A Research on the Association between Corporate Governance and Corporate Performance in Turkish Energy Sector

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***Abstract*—Today's harsh market conditions prompt companies to allocate the highest level of emphasis on corporate performance. However, in some cases interests of management and shareholders may clash. Subsequently providing investors with timely, accurate and valid information in today's ever changing economic environment is vital for transparency. Aim of this paper is to measure the association between corporate governance and corporate performance within companies in the energy sector listed at Borsa Istanbul (formerly known as Istanbul Stock Exchange).**

***Index Terms*—corporate governance, corporate performance, ethics, profitability**

I. Introduction

Increased competitiveness and systemic risks have made it difficult for firms to survive in the recently globalized world economy and the age of continuous development and innovation, in other worlds corporate performance has become more pronounced than ever. While Ettlingerand Patton [1]argue for an industrial development versus firm based development, they state that financial development influences corruption problems. Beck *et al.,* [2] state that firm size and value are crucial in decreasing corruption by financial development. In addition to this, Maskell [3] argues that business cycles and geographical conditions have an impact on firm performance. On the other hand Beugelsdijk [4] indicates firm-specific factors also have an effect on corporate performance on the innovation front. On a microeconomic level, corporate performance depends on many variables and one of these variables is ownership structure [5,6]. Keeping this in mind, we find especially principal/agent theory explains why some firms achieve better performance than others.

Principal/agent problem is the result of asymmetric information between shareholders and management and is strongly connected to ethical values of top management and internal audit quality in a firm. Meanwhile, corporate governance aims to strengthen corporations' operational and cultural infrastructure and the attitude of management towards a more transparent culture and decision-making processes.

Emergence of corporate governance has become inevitable in the light of recent scandals and volatile market conditions. Companies that have emphasized on transparent internal dynamics survived. Many different bodies define corporate governance, but OECD has published a set of rules that has become more generally accepted. Capital Markets Board of Turkey (CMB) has come up with its own set of corporate governance principles, which are again based on the OECD's corporate governance principles.

Eliminating the existing conflicts between managements and shareholders is the focal point of corporate governance. Since corporate governance is said to improve the body of corporate culture, internal controls and internal audit, it is possible to expect an association between corporate income and assets as a result of good compliance. The four pillars of corporate governance: transparency, ethics, morality and sustainability.

II. Literature Review

Objectives of management in some situations differ from those of the company's shareholders [7]. In the light of the recent scandals, it was clear that agents or managers in firms do not always act in favor of shareholders and focus on personal gains. Managers may choose to look toward short-term goals, manipulate accounting methods to increase profits artificially [8,9]. Such behavior feeds the ground to enhance ever-growing principal/agent problem. Curing this epidemic is a challenging task for businesses since it is relatively easy to get lured into the notion of individual-wealth maximization, which may simply take over the interest of the firm. Corporate governance, as an ideology mainly focuses on the duties and responsibilities of board of directors in managing the company and their relationships with the shareholders of the company and other stakeholder groups [10]. Though there is not one single precise definition is accepted on a worldwide scope, the set of rules published by OECD is regarded as valid. The most important part of these rules is transparency, which is public announcement of important information that can affect the stock price of the incorporation, thus affect shareholders' interests in turn. These announcements include news on financial information of the company, operations and management. Investors have the right to know what is going

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on in the company and compliance with corporate governance principles guarantees this [11]. In addition, any other significant information that is expected to affect the stock price should be announced to public timely; as to shareholders and investors have the same information at the same time and there is equality among shareholders, so that any abusive action in the Stock Market is prevented [8]. In this sense, corporate governance as an ideology incorporates transparency with all levels of decision-making processes within the firm. Corporate values, which can be defined as the ideology of the firm, are a set of highly important ingredients within the framework of corporate governance implementation [12].Undoubtedly, such an ideology, which aims to provide security for the shareholders, cannot function without business ethics. According to Vinten [13], business ethics is such a crucial ingredient of corporate governance that a consideration should be given to appointing a chief ethics officer or an ombudsman.

Sustainability, continuous cash flow, and strong profits are some of the focal objectives of every business. Each of these ingredients does contribute to the granter objective of maximizing the wealth of the shareholders as well. Lack of corporate governance increases the chance of failure; especially for family businesses since lack of transparency will create undefined job descriptions to encourage each family member to get involved in the business more. Given the high percentage of family businesses in the Turkish economy (95 per cent), successful implementation of corporate governance is one of the few chances to have these businesses avoid failure. Yu [14] argues that better-governed companies are associated with less risk from management and have value improvement potentials. Parkeret al., [15] state that relative to distressed firms, corporate governance attributes influence the likelihood of survival. Survival in the harsh market conditions requires awareness of not only internal dynamics but external factors as well. Corporate governance involves a strategic plan that interconnects social issues in management with financial performance. Through keen understanding of the business' activities at the business and society interface, businesses can use corporate governance as a tool to enhance corporate performance [16]. According to Downes and Gail [17], the demise of Enron was due in large part to a lack of ethics rather than a lack of regulations.

