The impact of Corporate Governance, Product Market Competition on Earning Management Practices

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Abstract

The current research inspects the influence of corporate governance and product market competition on earnings management practices in the emerging Pakistani economy. For this purpose, the study has analyzed a sample of 84 non-financial companies from 2010 to 2015 listed on Pakistan Stock Exchange. In order to address the issues of endogeneity among the variables of the research, dynamic GMM model has been employed for the analysis. The results show that corporate governance variable i.e. corporate board size, independent directors, board meeting and audit quality are negatively coupled with discretionary accruals. However, the institutional ownership and CEO duality have positive association with discretionary accruals. Furthermore, the product market competition is significantly and positively related with discretionary accruals. Hence, it is concluded that corporate governance and product market competition have significant influence on earnings management practices in Pakistan. This research work may help the practitioners, regulators and Government to boost the compliance of financial reports with better corporate governance mechanism which may improve consistency of financial reports.

Keywords: Corporate governance; Earnings management; Emerging economy; Pakistan Stock Exchange.

Introduction

Corporate executives purposely use Earnings management practices in order to deceive the shareholders who solely rely upon the announced accounting statistics (Healy, 1999;Xie, 2003). It refers to executives' actions to alter reported earnings through accounting tactics (Lin, Pizzini, Vargus, &Bardhan, 2011). In the context of agency theory and

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information asymmetry literature, different circumstances or motivating forces are identified through which executives may engage themselves in such purposeful interventions in order to get some private benefits. For example, these practices may be induced to get reward and remunerations, job security and bonus plans (Healy, 1985; De Fond & Park,1997), to reduce the expense of debt and avoid debt agreement violations (DeFond&Jiambalvo, 1994), tax reduction in order to minimize the tax-related expenses (Marden& Wong, 1997), inside trading benefits (Kedia&Philippon, 2009).

The well-known corporate scandals around the world in recent decades like Enron, WorldCom and Parmalatetc have added fuel in the debate of financial reporting reliability, accountancy, and corporate ethics (Jana Oehmichen, 2018). Such financial scams are manifested by poor financial disclosures (Lobo & Zhou, 2006), so the need of a strong mechanism to ensurehigh-quality financial reports is highly demanded (Chhaochharia& Grinstein, 2007).However, worldwide corporate governance explores that the effectiveness of corporate governance procedures more significantly relies upon the institutional surroundings (Aguilera & Jackson, 2010; Filatotchev, Jackson, & Nakajima, 2013; Oehmichen, Schrapp, & Wolff, 2017). In this regard, corporate governance has become one of the profoundly inquired areas among the academicians and practitioners. Corporate governance aims to frame and control a set of rules and regulations that relate to the decision making processes and mechanism of companies (Gill, 2008). Thus corporate governance provides a linkage between the management and the organizational systems (Dima,Ionesscu, &Tudoreanu, 2013). Consequently, corporate governance is a mechanism which is established for monitoring and control purpose. Furthermore, corporate governance system covers a wide range of institutions and practices, ranging from law and regulations regarding financial reporting and use of financial standard, executive compensation, board size and composition of board of directors(Javaid& Iqbal, 2010). Therefore, this monitoring and control system may have considerable implications on the performance of the firm, business relationship, employment system, and overall business practices.

The presence of strong corporate governance system within the firm may lead to professional enhancement in accomplishing the proper record of business transactions and limit the opportunistic behavior of firms' executives. On the other hand, weak governance system may be the ingredient of earnings misconducts, corruption and unprofessional conduct in the affairs of business (Leventis&Dimitropoulos, 2012).

The current research contributes to the existing literature in a unique way. The prior studies have documented contradictory evidences in exploring the impact of product market competition and earnings management practices. In this regard, one stream of literaturefinds positive impact (Marciukaityte and Park 2009, Cheng et al. 2013, Balakrishnan and Cohen 2014, Laksmana and Yang 2014) and few studies also ascertain the negative impact (Tinaikar and Xue 2009, Karuna et al. 2012, Markarian and Santaló 2014). Moreover, the previous literature ascertains the effect of corporate governance and market competition on earning management separately (Kamran and Shah, 2014).Therefore, we examine the effectiveness of market competition in the presence of corporate governance mechanism in constraining earning management practices.

Literature Review

In the twenty-first century, due to the downfall of organizations like World Com, Enron and Parmalatetc, corporate governance is again a very much serious business issue. Because of this, business authorities now recognize that the issuance of governance rules and regulations could encourage diligence by means of enhancement in investment and it may lead to economic development. Corporate governance leads to observing and analyzing the rights of the stakeholders to control actions. Corporate governance mechanism helps to manage the fairness of decisions, clarity in goals, policy management processes, traditions and overall system of the organization. If executives defined the sincere and appropriate presentation of annual accounting reports and reporting quality earnings of a particular fiscal year, it might had led to the financial standing of a business. So, for that reason, (IFRS) International Financial Reporting Standards offer best alternative accounting treatments for company executives in choosing better elasticity among that. According to Ahmad, Ali, and Islam, (2011) company executives are more excited about accounting alternatives because that is economically more beneficial for them. These sort of opportunistic behaviors are common in those types of organizations where governance structure is weak, so executives report poor quality in reporting earning management practices, as a result the trust of the shareholders shatters (Garcia-Meca& Gonzalez, 2014). Utilizing such accounting techniques in a way overall accounting reports show the better image of the organization, financial position, and production activities, so, this opportunistic and creative behavior is called earnings management. However, if there is no conflict of interests between executives and equity holders then, there is no need for executives to show manipulated image of accounting reports to shareholders (Sivarama, krishnian et al., 2008). According to the McKee (2005), earnings management may lead to manipulating in the number of bad debts, the volume of stock, depreciation of long-term assets, the volume of assets impaired and post-labor ship remunerations and pledge costs. Recent studies propose that better governance is tough to handle managerial and corporate activities because it leads to limit agency cost by maintaining the goals of the shareholders and authorities. Thus, good governance by the corporate board effectively limits the management and compels the executives to adopt good earning management practices, which not only reduces the agency cost but also improves the reporting quality for the shareholders.

