Corporate Governance and Earning Management: An Investigation on Turkish Capital Market

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Abstract: The main purpose of this paper is to examine the relationship between corporate governance and earning management. The data set covers 107 firms' data listed on Istanbul Stock Exchange for the period 2006–2007. In the study, accrual is used as an earning management indicator. Publicly offering rate, board of directors and duality are used alternative proxies for corporate governance indicators. Regression and correlation analysis are used. According to the results, there is a negative relationship between earning management and corporate governance indicators. This negative relationship is statistically significant for duality variables. An important finding from the study is that corporate management has extensively been adopted accordingly in large firms and in firms with low leverage rate.

1. Introduction

The increasing number of corporate scandals in the last five years have stained corporate governance reputation and questioned the effectiveness of its current structure. As a result, corporate governance has received attention from policymakers, investors, corporate boards (Donker ve Zahir, 2008). Corporate governance has become a popular topic in the international academic and business debate (Bebchuk and Cohen 2009). Corporate governance is of critical importance not only to the companies' directors who are interested in knowing the level of their companies governance structure and compliance with best practices and regulations, but to market participants who are keenly interested in the governance risks associated with companies.

Corporate governance is a set of mechanisms that affect how a corporation is operated. It deals with the welfares and goals of all the stakeholders, including shareholders, management, board of directors, lenders, regulators, and the economy as a whole. La Porta, *et al.* (2000) Defined, "Corporate governance is, to a certain extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders." They define "the insiders" as both managers and controlling shareholders. The purpose of corporate governance is to achieve the best overall welfare of all stakeholders and promote economic efficiency both internally and externally. Empirical research on corporate governance is based on the theoretical framework of agency theory advanced by Jensen and Meckling (1976), Fama (1980) and Fama and Jensen (1983), with a focus on the principal-agent problem. In corporations, principal-agent problem occurs when the interest of managers (the agent) is not in line with the interest of owners (the principal).

Firms with good governance are assumed to provide transparent disclosures of the allocation of decision and control rights between the firm and its investors thereby making them more investor-friendly than firms that do not. Therefore, because ''better governance enables firms to access capital markets on better terms'' (Doidge et al., 2007), good governance practices should positively impact a firm's valuation and market performance.

The concept of corporate governance evokes the question of corporate performance and higher returns in the case of companies complying with certain rules. The research on these relations constitute a substantial proportion of papers in modern management, finance as well as law and economics. Researchers have investigated

relationships between company performance and corporate governance variables such as ownership structure (concentration, shareholder identity), board structure (composition, turnover, proportion of independent, insider/outside or affiliated members), structure and functioning of board committees, structure and size of executing compensation (fixed salary vs. incentives programs and stock options), structure and size of debt (long vs. short term, private vs. public). Although, the research findings remain relatively mixed, many results do reveal clear relations between governance characteristics and performance (Aluchna, 2009).

One of the most important functions of corporate governance is to ensure the quality of the financial reporting process. The issue of corporate governance has become more important due to the highly publicized financial reporting frauds at Enron, WorldCom, Adelphia and Parmalat, in particular, and a very high level of earnings restatements. While there is an extensive literature on opportunistic earnings management in response to specific incentives to achieve one result or another, research looking at the impact of corporate governance on earnings management is quite limited. The few papers that address these issues (e.g., Klein (2002)) focus more on the magnitude than the direction of earnings management, and thus shed little light on the ability of these variables to offset the one-sided incentive of management to increase reported earnings that results from stock and option-based compensation. More recently, Cornett et al. (2008) examine the impact of incentive-based compensation and corporate governance on firm performance in light of potential earnings management. They find that incentive-based compensation has a significant impact on financial performance as measured by reported earnings. However, once earnings are adjusted for discretionary accruals the link between compensation and performance disappears. In contrast, the estimated impact of corporate governance variables on performance more than doubles when discretionary accruals are removed from measured profitability.

Shah et all (2009) examines the relationship between quality of Corporate Governance and Earnings Management for Pakistani companies. As the result of their analysis they found that indicates the presence of Positive relationship between corporate governance and earnings management. Cornett et all, (2006) examines whether corporate governance mechanisms affect earnings management at the largest publicly traded bank holding companies in the United States. They found that the use of discretionary accruals is positively related to a bank's unmanaged operating performance, capital ratios, and asset size. In contrast, the use of discretionary accruals is negatively related to a bank's non-discretionary accruals and market-to-book ratios.

Prencipe and Bar-Yosef (2009) examines the effectiveness of board independence on earnings management in family-controlled companies. Their empirical results provide evidence that the impact of board independence on earnings management is indeed weaker in family-controlled companies. The same result also holds for the lack of CEO/board chairman duality function. Such effects become stronger in cases where the CEO is a member of the controlling family.

Liu and Lu (2007) examine the relation between earnings management and corporate governance in China by introducing a tunneling perspective. They empirically demonstrate that firms with higher corporate governance levels have lower levels of earnings management.