In the United States, the Sarbanes-Oxley (SOX) Act of 2002 regulates corporate governance, and firms listed on the New York Stock Exchange and the NASDAQ must now answer to their respective standards, which were approved by the Security and Exchange Commission in 2003.In Turkey, Capital Markets Board of Turkey (CMB) has also adopted the rules presented by OECD, which is mandatory for publicly held companies. CMB expects compliance with these rules and a periodical report to be announced to public on the Internet. Until recently, CMB has made a number of improvements in these principles, such as announcing the salary and bonus packages of top management and including an independent contributor to Board of Directors. With these improvements, it is possible to say that publicly held companies are expected to take corporate governance more seriously than family businesses.

Corporate governance is not only a tool that provides better risk management, but also helps with decision-making process by securing future cash flow. Varış et al., [18] state that stable and long lasting international capital flow grandly depends on corporate governance principles. Yu [14] argues that analysts are concerned about the effectiveness of corporate governance mechanisms enforced by the company when they evaluate the company's investment potentials. That is why family businesses are doomed as long as they ignore corporate governance. The ideas presented here simply show that corporate performance is linked to application of corporate governance principles; especially profit margin and ROA are positively affected by corporate performance. ROE and ROA are quite important because they are the ratios that point out the performance of top management and whether they have been acting for the purposes of shareholders' interests. Accordingly, we hypothesize that website announcements concerning corporate governance have an association with corporate performance [19].

Corporate governance can only be established by the involvement of top management through periodic board and audit committee meetings. Studies have shown a significantly positive (negative) relationship between earnings management and the disclosure of the presence of financial experts on audit committees after the passage of SOX [20]. Audit committee not only has senior level managers but independent contributors such as independent auditors. Audit reports are discussed here and decisions on corrective actions are made. This is the spinal cord of corporate governance because without proper and regular meetings of the audit committee, it is not possible to integrate corporate governance with the overall company culture as an ideology [21, 22]. Moreover, financial experts on fully independent audit committees improve the credibility of earnings information and mitigate earnings management after SOX [20].

CMB advises the usage of company websites for important announcements, thus all parties that are involved with the firm can access important news that can affect the stock price. Furthermore, it is possible to say that corporate governance is a key point in ensuring ideal stock market conditions.

This is strongly related to morality and ethics as a problem. In a suitable environment this kind of ideas may result in fraud as mentioned above. Corporate governance involves the securing of shareholders' interests by imposing rules on ethics and transparency in order to prevent such unwanted scenarios in management level. Fraud schemes also affect the sustainability of the firm; because once shareholders' and investors' trust is gone it is not possible to build back what is lost.

III. Methodology

A. Sample

Companies operating in energy sector listed at Borsa Istanbul were chosen. They are 18 companies in total and are given in Appendix 1.

B. Research Design

This research is descriptive and Wilcoxon signed ranks test non-parametric measurement method was employed.

C. Measurement Instruments

Announcement of Corporate Governance Principles Compliance Report and financial statements on the websites of the selected companies are taken into consideration. In relation to this, corporate governance is evaluated by a dummy variable.

The following ratios for evaluating corporate performance for the year 2012 have been calculated: Profit margin, ROA, ROE, Basic Earning Power (BEP), EPS and price earnings ratio, operating cash flow/average accounts receivable, non-operating cash flow/net income, operational profit/total cash flow ratios. Secondary data were gathered from independent audit reports of the companies. All variables are ratio scaled.

IV. FINDINGS

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Results of Wilcoxon signed ranks test for 90% confidence level are presented in the table below.

Table 1. Wilcoxon Signed Ranks Test Results

Independent Variable	Significance
Profit Margin	,053
ROA	,001
ROE	,001
BEP	,001
EPS	,170
Price Earnings Ratio	,093
Opr. cash flow/Avg. a/r	,000
Non-opr. cash flow/Net Income	,542
Operational profit/Total cash flow	,845

According to the analysis it is observed that the corporate governance influences financial performance. This is because of significant results in profit margin, ROA, ROE and BEP. Profit margin is significant by 0,053; ROA is significant by 0,001; ROE is significant by 0,001, likewise BEP is significant by 0,001; thus null hypotheses are rejected for these variables. However, EPS is found to be insignificant by 0,170 and Price Earnings Ratio is found to be insignificant by 0,093. Since Borsa Istanbul is better explained by technical analysis instead, EPS and price earnings ratios are not significant according to analysis results.