Institutional Ownership and Earning Management

In any organization, executives have the capacity to take part in earnings management practices shortsightedly that powerfully impacts the efficiency of monitoring exercised by institutional owners. According to the Chung et al., (2002), Institutional owners have the ability to utilize the resources and opportunities to manage, control, and influence the company's managers. Koh (2003) examined that a firm with a larger number of institutional ownership has the ability to get economies of scale in information collection, as a result, separation of control and ownership leads to bearing high agency cost. Ownership structure is enhanced in the past few years for the reason of its instability. Executives are able to manage the organization more independently in a more isolated share ownership (Heubischl, 2006). In view of the fact that management performance is highly influenced because of ownership structure and the later on management involved in earnings management practices. For that reason, ownership structure indirectlyimpacts earnings management practices. In previous studies, institutional investors show a positive impact on earnings quality (Koh, 2005). Arabic and Bagherib, (2013) conducted the study upon institutional shareholders and earnings management and concludeda positive relationship among institutional ownership and earning management. Ikechukwu (2013) examined the association between corporate governance mechanisms and earnings management practices and reported that the organizations with better earnings management practices are supported with better governance practices, on the other hand, the organization with lower earnings management practices based on well stronger external governance, such as more institutional ownership results in high take overpressure. Ansari, Mehrabian, and Pourheydari, (2013) conducted the study upon the institutional ownership on both (discretionary and non-discretionary) accruals and they concluded that the influence of institutional ownership on discretionary and non-discretionary accruals is positive. Corporate governance is a system and ownership structure is a part of that system, corporate governance utilizes ownership structure as a tool to minimize the agency conflicts (Farhani&Hajiha, 2011). According to the Kusumastuti and Henryani, (2013) corporate governance or the company's managerial structure utilizes the ownership structure as a tool and diminishes the cost of agency conflicts. In the above literature, we already mentioned about the conflict that arises among the shareholders and executives of the company, this all occurs due to the reason of agency cost which leads to different talks associated with ownership structure. Those shareholders who contain minor ownership interests of the company or who are known as dispersed owners lead towards agency conflicts among organizations for the reason that investors do not care about the company's strategic decisions because they have very little incentives in it. Moreover, according to Lee (2008) shareholders with a minor percentage of shares with no information are unable to take part in important strategic decisions. But, they said that large institutional shareholderswith their power to vote decrease the agency conflicts and problems among the management and owners because they have the right and regulatory power upon the company's decisions and they also have more incentives to do so. Therefore, the intention of manipulation of earnings reduces at the end.With having specified these contrasting thoughts and conclusions,the current study hypothesizes that:

H1. There is a significant association between institutional ownership and earnings management practices in Pakistan.

Corporate Board Size and Earning Management

The size of the governing body plays a vital role to manage the earnings management in corporations. According to the Davidson and Singh, (2003) larger board is more influential on the managers as compared to smaller corporate board. They also establish that the relationship among board size and asset ratio utilization is significant and positive in nature. Furthermore, they found that due to less agency cost the utilization of asset ratio is high. The same thoughts are also included by Pearce and Zahra (1991). In recent studies, mechanisms of corporate governance are analyzed to check the impact on earnings management practices and conclusions are drawn that among various proxies of corporate governance, only board size plays an importantpart in restricting the earnings management practices (Suwaidan, Abed, & Attar, 2011). Chekili (2012) investigated the role of corporate governance in management practices in corporations and drew the conclusions that board size has a significant connotation with earnings management along

the presence of CEO duality and independent directors. Ramsay and Mather (2006) examined that board characteristic that comes under in corporate governance has a substantial impact on controlling the earning management practices. According to Adams, Ahmed, and Hossain, (2006), the impact of corporate governance on earnings management practices is not always positive and theyreported a negative link among board size and earning management. In a recent study Muchoki, Iraya, and Mwangi(2015) examined the impact of corporate governance on earnings management practices and developed a negative association between corporate board size and earnings management. Moreover, Sayim, Aygun, and Ic, (2014)and Laili, Khairi and Siam(2014) also concluded a negative link between corporate board size and earning management practices. Thus, in conclusion to these contrasting thoughts and claims on the subject of the relationship between board size and earning management practices by companies, we have developed our hypothesis that follows:
H2: The larger corporate board negatively influences the earning management practices in firms.

Corporate Board Independence and Earning Management
The presence of independent directors in the governing body ensures the effectiveness of corporate governance policies and decreases earnings management practices(Klein, 2002). However, some studies examined that there is no connection between the effectiveness and independence and earnings management in firms (Niu, 2006). Young, Peasnell and Pope, (2005) during 1991-1993, conducted aseries of studies upon the board independence by selecting a sample of 687 institutions in the U.S.A and 1,271 institutions in the U.K and concluded that effectiveness of board independence reduced the earnings management practices. Furthermore, in Canada, a study was conducted by an organization and depicted the result that the level of board independence was no association to the unusual level of accruals (Niu, 2006). In prior studies, internal mechanisms of corporate governance were investigated to check the impact of internal corporate governance, ownership concentration, board independence, CEO duality, and earnings management practices. The conclusions drawn from the results infer that there exists a negative association between board independence, CEO duality and ownership concentration on earnings management practices (Chashmi&Roodposhti, 2010). After the analysis, the results show that board independence shapes more efficient corporate governance system (Tian & Zhu, 2009). Another study also supported in the same way that board independence leads to limit earnings management practices (Tehranian, Cornett &

McNutt, 2009). However, in reference to the analysis of the impact of board characteristics on earnings management practices, results depict that board independence shows positive association with earnings management practices (Yarram, Sukeecheep& Al-Farooque, 2013). While analyzing the literature review of corporate governance and earnings management practices, the conclusions reveal that the increase in board independence will control managerial activities more efficiently from earnings management practices (Wong & Man, 2013). With having specified these contrasting thoughts and conclusions on the subject of the relationship between board independence and earnings management practices by companies, we shape our hypothesis in the form as follows:
H3: There is a negative association between board independence and earnings management.

