATURE REVIEW

Reference [7] examined the relation between corporate governance mechanisms and disclosure transparency measured by the level of IFR behavior. The authors take corporate governance framework of shareholder rights, ownership structure, board composition and audit committee characteristics for determining the degree of corporate governance. It might be said that their study resulted in a disclosure index, which is to be used for measuring each firm's IFR presentation format and corporate governance disclosure. Their results suggest that, firms with weak shareholder rights, a small proportion of block holder ownership, a higher proportion of independent directors, a more diligent audit committee is thought to be more likely to engage in internet financial reporting. The authors also suggest that firms with good corporate governance can affect the level of internet disclosure behavior positively and this is evaluated

as a response in order to reduce agency costs between management and investors.

Another research that investigates how several characteristics of corporate governance determine timeliness of corporate internet reporting is prepared by [13]. In their work, they reported that timeliness of corporate internet reporting has a positive correlation with board experience but it has a negative correlation with board independence in the United Kingdom.

When analyzing the situation in Malaysia, [14] examined the interrelation between corporate governance structure, ownership, internet visibility and internet financial reporting. By using regression model, they reveal that internet financial reporting is positively related to independent non-executive directors, directors with accounting and business qualification, board size and shareholders numbers. The authors report that their findings suggest competent directors and accounting professional are maintaining reporting practices for a healthy response against any uncertainty in technology.

In their research, [9] analyzed the determinants of internet financial reporting within the context of corporate governance. The study addresses the question of which governance model disclosures are more related to the IFR. The authors state that for the sake of IFR adoption in a country, physical and institutional infrastructures (computer and telecommunication technology) are important determinants. Their further conclusion reveal that corporate governance structure that partly determine the speed of distribution of information requested by firms' stakeholders, is found to be an important role in adoption of IFR.

Reference [10] probed if corporate governance principles; ownership, independent commissioners and audit committee characteristics, affect the level of voluntary disclosure of internet financial reporting or not. By using purposive sampling method for Indonesian companies, they conclude that among the principles of corporate governance only audit committee meeting frequencies have influences on voluntary disclosure of IFR.

III. PROCEDURE

A. Hypotheses

Corporate governance mechanism consists of hypotheses in this research. These would be ownership in management, block holder ownership, membership of board of directors and the characteristics of audit committee as such that education level of the auditing committee and frequency of meeting and the relation of all these mechanism with IFR. While constructing the hypotheses of this research the research design of reference number [10] is adopted and accepted as a model.

H1: There is negative relation between IFR and the ratio of the managerial ownership in a company.

Investors who are in the management of the company have advantage regarding to the use of information and knowledge acquisition when compared to other investors. Increasing shareholders value means increased welfare of management as

a result [15]. However, due to asymmetric information between shareholders and managers, there would be some limitation on information dissemination [10].

H2: Blockholder ownership affects IFR in a negative way.

Blockholders are likely to be more active in firm management due to their large shares [15]. And as they actively engage in management, they can prevent any opportunistic behavior by firm management [10]. On the other hand, large block shareholders can influence management and can also access firm's resources easily [16] and this might disrupt information distribution. Hence, investors who hold large ownership will affect IFR negatively.

H3: There is positive relation with the number of independent members in the board of directors and IFR.

As the number of independent members in the board of directors increase, possibility of preserving information within the management might weaken [7]. So, the level of publishing firm's financial reporting will increase as the number of independent members increase in the management.

H4: The frequency of meetings by audit committee will affect IFR level positively.

When firms have a minimum of four audit committee meetings in a year, the disclosure of financial control in management reports might be positively related [17]. Frequency of meeting will positively affect corporate governance application, internal control and efficiency of management control [10]. Thus, frequency of meetings has positive correlation with IFR level.

H5: The education level of audit committee has positive relation with IFR.

The audit committee should be composed of independent individuals who have the ability to evaluate financial statements and also these individuals will not take part in executive board [16]. Higher level of financial qualification will lead higher quality in reporting in audit committee [18]. IFR level has positive relation with the education level of audit committee.

B. Research Method

In this study, data gathered from corporations which are included in the Corporate Governance Index of Borsa Istanbul and listed in Borsa Istanbul BIST 100 index are analyzed. The number of firms is 31. The collected data are secondary data. Data belongs to the year 2013 and provided by means of firms' official websites.