ROA and ROE show the success of management in generating profits. Accordingly, organizations that are better compliant with corporate governance principles are more profitable as expected. Additionally, profit margin and BEP also concur with the fact that corporate governance as an ideology creates a control environment that increases efficiency and effectiveness of the firm. Nonetheless, when we focus on the profitability ratios, it is clear that companies, which are noncompliant with corporate governance principles, choose to generate profit by financial market investments instead of operations.

BEP as the ratio of EBIT over total assets indicates a high tax amount for the sector, which explains the decline in net profit figures and a rising tendency for investing in financial markets.

Wilcoxon signed rank test results show that operating cash flow is an important indicator of corporate governance because a company that is compliant with corporate governance principles and ethics can and should choose its business partners more carefully and according to a risk based assessment. As a result, operating cash flow/average accounts receivable indicates that companies that are noncompliant with corporate governance refrain from working with trusted business partners and have higher cost of capital.

In this study non-operating cash flow is considered as income from transactions made in financial markets. Majority of the selected companies have used financial markets to produce extra cash flow to retain in the business, which happens to be an indicator of success in cash management and not related to operating income. Since total cash flow also includes non-operating cash flow items, non-operating cash flow/net income, operational profit/total cash flow are insignificant to corporate governance principles.

V. DISCUSSION AND CONCLUSION

Corporate governance principles show that a transparent environment for companies to act upon is felt in every function of the organization with the right attitude from the management. Especially a well-functioning internal audit department is the key point in securing company culture that embraces corporate governance. Although internal audit is very important for corporate governance, attitude of management cannot be denied at this stage. Without any endorsement from management, it is not likely to incorporate a corporate governance ideology.

Accordingly, organizations are expected to assign significant importance to internal audit function for compliance with corporate governance principles. In addition to this, top management and board of directors are anticipated to make it clear that they are supporting legitimacy and corporate governance. The most important tool in ensuring compliance with corporate governance principles is public announcement of important information.

The association between corporate governance and corporate performance measured by ROA, ROE, profit margin, basic earning power, and operating cash flow/average accounts receivable, has been investigated specifically on companies only of the energy sector at Borsa Istanbul. Analysis results show that there is an association between companies that are compliant with corporate governance principles and corporate financial performance. In other words, top management that is respectful to transparency and ethics can and do generate income better, get to choose business partners accordingly and increase profitability of assets and equity as well.

Also, in this study, we showed that companies that properly announce and disclose important information such as financial tables, audit reports, corporate governance compliance reports to public on a periodical basis are considered as better compliant with these principles. Naturally, companies with steady profits and solid asset maintenance are necessary to continue practicing these principles. For future, we recommend investigation of liquidity ratios combined with corporate performance.

APPENDIX 1

Companies Included in the Analysis

AkEnerji, AksaEnerji, AksuEnerji, AnelElektrik, Atlantik Petrol, Avrasya Petrol, AyenEnerji, Aygaz, EmekElektrik, GersanElektrik, IşıklarElektrik, İpekEnerji,,Mepet Metro Petrol, OMV Petrol Ofisi, Park Elektrik, Tüpraş, Turcas Petrol, ZorluEnerji.

APPENDIX 2

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std.Error
CorporateGovernance	18	,00	1,00	,7778	,42779	-1,461	,536	,137	1,038
Profit Margin	18	-1,48	3,03	,3506	,99733	1,565	,536	3,679	1,038
ROA	18	-,03	,23	,0567	,08105	,963	,536	-,019	1,038
ROE	18	-,06	,85	,1299	,21159	2,489	,536	7,859	1,038
BEP	18	-,03	,25	,0547	,07744	1,632	,536	2,099	1,038
EPS	18	-,14	210,00	12,1952	49,38489	4,237	,536	17,966	1,038
PriceEarningsRatio	17	-96,98	1875,00	181,3302	485,20862	3,144	,550	10,225	1,063
Operating cash flow/Avg. accounts receivable	17	2,55	45,50	12,2982	10,17642	2,288	,550	6,950	1,063
Non operating cash flow/Net Income	18	-18,20	8,75	,1378	5,14719	-2,605	,536	10,649	1,038
Operational profit/Total cash flow	18	-2,44	8,49	1,4056	2,80803	1,635	,536	2,274	1,038

REFERENCES

[1] N. Ettlinger and W. Patton, “Shared Performance: The Proactive Diffusion of Competitiveness and Industrial and Local Development”, *Annals of the Association of American Geographers*, Vol. 86, No. 2, Jun. 1996, pp. 286-305.