CEO Duality and Earning Management

CEO duality not just helps to manipulate the earnings of the company but it also leads toward increase in the conflict of interests and agency costs of the corporations. According to the literature, the parting between the position of CEO and chairman of the corporation will develop the value of the firm and it may lead to control the conflict of interests, reduce the earning management practices and agency costs. Prior studies examined the impact of ownership and CEO duality on earnings management (using discretionary accruals as a measurement tool) and result depict that the impact of CEO duality on earning management is positive and ownership shows negative relation on earnings management (Abdul Rahman, et al., 2012). Moreover, the study examines the significance of board characteristics towards limiting earnings management practices by the executives and results show that CEO duality has a positive relationship with earnings management practices (Iskandar, Rahmat, & Saleh, 2005). A study analyzes the significance of corporate governance in limiting earnings management practices (government based company's) and results depict that CEO duality shows positive association on earnings management practices. Furthermore, the study examines the significance of the characteristics of the audit committee, board characteristics and ownership structure in limiting the practices of earnings management. The conclusions state that CEO duality and ownership have a positive relationship with earnings management (Abdullah & Latif, 2015). In prior studies, internal mechanisms of corporate governance were investigated to check the impact of internal corporate governance, ownership concentration, CEO duality, and earning management practices. The conclusion drawn from the results is that there exists a negative impact of board independence, CEO duality

and ownership concentration on earnings management practices (Chashmi et al., 2010). With having specified these contrasting thoughts and conclusions on the subject of the relationship among CEO duality and earning management practices by companies, we shape our hypothesis as follows:
H4: There is a positive association between CEO duality and earnings management.

Board Meetings and Earning Management
Board meetings are a very important characteristic of the board of directors. Earnings management practices highly influence the degree of board interaction and behavior. In those company's where the board of directors get together most frequently solve the problems more effectively and efficiently (Lorsch& Lipton, 1992). The higher the ratio of board meetings (used as a proxy of board meetings), the more effective is the monitoring in the firms. Researchers also claim that if board meetings are lesser in number then the value of the firm also declines (Lawler &Finegold, 1998). Furthermore, they recommend that with more board meetings held in the firms, the more it will help to reduce the chances of fraud and because of regular meetings, it's easy for executives to identify the problems and make effective solutions (Firth, Chen &Rui, 2006). In contrast, some studies conclude that board meetings are significantly negatively associated with the board meetings. However, board meetings definitely affect the firm performance and this is an important factor in order to limit the earnings management practices (Davvidson&Xie, 2003). Board meetings are playing a vital role for executives to put the effort into managerial activities to maintain firm value (Ronen, &Yaari, 2008). The study analyzes that the frequent no. of board meetings enhance the productivity of the board (Conger,Finegold, & Lawler, 1998). In an organization where the board of directors meetmore frequent basis perform their jobs with more interests and upto the expectation of shareholders and manage the accounting reports with more integrity. With having specified these contrasting thoughts and conclusions on the subject of the relationship between board meetings and earnings management practices by companies, we shape our hypothesis as follows:
H5: There is a negative association between board meetings and earnings management.

Audit Qualityand Earning Management

In Pakistan, the concept of big five audit firms is used to maintain the quality of earnings and overall efficiency and effectiveness of the corporations. This is considered good in Pakistan when corporations carried out an audit by big five audit firms. Basically, audit firms operate independently so that they monitor the corporate functions on fair basis and at the end, the factor of biases are minimized. Moreover, the prior studies examined that audit firms independently will reduce the opportunistic manipulation of earnings (Vann & Turner, 2010). Especially in Pakistan, when corporations are happened to be inspectedby big five audit companies, leads to gain more trust of shareholders in relation to the huge amount of their capital invested in these sorts of companies. In this way, the study sets a trade-off among corporate governance sectors and financial expertise (Carcello, 2006). In recent studies, researchers concluded that bigger audit committees by means of the superior amount of independence conducted better as supervision bodies. Because during the audit a huge gap of mistakes due to the internal operations will be covered and at the end maximizing the profit ratio (Ahmad, Zaluki, & Osman, 2013). With having specified these contrasting thoughts and conclusions on the subject of the relationship between audit quality and earnings management practices by companies, we shape our hypothesis as follows:

H6: There is a negative association between audit quality and earnings management.

Product Market Competition and Earning Management

In the present era, literature indicated that product market competition impacts the tendency to control earnings, executives and incentives of the company. Especially, in those organizations where competition is high in nature, shareholders check and balance the performance of their CEO's more closely than those organizations where competition is low (Karuna, 2007). Therefore, in the previous times board of directors were more pressurized to control the reported accounting details distributed to money markets as compared to those who are in the latter 31 groups (Weisbach&Hermalin, 2007; Chen, Zhao, Zhang & Davis, 2012). Product market competition also enhances the pressures in the money market (Cohen &Balakrishnan, 2009). According to the signaling model, product market competition enhances the executive's tendency to control and misrepresent financial details to show the good and effective performance of the company (Scharfstein&Rotemberg, 1990). In view of the fact that earnings are very much important in investment decision making so the executives in highly competitive markets have more

incentives to grape the shareholders for the sake of investment as compared to those who are in less competitive industries. As a result, the above analysis shows that the organizations in highly competitive industries are more likely to participate in earnings management practices. With having specified these contrasting thoughts and conclusions on the subject of the relationship among product market competition and earnings management practices by companies, we shape our hypothesis as follows:
H7: There is a positive association between product market competition and earnings management.