While analyzing the effect of corporate governance mechanism on internet financial reporting, internet financial reporting is considered to be the dependent variable and corporate governance principles are considered to be independent variables. Subsequently, a multilinear regression is to be managed within the context of this research. IBM SPSS statistics software is to be used in order to conduct the analysis. Reference [20] used the Intercultural Development Inventory (IDI) scale to assess the level of internet financial reporting. The IDI is a 50-items questionnaire. Of this 50

question, 40 questions are about firm business context and the remaining 10 questions are about the information presentation. For each item presented in the web site of a firm 1 point is assigned. And finally, the average value of these scores is used as an indicator of internet financial reporting.

The independent variables in the regression model are; managerial ownership, blockholder ownership, independent member in the board of directors, frequency of audit committee meeting, education level of audit committee. In order to evaluate the financial performance of corporations some other explanatory variables such as firm size, profitability, liquidity and financial leverage are required to be incorporated to the research model [10]. This process increases the significance of the model. It might be stated that firms with higher profitability and liquidity ratios are expected to disclose more and transparent information caused by their willing to disclose their favorable positions. In general, firm size is perceived as an indicator of institutional constitution and perception of stakeholders regarding to detailed and more transparent disclosures by institutional organizations affect their disclosure willingness. On the other hand, higher leverage might result in more frequent and transparent information disclosure efforts by firms in order to maintain the information requirements of creditors and investors; so these firms might relief the concerns of stakeholders regarding to their financial performance and situation.

Managerial ownership means the ratio of equity, which represent the owners in the board of directors of company or affiliated companies. Shareholders that own at least 5% of equity of a firm defined as blockholder ownership. The number of independent members in a board of directors is measured as the ratio to entire members of board of directors. The frequency of audit committee meeting is calculated regarding the number of meetings in a financial year. The education level of audit committee is determined by specializations of committee members in economics, finance and accounting. Natural logarithm of firm assets provides firm size level. Firm profitability is measured as net profit over firm assets. Current ratio is calculated as the ratio of current assets to short-term liabilities and finally leverage ratio is determined as ratio of firm's total liabilities to total assets.

Multilinear regression equation would be:

$$IFR = \beta_0 + \beta_1 MOwn + \beta_2 LShare + \beta_3 IMem + \beta_4 FMeet + \beta_5 EdLev + \beta_6 FSize + \beta_7 Prof + \beta_8 CRatio + \beta_9 LRatio$$

where; MOwn: Managerial Ownership; LShare: large shareholder ownership; IMem: The number of independent members in board of directors; FMeet: Frequency of audit committee meeting; EdLev: Education level of audit committee; FSize: Firm size; Prof: Firm profitability; CRatio: Current ratio; LRatio: Leverage ratio.

Other than multilinear regression model, t-statistics and ANOVA were used to analyze IFR scoring as some variables can be converted categorical variables (categorical distribution). For instance, managerial ownership, independent members situated in board of directors, frequency of audit

committee meeting and the education level of audit committee members.

C. Results

Descriptive statistics of variables are given in Table I:

TABLE I
DESCRIPTIVE STATISTICS FOR VARIABLES

Variables	N	Min	Max	Mean	St.Deviation
IFR	31	0,48	0,86	0,68	0,09
MOwn	31	0	0,41	0,03	0,08
LShare	31	0,06	0,85	0,64	0,18
IMem	31	0	0,54	0,3	0,11
FMeet	31	4	43	6,07	7,15
EdLev	31	0	1	0,62	0,33
FSize	31	14,72	22,11	18,13	2,54
Prof	31	0,01	0,23	0,06	0,05
CRatio	31	0,35	7,5	1,64	1,27
LRatio	31	0,11	0,98	0,6	0,23

To determine the validity of multilinear regression model several assumptions should be tested. Lags in the model are evaluated by means of Kolmogorov- Smirnov's normality test. Whether there is multicollinearity problem in the model or not, Variance Inflation Factor (VIF) is employed and for heteroscedasticity, Spearman Rank Correlation Coefficient is utilized. As there is no time dependent variable in the model the autocorrelation in the model is not analyzed.

After conducting Kolmogorov- Smirnov test, data seems to be distributed normally as test's significance value is greater than 5% level (p= 0,808). Table II shows that multicollinearity problem is not detected when VIF test is used. According to Spearman test results, it is apparent that heteroscedasticity problem does not exist within the model.

TABLE II
REGRESSION ASSUMPTION RESULTS

Variables	VIF	Spearman test
MOwn	1,9	0,03
LShare	1,584	0,013
IMem	2,186	0,001
FMeet	1,589	0,148
EdLev	1,568	0,141
Fsize	1,375	0,043
Prof	1,359	-0,073
CRatio	2,404	0,004
LRatio	2,223	0,085

The outcomes of hypothesis tests for the regression model are given in Table III.