Ahmed et all (2008) examining whether monitoring mechanisms play a role in constraining earnings management resulting from equity incentives. They show that equity incentives are not positively associated with abnormal accruals suggesting that they seem to align manager interests with shareholder interests rather than motivate opportunistic earnings manipulation.

Corporate governance models can vary according to the system of corporate ownership and management control mechanisms prevailing in a country. In Turkey, a market-oriented corporate governance and control system cannot be said to exist, since the flotation ratios of listed companies and share dispersion levels are low.

According to a corporate governance study conducted in 2003,18 the flotation ratio of listed companies in Turkey is approximately 15–20 per cent, while only 15 per cent of the Istanbul Stock Exchange (ISE) 100 Index companies have a flotation ratio of more than 50 per cent. In practice, Turkish companies are characterized by the existence of one or more majority shareholders owning controlling blocks of shares. Furthermore, unlike in some other European countries, the system is not bank-based, as a domination of banks over companies does not seem to exist either through ownership of shares.19 or through the exercise of voting rights for shares held in custody.20 Instead, most large corporations are held by families or individuals.21 Hence, the Turkish corporate ownership and management control system can be generally classified as insider controlled (Nilsson, 2007).

The main purpose of this study examines how corporate governance mechanisms affect earnings management. Public offerinf rate, size of executive board and duality are used as alternative indicators for the corporate governance. For Turkey, an indicator has not been defined yet. In the study two control variables are included in the model. According to the results, there is a negative relationship between earnings management and corporate management. Another findings indicates that the earning management has extensively been adopted in large firms and firms with low leverage rates.

The remainder of this paper is organized as follows. Section 2 presents our research design choices and their rationale. The results are presented in Section 3 and the conclusion in Section 4.

2. Research Design

The purpose of this paper examines relationship between corporate governance and earnings management. In this paper, we examine companies listed on Istanbul Stock Exchange during the period of 2006 to 2007. Because of the difference in their asset structures, banks and participation banks, insurance firms, leasing and factoring firms, real estate investment trust and security investment trusts are not taken to the sample. Hence 107 firms covered in the study.

Measuring corporate governance is difficult because it cannot be directly observed and it usually involves multiple dimensions. While there is no consensus on how corporate governance can be measured, prior literature suggests several different ways to proxy for corporate governance. For instance, Bai et al. (2004) use both internal single dimensions, such as ownership structure, executive compensation, board of directors and financial disclosure, and external single dimensions, such as external takeover market, legal infrastructure, and product market competition. Gompers et al. (2003) create a 24-factor G-index to measure corporate governance and Brown and Caylor (2006) use 51 corporate governance provisions to create a broader measure. Other empirical studies examine the impact of a single dimension of corporate governance, such as ownership concentration and the separation of CEO and the chairman of the board. In this study, we use to measure corporate governance three variables: Publicly Offering Rate (POR), Board of Directors (BSIZE) and Duality.

The variables used are defined as; POR, firms' public offering rate. BSIZE, The number of board members. Jensen (1993) and Yermack (1996) argue that small boards are more effective in monitoring managerial behavior as the smaller group forces members to be more engaged. Larger boards can also result in a free-rider problem where the addition of directors causes the overall monitoring to decrease as directors may rely on other directors to monitor managers. This is also consistent with Beasley (1996) who finds that companies with larger board sizes are more prone to fraud compared to those with smaller boards. However, Klein (2002) argues that large boards allow for directors to specialize in monitoring and have greater diversity among the committees of the board resulting in greater monitoring. Additionally, the larger the board, the greater the likelihood different perspectives on opportunities facing the corporation may be heard.

DUALITY a binary variable is used as a proxy for duality. This binary variable takes the value of one if the CEO also served as chairman of the board and zero otherwise. Separating the position of the CEO from the position of Chairman of the Board helps delineate the decision making authority of the CEO from the monitoring and oversight activities of the board of directors (Fama and Jensen, 1983). If a single person simultaneously holds both positions the likelihood of material misstatement increases as important decisions may not be reviewed by the board and actions inconsistent with the corporation's controls may be taken.

Consistent with previous research, discretionary accruals are used to identify earnings management. We use a modified version of the Jones model (Dechow, 1996). Discretionary accruals from regressions of total accruals on changes in sales and on property, plant, and equipment within industries.

$TACC = NI − OCF$ (1)
Where;
TACC: Total accrual
NI: Net Income
OCF: Operating Cash Flow
$NDCA_{it} = \alpha1 (1/ TA_{i, t-1}) + \alpha2 [(\Delta REV_{it} - \Delta AR_{it})/TA_{i, t-1}]$ (2)
Where;
$NDCA_{it}$: is nondiscretionary accrual in year t scaled by lagged total assets
$TA_{i, t-1}$: is a total asset at the end of year t -1
ΔREV_{it} = is revenues in year t
ΔAR_{it} = is net receivables in year t

Our control variables include leverage and firm size. We have used a logarithmic transformation of the 2006–2007 total assets to use our size variable (SIZE). Leverage provides a mechanism to curb agency costs, so the use of leverage as a control variable is warranted in this study. Our leverage variable is calculated as a ratio by dividing the firm's total debt by its total assets for each calendar year.