Methodology

The operationalization of Dependent Variable

The past literature has used different models to measure the earnings management practices and these models vary from accruals to activity based models. We have estimated the earningsmanagement based on accruals through Modified Jones Model (1996) and Kothari et al. (2005).
Modified Jones Model:

$$TAC_{it} = \beta_0 + \beta_1 (1/TA_{i,t-1}) + \beta_2 (\Delta REV_{it} - \Delta REC_{it})/TA_{i,t-1} + \beta_3 (PPE_{it}/TA_{i,t-1}) + \varepsilon_{it}. \dots (3)$$

Kothari Model:

$$TAC_{it} = \beta_0 + \beta_1 (1/TA_{i,t-1}) + \beta_2 (\Delta REV_{it} - \Delta RECit)/TA_{i,t-1} + \beta_3 (PPEit/TA_{i,t-1}) + \beta_4 ROA_{i,t-1} + \varepsilon it. \dots (4)$$

Where,TAC_{it} = Total accruals based on cash flow statement approach which is the difference between net income and cash flow from operations., $TA_{i,t-1}$ = Total assets for firm i in year t, ΔREV_{it} = Changes in revenues for firm i between year t and t–1, PPE_{it} = Gross property, plant and equipment for firm i in year t, ΔREC_{it}= Changes in accounts receivable for firm i between year t and t–1, $ROA_{i,t-1}$ = Return on assets for firm i in year t-1and ε_{it} = Error term of the equation used as proxy of earnings management. In aforementioned modes, total accruals derived from cash flow based approach have been regressed on the difference between the change in revenue and change in receivable (in the current year) and change in property, plant and equipment as projected in econometric model. The Kothari et al. (2005) has extended the modified Jones Model (1996) by adding lag ROA as a determinant of total accrual. Lastly, the absolute value of residual term or unexplained part of econometric models identifies the discretionary portion of total accruals which has been used as proxy of earnings management practices.

The operationalization of Independent Variables

We have explored the relationship of corporate governance mechanism and product market competition with earnings management practices. For this purpose, we have used various proxies of corporate governance such as Institutional Ownership,Board Independence, Board Size, Board

Meetings,Audit Quality and CEO Duality. Whereas, product market competition is estimated through (HHI) Herfindahl index of sales revenue. Moreover, this study includes firm level characteristics such as firm size, leverage, loss as control variables (Rahmat, Saleh, and Iskandar, 2005 ; Chashmi et al., 2010).

Econometric Model

In order to explore the relationship among corporate governance proxies, product market competition and earning management, following model econometric model is employed:

$$\mathbf{DACC_{it}} = \beta_0 + Dacc_{i,\,t-1} + \beta_1 IO_{it} + \beta_2 BI_{it} + \beta_3 BS_{it} + \beta_4 BM_{it} + \beta_5 CEO_{it} + \beta_6 BIG_{it} + \beta_7 HHI_{it} + \beta_8 SIZE_{it} + \beta_9 LEV_{it} + \beta_{10} LOSS_{it} + \varepsilon_{it}.$$

Where, $DACC_{it}$ represents discretionary accruals. IO_{it} is calculated as the percentage of shareholders holding held by institutions in the total shareholders holding. BI_{it} is calculated as the percentage of non-executive directors in board. BS_{it} is calculated as the total board members. BM_{it} is calculated as the total number of meetings held during the year. BIG_{it} is dummy variable, implied 1 if the company is audited by one big auditor, 0 for else. CEO_{it} is dummy variable, has 1 if CEO is the chairman of the board too, 0 for else. HHI is measured by the natural logarithm of the Herfindahl index of sales revenue.

Sample Size

We have considered 84 non-financialfirms with data spread over a time period of 2010 to 2015.So, the data set of this study includes both pre and post financial crises era. These companies represent all the non-financial companies listed on Pakistan stock exchange. Initially the study considered a sample of 100 companies but later on, it was reduced to 84 on the basis of data availability. Data on companies is obtained from the annual reports of the listed companies downloaded from their web sites. Table 1 represents the total sample of considered companies that are categorized industry wise. Table 01 demonstrates the composition of this sample which includes 28 companies from textile industry constituting 33.33 % of our total sample. Likewise, 12 companies belong to Cement industry, 5 companies are from Sugar industry, 4 companies from Manufacturing industry, 6 companies from Fuel and Energy industry, 3 companies from Pharmaceuticals industry, 2 companies from Paperboard and Product industry, 2 companies from Information and Communication industry, 3 companies from Food industry, 5 companies from Chemical industry,13 companies from Automobile industry and finally 1 company from Tobacco industry inferring the individual percentage of each sector i.e. 14.28, 5.95, 4.76, 7.14, 3.57, 2.38, 2.38, 3.60, 5.95, 15.47 and 1.19 % respectively to total size of the sample.