TABLE III
TESTING HYPOTHESES

Variables	Regression Coefficient	t-statistics
MOwn	**-0,045**	**-2.165***
LShare	-0,006	-0,332
IMem	**-0,047**	**-2.125***
FMeet	-0,014	-0,715
EdLev	0,007	0,382
Fsize	-0,025	-1,406
Prof	0,008	0,435
CRatio	**-0,071**	**-3.076****
LRatio	-0,018	-0,826

*: 5% significance level
**:1% significance level

If the regression results are evaluated it might be observed that the effect of managerial ownership, the number of independent members in board of directors and firms' current ratio seems to be significant on IFR. On the other hand other variables found to be not as significant or insignificant in relation to IFR.

The study's hypothesis that had suggested a negative relation between IFR and managerial ownership conform to the results attained. However, it could not be found that the same correct estimation between the number of independent members in board of directors and IFR, as a positive relation between the two variables is estimated, the linkage between the two turns out to be negative. Additionally, the same prediction failed in relation to IFR and current ratio to which a negative relation found.

In Table IV, variables are categorized in order to find any difference between IFR score averages. T-statistics and ANOVA are used in order to determine the differences. The difference test results suggest that there is no difference between IFR score and categorized variables.

TABLE IV
DIFFERENCE TEST

Variables	F	p-value
MOwn	2,244	0,125
LShare	0,412	0,666
IMem	0,404	0,672
FMeet	-0,796	0,433
EdLev	-0,635	0,53

Table V shows the group and IFR average score below.

TABLE V
AVERAGE IFR SCORES

Variables		Average IFR	Number of Observation
MOwn	<0.02	0,68	24
	0.02-0.10	0,74	4
	>0.10	0,6	3
LShare	<0.3	0,67	2
	0.3-0.50	0,6	1
	>0.50	0,684	28
IMem	<0.25	0,675	8
	0.25-0.35	0,692	17
	>0.35	0,653	6
FMeet	<4	0,671	23
	>4	0,705	8
EdLev	<0.5	0,671	17
	>0.5	0,691	14

IV. CONCLUSION

Corporate governance is not only important for business performance but also relevant in firm's transparency and disclosure policies, which will improve the understanding of the firm's structure, activities and its future prospects [19]. It might be said that Internet financial reporting is closely related with this concept because; the interested parties in general and investors particularly need firm's available information. After analyzing the level of Turkish firms' IFR on corporate governance mechanism, it is found that a negative relation with managerial ownership which is possible to be understood as owners of firms will not to release any negative news if

exist. The negative effect of managerial ownership on IFR found in Turkish Corporations is the same as the outcomes revealed in the study of [7] for the US companies. However, the positive relationship of IFR and the number of independent members in board of directors and current ratio contradicts the prediction of negative relation. On the other hand, [11] found this relation positive for Malaysian companies and [12] for Egyptian companies. As mentioned previously, this study revealed no relation between IFR and other variables used in the model. Findings revealed that there is not a significant relationship between block-holder ownership, the frequency of meetings by audit committee, education level of audit committee, explanatory variables excluding current ratio and internet financial reporting.