[2] T. Beck, A. Demirgüç-Kunt, and V. Maksimovic, “Financial and Legal Constraints to Growth: Does Firm Size Matter?” *The Journal of Finance*, Vol. 60, No.1, Feb. 2005, pp. 137-177.

[3] P. Maskell, “The Firm in Economic Geography”, *Economic Geography*, Vol. 77, No. 4, Oct. 2001, pp. 329-344.

[4] S. Beugelsdijk, “The Regional Environment and a Firm's Innovative Performance: A Plea for a Multilevel Interactionist Approach”, *Economic Geography*, Vol. 83, No. 2, Apr. 2007, pp. 181-199.

[5] V. V. Acharya, and A. Bisin, “Managerial Hedging, Equity Ownership, and Firm Value”, *The RAND Journal of Economics*, Vol. 40, No. 1, Spring 2009, pp. 47-77.

[6] D. L. Kang, and A. B. Sorensen, “Ownership Organization and Firm Performance”, *Annual Review of Sociology,* Vol. 25, 1999, pp. 121-144.

[7] A. Rappaport, “Creating Shareholder Value”, *The Free Press, Library of Congress Cataloging-in-Publishing Data*, 1986, pp. 6

[8] J. Tirole, “Corporate Governance”, *Econometrica*, Vol. 69, No.1, Jan. 2001, pp. 1-35.

[9] V. I. Usurelu, M. Marin, A. E. Danaila, and D. Loghin, “Accounting Ethics - Responsibility versus Creativity”, *Annals of the University of Petrosani, Economics*, 10(3), 2010, pp. 349-356.

[10] C. Pass, “Corporate Governance and the Role of Non-Executive Directors in Large UK Companies: An Empirical Study”, *Corporate Governance*, Vol. 4, No. 2, 2004, pp. 52-63.

[11] OECD Principles of Corporate Governance. OECD. retreived on 08/10/2013 from http://www.oecd.org/daf/ca/corporategovernanceprinciples/31557724.pdf

[12] S. Thomsen, “Corporate Values and Corporate Governance”, *Corporate Governance*, Vol. 4 No. 4, 2004, pp. 29-46, Emerald Group Publishing Limited, ISSN1472-0701.

[13] G. Vinten, “Corporate Governance Lessons of Enron”, *Corporate Governance*, Vol. 2 No. 4, 2004, pp. 4-9, MCB UP Limited, 1472-0107.

[14] M. Yu, “Analyst Recommendations and Corporate Governance in Emerging Markets”, *International Journal of Accounting and Information Management*, Vol. 19 No. 1, 2011, pp. 34-52, Emerald Group Publishing Limited, 1834-7649, DOI 10.1108/18347641111105926

[15] S. Parker, G. F. Peters, , and H. F. Turetsky, “Corporate Governance and Corporate Failure: A Survival Analysis”, *Corporate Governance*, Vol. 2 No. 2, 2002,pp. 4-12, MCB UP Limited.

[16] H. Petersen, and H. Vredenburg, "Corporate Governance, Social Responsibility and Capital Markets: Exploring the Institutional Investor Mental Model", *Corporate Governance*, Vol. 9 No. 5, 2009, pp. 610-622, Emerald Group Publishing Limited, ISSN 1472-0701 DOI 10.1108/14720700910998175
[17] M. Downes, and S. R. Gail, "Antecedents and Consequences of Failed Governance: The Enron Example", Corporate Governance, Vol. 5,No. 5, 2005, pp. 84-98, Emerald Group Publishing Limited, ISSN 1472-0701
[18] M. Varış, A. Küçükçolak, O. Erdoğan, and L. Özer, "Sermaye Piyasalarında Kurumsal Yönetim İlkeleri", *İMKB Dergisi*, Sayı 19, 2001.
[19] R. W. Masulis, C.Wang, , and F. Xie, "Corporate Governance and Acquirer Returns", *The Journal of Finance*, Vol. 62, No.4, August 2007, pp. 1851-1889.
[20] J. Chang, and H. Sun, "Does the Disclosure of Corporate Governance Structures Affect Firms' Earnings Quality?", *Review of Accounting and Finance*, Vol. 9 No. 3, 2010, pp. 212-243, Emerald Group Publishing Limited, 1475-7702, DOI 10.1108/14757701011068048
[21] J. Abbott, S. Parker, G. F. Peters, and D. V. Rama, "Corporate Governance, Audit Quality and the Sarbanes-Oxley Act: Evidence from Internal Audit Outsourcing", *The Accounting Review*, Vol. 82, No. 4, 2007, pp. 803-835.
[22] C. A. Göçen, "Corporate Governance, Internal Audit and Independent Audit: Parmalat Case", *Mali Çözüm*, Vol. 97, 2010.

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