Table 01: Sample Size

S.NO.	Industrial category	No. of companies	%
1.	Textile composite	28	33.33
2.	Cement	12	14.28
3.	Sugar	5	5.95
4.	Manufacturing	4	4.76
5.	Fuel and energy	6	7.14
6.	Pharmaceuticals	3	3.57
7.	Paperboard and product	2	2.38
8.	Information and Communication	2	2.38
9.	Food	3	3.60
10.	Chemicals	5	5.95
11.	Automobile industry	13	15.47
12.	Tobacco	1	1.19
	Total	84	100

Results and Discussion

Descriptive Statistics

Table no. 2 represents the descriptive statistics for the study variables. The results show that the average value of absolute discretionary accruals calculated by Modified Jones model is .1582, standard deviation is .5616 and its range is in between the 8.7382 and .0028. The high value of standard deviation indicates that there is high volatility in the earnings management practices in Pakistan. The average value of board size is 7.966; this means that on the average basis there are 8 members in the board, whereas, the minimum value of board of directors is 4 and the maximum value is 16. However, standard deviation is found to be 1.4631. The average value of board independence is .1463, this means that on average 14.6% of the board members are non-executive directors, whereas, the minimum value of non-executive directors in the board is 0% and the maximum value is 100%. The calculated standard deviation is .1940. The average value of board meetings is 5.5296, this means that on the average basis, 5 meetings are held during the year, whereas, the minimum value of board meetings is 4 and the maximum value is 28. The calculated standard deviation is 2.6925. The average value of audit quality is .4970, this means that 49.7% of companies are audited by big five auditors, whereas, the minimum value of audit quality is 0 and the maximum value is 1. The calculated standard deviation is .5004. The average value of CEO duality is .1853, whereas, the minimum value of CEO duality is 0 and the maximum value is 1. The calculated standard deviation is .3889. The average value of institutional ownership is .6526, this means that on the average basis 65% of shareholders holdings are with institutions, whereas, the minimum value of institutional ownership is 0% and the maximum value is 30.8%. The calculated standard deviation is 3.5167. The mean value of HHI for the selected firms is .3639, whereas the standard deviation captured is .2014. The maximum value is 1 and the minimum value is .1501. The average value of leverage of the firm is .5729; whereas, the minimum value of leverage is .0151 and the maximum value is 6.2785. The calculated standard deviation is .4542. The average value of the loss of the firm is .1832, whereas, the minimum value of the firm is 0 and the maximum value is 1. The calculated standard deviation is .3872. The average value of the firm size is 6.7278; whereas, the minimum value of firm size is 4.7195 and the maximum value is 8.7433. The calculated standard deviation is .6406.

Table 02: Descriptive Statistics

Variable	Mean	Std_Dev	Min	Max
DACC	0.15827	.56156	0.0002	8.7382
BS	7.9660	1.4631	4.000	16.00
BI	0.14632	.19405	0.000	1. 000
BM	5.5296	2.6925	4.000	28.00
BIG	0.49700	.50049	0.000	1. 000
CEO	0.18533	.38896	0.000	1. 000
IO	0.65260	3.5167	.00003	30.81
LEV	0.57296	.45426	.01519	6.278
LOSS	0.18326	.38727	0.000	1. 000
SIZE	6.7278	.64061	4.719565	8.743346
HHI	.36394	.20141	.1501956	1. 000

Mean Estimation

Table 03 interprets a decreasing trend for the board size (BS) initially and then an increasing trend later on which conclusively reflects a holistic improvement in the board size (BS) over the spread of time. Likewise, a similar trend is observed for board independence (BI), institutional ownership (IO), CEO duality and product market competition (HHI). However, board meetings (BM) and audit quality (BIG) are observed to proceed opposite to this trend showing an increase in their statistics initially followed by a sudden decrease.

Table 03: Mean Estimation

Year	BS	BI	BM	BIG	CEO	IO	HHI
2010	8.016393	.1702131	5.000	.4754098	.2459016	.7598599	.3836337
2011	7.942857	.142800	5.55714	.5428571	.2428571	.5064664	.340702
2012	7.933333	.1105067	5.6400	.5200	0.2000	.6656748	.3284718

2013	7.932432	.1142027	5.56756	.527027	.1756757	.5658447	.324332
2014	8.064103	.1532295	5.53846	5128205	.0897436	.573602	.3954345
2015	8.116883	.1552468	5.41558	.4935065	.0909091	1.094245	.4004205

Correlation Matrix

Table 04 shows the values of coefficient of correlation of study variables. The results revealed that BS, BI, SIZE and BM are significantly negatively correlated. This means that board size, board independence, size of firm and board meetings reduce the earnings management practices. Whereas, the value of HHI index is negatively correlated with the discretionary accruals, this summarizes that higher level of HHI decrease the earnings management practices too. As Higher (lower) values of HHI indicate the Lower (Higher) competition in the market. This means that there is a direct relationship of earnings management and product market competition.

Table 04 : Correlation Matrix

	DACC	BS	BI	BM	BIG	CEO	IO	LEV	LOSS	SIZE	HHI
DACC	1										
BS	-0.1220***	1									
BI	-0.1276***	0.134**	1								
BM	-0.0979*	0.0365	0.0296	1							
Big	0.0056	0.254***	0.124*	-0.046	1						
CEO	0.0459	-0.154**	0.00578	-0.059	-0.128*	1					
IO	-0.0186	0.126*	0.0828	0.0854	0.094	0.037	1				
LEV	-0.0137	-0.0838	-0.0581	-0.092	-0.163**	0.142**	-0.0127	1			
LOSS	-0.0179	-0.162**	-0.0501	-0.02	-0.212***	0.188***	-0.0021	0.419***	1		
SIZE	-0.093	0.309***	0.101	0.0989	0.315***	0.0161	0.0282	-0.07	-0.0	1	