REFERENCES

[1] Wagenhofer, A., "Economic Consequences of Internet Financial Reporting" Schmalenbach Business Review, 2003, Vol 55 262-279.
[2] Debreceny, R., Gray, G., Rahman, A., "The determinants of Internet financial reporting" Journal of Accounting and Public Policy 21 (2002) 371-394.
[3] Bozcuk, A.E., Aslan, S., Arzova, S.B., "Internet Financial Reporting in Turkey" EuroMed Journal of Business. Vol:6, Issue:3 313-323, 2011.
[4] Lisa Mary Thomson, ET Bureau (2009), What is corporate governance?.http://articles.economictimes.indiatimes.com/2009-01-18/news/28462497_1_corporate-governance-satyam-books-fraud-by-satyam-founder. d.a. 23.02.2015.
[5] Jones, M.J., Xiao, J.Z., "Financial reporting on the Internet by 2010: a consensus view" Accounting Forum. 28 (2004) 237-263.
[6] Bushman, R.M., Smith, A.J., "Transparency, Financial Accounting Information, and Corporate Governance" FRBNY Economic Policy Review, April 2003.
[7] Kelton, S.A., Yang, Y., "The impact of corporate governance on internet financial reporting" Journal of Accounting and Public Policy.Vol 27 62-87 (2008).
[8] Ashbaugh, H., Johnstone, K.M., Warfield, T.D., "Corporate reporting on the internet" Accounting Horizone. 13 (3), 241-257, (1999).
[9] Ojah, K., Mokoteli, T.M., "Internet financial reporting, infrastructures and corporate governance: An international analysis" Review of Development Finance. 2 (2012) 69-83.
[10] Puspitaningrum, D., Atmini, S., "Corporate governance mechanism and the level of internet financial reporting: Evidence from Indonesian companies" Procedia Economics and Finance. 2 (2012) 157-166.
[11] Yap, K.H., Saleh, Z., Abessi, M., "International Financial Reporting and Corporate Governance in Malaysia" Australian Journal of Basic and Applied Sciences. 5 (10) 1273-1289, 2011.
[12] Ezat, A. (2009) "The Impact of Corporate Governance on the Timeliness of Corporate Internet Reporting by Egyptian Listed Companies". Proceedings of the Postgraduate Symposium (176-199). University of Plymouth Faculty of Social Science and Business.
[13] Abdelsalam, H.O., Street, D.L., "Corporate governance and the timeliness of corporate internet reporting by U.K. listed companies" Journal of International Accounting, Auditing and Taxation. Vol 6 111-130 (2007).
[14] Yap, K.H., Saleh, Z., Abessi, M., "International Financial Reporting and Corporate Governance in Malaysia" Australian Journal of Basic and Applied Sciences.5 (10) 1273-1289, 2011.
[15] Kula, V., "Kurumsal Yönetim: Sorunun Boyutları ve Beklenen Gelişmeler. C. C. Aktaniçinde, Kurumsal Şirket Yönetimi (s. 101-127). Ankara: Sermaye Piyasası Kurulu, (2006).
[16] Suer, H., "İMKB'de Kurumsal Yönetim ve Firma Değeri İlişkisinin Modellenmesine İlişkin Bir Uygulama. Doktora Tezi". İstanbul: İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, (2011).
[17] Abbott, L.J., Parker, S., Peter, G.F., Raghunandan, K., "The Association between Audit Committee Characteristics and Audit Fees". Auditing: A Journal of Practice and Theory. 22 (2) 17-32, (2003).
[18] Qasim, A., "Corporate Governance Mechanisms and Web-Based Investor Relations Activities: an Empirical Examination on Companies Listed in Abu Dhabi Stock Exchange" Research Journal of Finance and Accounting. 6-14, (2014).
[19] Stiglbauer, M. (2010) "Transparency & disclosure on corporate governance as a key factor of companies' success: a simultaneous equations analysis for Germany" Problems and Perspectives in Management. Vol: 8 Issue: 1, (2010).
[20] Loukas,S., Corporate Reporting on the Internet in a European Emerging Capital Market: The Greek Case", European Journal of Economics, Finance and Administrative Sciences , 1-23, (2006).

Prof. Dr. Raif Parlakkaya graduated from the Accounting Department of Faculty of Economics and Administrative Sciences (Gazi University-Turkey) with bachelor's degree in 1985. He has received my master's degree from the Institute of Social Sciences (Selcuk University) as Master of Science in Business Administration in 1992 and my doctoral degree in 1996. He has been lecturing Finance, Accounting and Cost Accounting.

Parlakkaya has published a lot of research papers and national and international presentations. He is also advisor of lots of postgraduate and doctoral student. He is a Dean of Tourism Faculty, Necmettin Erbakan University, Konya-Turkey.
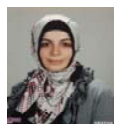
Asst. Prof. Dr. Umran Kahraman graduated from Faculty of Economic and Administrative Sciences (Selcuk University-Turkey) with bachelor's degree in 2005. She has received my master's and Phd degree from the Institute of Science (Selcuk University) in department of Statistics. Since July 2014 she had been in Necmettin Erbakan University, Konya-Turkey as Assistant Professor.

Kahraman has published 6 research papers and 4 national and 3 international presentations.

Asst. Prof. Dr. Huseyin Cetin graduated from Faculty of Economic and Administrative Sciences (Selcuk University-Turkey) with bachelor's degree in 1999. I have received my master's and Phd degree from the Institute of Social Sciences (Selcuk University) as Master of Science in Business Management. From September 2005 to March 2012 he has been lecturing Finance, Accounting, Auditing and Cost Analysis at Selcuk University. Since then he has been in Necmettin Erbakan University, Konya-TURKEY as Assistant Professor. He was in London, School of Business and Finance, for Postdoctoral Study between 2012-2013 for one year.

Cetin has published 12 research papers and 1 national and 12 international presentations. He is a chief of Department of Tourism Management, Coordinator of Mevlana Exchange Programme and Board Member of Social Sciences Institute.