Considering theoretical discussions and empirical studies (Shah et all, 2009; Cornett et all, 200/) the model has been set in order to test the relationship between corporate governance and earning management as is below.

$$ACC_{it} = \beta_0 + \beta_1 (POR) + \beta_2 (BSIZE) + \beta_3 (DUALITY) + \beta_4 (SIZE) + \beta_5 (LEVERAGE) + \varepsilon_{it}$$

3. Results

Regression and correlation analyses are used. Table 1 shows the results of descriptive statistics to variables. The results of descriptive statistics indicates that mean return on assets (ACC) is about 3 % while mean POR is 33 % and BSIZE is 6, 6636. On the other hand the mean SIZE is 8.4554 and the mean LEV is 41 %.

DEĞİŞKENLER	N	Mean	Minimum	Maximum	St. Dev.
ACC	214	,0302	-,40	,50	,1241
POR	214	,3325	,01	,86	,1879
BSIZE	214	6,6636	3	13	1,9807
DUALITY	214	,5888	,00	1	,4943
SIZE	214	8,4554	7,05	9,94	,6735
LEV	214	,4172	,05	,90	,2067

Table 1: Descriptive Statistics

Table 2 shows the results of correlation coefficients of variables used at the analysis. As it can be seen from the table negative and statistically significant results have been obtained between DUALITY and ACC. There is a very significantly negative relationship (5%) between duality and ACC. There exits a significantly (5%) negative relationship between duality and ROE and also significantly negative relationship (5%) between ACC and LEV. There is a positive relationship between ACC and SIZE. The correlation among the independent variables is low and less than 0.50, thus there is no multicollinearity problem in the model.

DEĞİŞKENLER	ACC	POR	BSIZE	DUALITY	SIZE	LEV
ACC	1					
POR	-,103	1				
BSIZE	,167	-,174	1			
DUALITY	-,269**	,055	-,066	1		
SIZE	,235*	-,231*	,433**	-,019	1	
LEV	-,303**	-,029	-,131	,033	,136	1

**, * significant at 5 % and 10 %, respectively.

Table-2: Correlation Table

Table 3 shows the results of regression analysis about financial performance. Model 1 searches the relationship between POR and ACC. When the results are examined it can be seen that there is a negative but statistically insignificant relationship between ACC and POR. According to the results of Model 2 which searches the relationship between ACC and BSIZE positive but still insignificant relationship can be observed. Model 3 searches the relationship between DUALITY and ACC. When the results are examined it can be seen that there is a statistically significant negative relationship at 1% level between DUALITY and ACC. Dependence variables of two models have also negative relations with LEV and positive relations with SIZE. F-statistics values are significant at 1% level for three of the models. But adjusted R^2 values are low for three of the models.

Model 4 presents the regression of earning management on all variables. When the results are examined it can be seen that there is a statistically negative relationship between ACC and corporate governance variables. This negative relationship statistically significant at % 1 level between ACC and DUALITY. We do not find a significant between ACC and POR and BSIZE.

Variables and Parameters	Model 1: Dependent Variable: ACC	Model 2: Dependent Variable: ACC	Model 3: Dependent Variable: ACC	Model 4: Dependent Variable: ACC
CONSTANT	-,294 (-1,958)**	-,323 (-2,265)**		-,261 (-1,771)*
POR	-,034 (-,553)			-,026 (-,434)
BSIZE		,000 (,003)		-,001 (-,198)
DUALITY			-,063 (-2,928)***	-,063 (-2,883)***
SIZE	,050 (2,904)***	,052 (2,760)***	, 051 (3,164)***	,051 (2,748)***
LEV	-,205 (-3,770)***	-,205 (-3,679)***	-,199 (-3,810)***	-,202 (-3,733)***
F-Statistic	7,138***	7,016***	10,456***	16,208***
Adj. R^2	,148	,145	,211	,297
Observation	214	214	214	214

***, ** and * significant at 1 %, 5 % and 10 % , respectively.

Table 3: Regression Analysis

4. Conclusion

In this study, the relationship between corporate governance and earnings management in Turkish Financial market. Data set covers 107 firms' data for 2006-2007 period. Public offering rate, the size of executive board and duality are used alternative indicators for corporate management. Corporate management is proxied by discretionary accruals. According to the results, a negative relationship is found significant at 1% level for duality variable. Another finding states that earnings management is extensively used in large firms and in firms with low leverage rate.

In the literature, corporate governance index itself is used in econometric models. But due to a lack of this index, for Turkey, apart from the literature, the alternative indicators mentioned above are used as proxies for corporate governance. But the attempts are in process to estimate such an index for Turkey.

Another difficulty arises from the insufficient number of the years used in the regression. As it can been seen that the larger is the period, the healthier might be the results. These two issues should be kept in mind for the future studies on Turkey.

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