	7*							59	94		
HHI	-0.1527**	0.0685	-0.0022	0.0588	0.00046	-0.0018	0.292***	-0.0595	-0.048	-0.065	1

Results Analysis

This study estimates the association of corporate governance, product market competition and earnings management. Table 05 show the regression analysis for hypothesis testing using Dynamic GMM regression model. Model 1 and model 2 use alternate proxies for discretionary accruals to measure the earnings management. In model 1, discretionary accruals are captured by using Modified Jones Model, whereas; model 2 uses Kothari et al. (2005). The regression coefficient of IO is positive (β=.0161008) and negative (β =-.003209) both significant at 1% and 10% in Model 1 and 2 respectively. This is in line of our H1. BS poses a positive significant influence on discretionary accruals as β=-.0149547 at 5% level and β= -0193689 at 1% level in model 1 and 2 respectively. BI is negatively and significantly associated at 1% level in both models (β values are -.0892007and -.187003 respectively) supporting the hypothesis H3. CEO duality is found to be positivelyassociated with earnings management as β=.4908778 in model 1 and β= .5909682 in model 2 at 1% level respectively. The findings support our hypothesis H4. The results show significant negative impact of BM on DACC in model 1 and 2 (β values are-.0089913 and -.0069351 respectively, P<.01 for both), which is aligned with H5. The quality of audit reduces the earnings management as H5 predicts, we find support for H5 using both proxies as β values of BIG are -.1515189 and -.2550943 significant at 1% respectively. Finally, HHI coefficients in respective models are negative (β=.-1.164341 and β= -1.049648) and significant at 1% respectively. As lower value of HHI shows higher market competition so the findings reveal that high market competition leads to high earnings management.

Table 05: Regression analysis through GMM

Variables	Model 1		Model 2	
	Coef.	P values	Coef.	P values
$DACC_{LAG}$	-.0737 ***	0.000	.0245615**	0.077
BM	-.0089913***	0.000	-.0069351***	0.000
IO	.0161008***	0.000	-.003209*	0.069
CEO	.4908778***	0.000	.5909682***	0.001
BS	-.0149547**	0.011	-.0193689***	0.003
BI	-.0892007***	0.000	-.187003***	0.000
BIG	-.1515189**	0.034	-.2550943***	0.001
LEV	.0004107	0.972	.0034713	0.848
LOSS	-.305116***	0.000	-.3997456***	0.000
SIZE	-.0155555	0.819	-.0199769	0.822

HHI	-1.16434***	0.000	-1.049648***	0.000
Intercept	.7103451	0.168	.4367153	0.486
Industry Dummies	Yes		Yes	
Year Dummies	Yes		Yes	
Arellano-Bond test AR(2) (p-value)	-1.4042 0.163		-1.3013 0.1932	
Sargan test	47.1869		50.22074	
Wald Test(P Value)	0.000		0.000	

Conclusion

This study aims to investigate that to what extent different dimensions of corporate governance and product market competition influence the earnings management practices. Although prior studies in the domain of corporate governance research have focused on the influence of corporate governance mechanism in mitigating the earnings management practices, however in this study we focus on exploring the association of product market competition and corporate governance with earnings management practices.In order to investigate the above research question, this study has used a sample of 84 non-financial companies from 2010 to 2015 listed on Pakistan Stock Exchange. In order to address the issues of endogeneity among the variables, this research has applied dynamic GMM model for theempirical analyses.The dynamic GMM model estimates show the significant negative impact of board size (Aygun, Ic and Sayim 2014 ;Laili, Khairi and Siam, 2014), board independence (Yarram, Sukeecheep & Al-Farooque, 2013),meetings (Davvidson&Xie, 2003), and audit quality (Vann & Turner, 2010)on earning management, whereas, CEO duality (Chashmi et al., 2010 : Abdullah & Latif, 2015) and product market competition (Cheng et al. 2013; Balakrishnan and Cohen 2014) show a significant positive impact on earnings management. The results remain unchanged for both measurements ofdiscretionary accruals. However, institutional ownership shows contrasting results for different discretionary accruals measures. Overall, the findings of current study confirms the influential role of corporate governance mechanism and product market competition on earning management practices of firms listed at Pakistani stock exchange.

The current research study contributes in the existing literature of earnings management practices and corporate governance mechanism in the light of product market competition in the context of emerging Pakistani economy. The analysis of earnings management practices presented in the current study not only provides an insight to the regulators about the firm but also helps the policy makers to formulate such policies which ensure the wellbeing of all the stakeholders of the firms. The current study is also helpful for the managers and equity holders of the firms in order to improve the corporate governance mechanism in product market competitive environment.

References

Abdul Rauf, F.H., Johari, N.H., Buniamin, S., and Abd Rahman, N.R. (2012). "The Impact of Company and Board Characteristics on Earnings Management: Evidence from Malaysia", *Global Review of Accounting and Finance,* Volume 3. No. 2. September 2012, Page 114 – 127.

Abed, S., Al-Attar, A., and Suwaidan, M. (2012). "Corporate Governance and Earnings Management: Jordanian Evidence, *International Business Research,* Volume 5(1), Page 216- 225.

Ahmed, K., Hossain, M., and Adams, M. (2006). "The Effects of Board Composition and Board Size on the Informativeness of Annual Accounting Earnings", Corporate Governance: *An International Review,* Volume 14 (5), Page 418-431

Alves, S. (2012). "Ownership Structure and Earnings Management: Evidence from Portugal", *Australasian Accounting Business and Finance Journal,* Volume 6(1), 2012, Page 57-74.

Arsoy, A.P. & Crowther, D. 2008, Corporate governance in Turkey: reform and convergence. *Social Responsibility Journal,* 4(3), 407 – 421. http://dx.doi.org/10.1108/17471110810892893

Arya, A., Glover, J., & Sunder, S. (2003). Are unmanaged earnings always better for shareholders?*Accounting Horizons,* 111−116 (supplement).

Aygun, M., Ic S., and Sayim, M. (2014). "The Effects of Corporate Ownership Structure and Board Size on Earnings Management: Evidence from Turkey", *International Journal of Business and Management,* Volume 9, No. 12. 2014, Page 123,126.

Balakrishnan, K. and Cohen, D.A., 2012. Product market competition and financial accounting misreporting. *The University of Texas at Dallas*

Balakrishnan, K., & Cohen, D. (2009). Product market competition and financial accounting misreporting. *Working paper (Available at SSRN: http://ssrn.com/abstract= 1927427).*

Baydoun, N. Maguire, W. Ryan, N. & Willett, R. 2012, Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal,*28(1),7–22.

Brickley, J.A., Coles, J.L. & Terry, R.L. 1994.Outside Directors and the Adoption of Poison Pills. *Journal of Financial Economics,* 35(3) 371–90. http://dx.doi.org/10.1016/0304-405X(94)90038-8

Carcillo, J.V., Hollingsworth, C.W., Klein, A. & Neal, T.L. 2006. Audit Committee Financial Expertise, Competing Corporate Governance Mechanisms, and Earnings Management. *Retrieved from http://ssrn.com/paper=887512.*

Chekili S. (2012). "Impact of Some Governance Mechanisms on Earnings Management: An Empirical Validation Within the Tunisian Market", *Journal of Business Studies,* Quarterly 2012, Volume 3, No. 3, Page 95-104, ISSN 2152-1034.

Chen, G., Firth, M., Gao, D. N., &Rui, O. M. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance,* 12, 424-448.

Cheng, P., P. Man, and C. H. Yi. 2013. The impact of product market competition on earnings quality. *Accounting & Finance,* 53 (1),137-162.

Chung, R., Firth, M., & Kim, J.-B. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance,* 8(1), 29–48.

Conger, J. A., Finegold, D., & Lawler, E. (1998). Appraising boardroom performance. *Harvard Business Review,* 76, 136-164.

Conger, J. A., Finegold, D., & Lawler, E. (1998). Appraising boardroom performance. *Harvard Business Review,* 76, 136-164.

Cornett, M., McNutt, J., and Tehranian, H. (2009). "Corporate Governance and Earnings Management at Large U.S. Bank Holding Companies", *Journal of Corporate Finance,* Volume 15 (4), Page 412-430.

Datta, S., M. Iskandar-Datta, and V. Singh. 2013. Product market power, industry structure, and corporate earnings management. *Journal of Banking & Finance,* 37 (8),3273-3285.

DeAngelo, L. (1986). "Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders", *Accounting Review,* Volume 61 (3), Page 400-420.

Dechow, O.M. &Dichev, I.D. 2002. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review,* 77(Supplement) 35-59.

Dechow, P. M., Sloan, R. G., & Sweeny, A. P. 1995, Detecting Earnings Management, *The Accounting Review,* Vol. 70, No. 2,April, pp. 193-225

DeFond, M. L., &Jiambalvo, J. (1994). Debt covenant violation and the manipulation of accruals. *Journal of Accounting and Economics,* 7, 145 – 176.

Defond, M. L., & Park, C. W. (1997). Smoothing income in anticipation of future earnings. *Journal of Accounting and Economics,* 23, 115 – 139.

Dima, B., Ionescu, A., &Tudoreanu, P. (2013). Corporate governance and financial structures of companies in developing countries. *AnnalesUniversitatisApulensis Series Oeconomica,* 15(1), 162172.Retrievedfromhttp://search.proquest.com/abiglobal/docview/1424327741/6BE30FD449914FBEP Q/1? Accounted =27870

Emamgholipoura M., Bagherib, S. M., B., Mansouriniaa, E., and Arabic A., M. (2013). "A study on the relationship between institutional investors and earnings management: Evidence from the Tehran Stock Exchange", *Management Science Letters,* Volume 3 (2013), Page 1105–1112.

Fazlzadeh, A., Hendi, A. T., &Mahboubi, K. (2011). The examination of the effect of ownership structure on firm performance in listed firms of Tehran stock exchange based on the type of the industry. *International Journal of Business and Management,* 6 (3), 249-266. Retrieved from www.ccsenet.org/ijbm

Gill A. (2008). "Corporate Governance as Social Responsibility: A Research Agenda", *Berkeley Journal of International Law,* Article 5, Volume 26, Issue 2, Page 453-478.

González, J., S., &García-Meca, E. (2014). "Does corporate governance influence earnings management in Latin American markets?",*Journal of Business Ethics,* Volume 121(3), Page 419–440.

Habib, A. (2004). Impact of earnings management on the value-relevance of accounting information: Empirical evidence from Japan. *Managerial Finance,* 30 (11), 1-15. Retrieved from http://www.emeraldinsight.com/doi/pdfplus/10.1108/03074350410769344

Healy, P. M., & Palepu, K. G. (1993). The effect of firms' financial disclosure policies on stock prices. *Accounting Horizons,* 7, 1−11.

Henryani, F. F., &Kusumastuti, R. (2013). Analysis of ownership structure effect on economic value added. *International Journal of Administrative Science & Organization,* 20(3), 171-180.

Hermalin, B., &Weisbach, M. (2007). Transparency and corporate governance. *NBER working paper No. 12875*

Heubischl, J. S. (2006). European network governance – Corporate network systematic in Germany, the United Kingdom,and France: An empirical investigation. *Retrieved from http://www.openthesis.org/documents/European-Network-GovernanceCorporate-Systematic-596680.html*

Ikechukwu, O., I. (2013). "Earnings Management and Corporate Governance", *Research Journal of Finance and Accounting,* ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online), Volume 4, No.3, 2013

Iraya C., Mwangi, M., &Muchoki, G. (2015). "The effect of corporate governance Practices on earnings management of Companies listed at the Nairobi Securities Exchange", *European Scientific Journal,* January 2015 edition Volume 11, No.1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431

Islam, M. A., Ali, R., & Ahmad, Z. (2011). "Is modified Jones model effective in detecting earnings management? Evidence from a developing economy", *International Journal of Economics and Finance,* Volume 3(2), Page 116–125.

Javaid, A., Y., Iqbal R. (2010). "Corporate Governance in Pakistan: Corporate Valuation, Ownership,and Financing", *PIDE Working Papers, Volume* 2010(57), Page 37-72.

Jensen, M. C., &Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs,and ownership structure. *Journal of financial economics,* 3(4), 305-360.

Kaplan. R. S. 1985, Comments on Paul Healy: Evidence on the Effect of Bonus Schemes on Accounting Procedure and Accrual Decisions. *Journal of Accounting and Economics* 7: 109-113. http://dx.doi.org/10.1016/0165-4101(85)90030-8

Karuna, C. (2007). Industry product market competition and managerial incentives. *Journal of Accounting and Economics*, 43(2–3), 275–297

Karuna, C., Subramanyam, K.R., and Tian, F., 2012. "Industry product market competition and earnings management, University of Houston working paper.

Kedai, S., Philippon, T. 2009. The Economics of Fraudulent Accounting. *The review of Financial Studies,* Vol. 22 (6) pp. 2169 – 2199.

Khalil, M. M. (2010). Earnings management, agency costs,and corporate governance: Evidence from Egypt. *Retrieved from https://hydra.hull.ac.uk/assets/hull:7975a/content*

Klein, A. (2002). Economic determinants of audit committee independence. *Accounting Review,* 77 (2), 435-453. Retrieved from http://www.jstor.org/stable/3068905

Klette, T. J., 1999. Market Power, Scale Economies and Productivity: Estimates from a Panel of Establishment Data. *The Journal of Industrial Economics,* 47 (4),: 451-476.

Koh, P. S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *British Accounting Review,* 35(2), 105–128.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1997. Legal determinants of external Finance. *Journal of Finance,*52, 1131-1150 http://dx.doi.org/10.1111/j.1540-6261.1997.tb02727.x

Lakhal, F., Aguir, T., and Lakhal, N. (2015). "Do Women On Boards And In Top Management Reduce Earnings Management? Evidence in France", *The Journal of Applied Business Research,* May/June 2015, Volume 31, Number 3, Page 1107.

Laksmana, I. and Yang, Y., 2014. "Product market competition and earnings management: evidence from discretionary accruals and real activity manipulation",*Advances in Accounting, Incorporating Advances in International Accounting, 30, 263–275*

Latif, A., and Abdullah F. (2015). "The Effectiveness of Corporate Governance in Constraining Earnings Management in Pakistan", *The Lahore Journal of Economics,* Volume 20(1), Summer 2015, Page 135–155

Lee, S. (2008). Ownership structure and financial performance: Evidence from panel data of South Korea. Corporate Ownership and Control, 6 (2). *Retrieved from http://ssrn.com/abstract=1279919*

Leventis, S,andDimitropoulos, P, 2012. The role of corporate governance in earnings management: experience from US banks. *Journal of Applied Accounting Research*, 13 (2), pp. 161 – 177.

Lin, S., Pizzini, M., Vargus, M. and Bardhan, I.R. 2011, 'The Role of the Internal Audit Function in the Disclosure of Material Weaknesses'*, Accounting Review,* 86 (1): 287–323.

Lipton, M., &Lorsch, J. W. (1992). Modest Proposal for Improved Corporate Governance, *A. Bus.Law.,* 1(1), 59-77.

Lobo, G. J., & Zhou, J. (2006). Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? *Initial evidence. Accounting Horizons,* 20(1), 57-73.

Man, C. and Wong, B. (2013). "Corporate Governance and Earnings Management: A Survey Of Literature". *The Journal of Applied Business Research,* March/April 2013, Volume 29, Number 2.

Marsden, A., & Wong, J. (1997). The impact of taxation on the earnings management on New Zealand electric power boards. *Pacific Accounting Review,* 10(2), 1 – 31.

Markarian, G. and Santaló, J., 2014. "Product market competition, information and earnings management. Journal of Business Finance & Accounting, 41 (5-6), 572–599.

Mather, P., and Ramsay, A. (2006). "The Effects of Board Characteristics on Earnings Management around Australian CEO Changes", *Accounting Research Journal,* Volume 19, No. 2 (2006), Page 78-93.

Marciukaityte, D. and Park, J., 2009. 'Market competition and earnings management. SSRN paper, http:// ssrn.com/abstract=1361905

McKee, T. E. (2005). "Earnings management: An executive perspective", *Mason, OH: Thomson.*

Mehrabian, M., Ansari, A., and Pourheydari, O. (2013). "The relationship between institutional ownership and discretionary and nondiscretionary factors accruals quality firms Listed on Stock Exchange", *International Research Journal of Applied and Basic Sciences,* ISSN 2251-838X / Volume 6(1), Page 13-16.

Mohammad, M., Abdul Rashid, H., and Shatter, F. (2012). "Corporate Governance and Earnings Management in Malaysian Government Linked Companies: The Impact of GLCs' Transformation Policy", *Asian Review of Accounting,* Volume 20(3), Page 241-258.

Moradi, M, Salehi M, Bighi, SJH, and Najari M. (2012). "A Study of Relationship between Board Characteristics and Earning Management: Iranian Scenario", *Universal Journal of Management and Social Sciences,* Volume 2, No.3, March 2012, Page 12,17-19,25.

Nickell, S. J., 1996. "Competition and Corporate Performance." *Journal of Political Economy,* 104(4), 724-746.

Niu, F.F. (2006). Corporate governance and the quality of accounting earnings: A Canadian perspective. *International Journal of Managerial Finance,* 2 (4), 302- 327. http://dx.doi.org/10.1108/17439130610705508

Park, Y., and Shin, H. (2004). "Board Composition and Earnings Management in Canada", *Journal of Corporate Finance,* Volume 10(3), Page 431-457.

Pearce II, J. A., & Zahra, S. A. (1992). Board Composition From A Strategic Contingency Perspective. *Journal of Management Studies,* 29(4), 411–438.

Peasnell, K.V., Pope, P.F., & Young, S. (2005). Board monitoring and earnings management: Do outside director's influence abnormal accruals? *Journal of Business Finance and Accounting,* 32, 1131-1346. doi: 10.1111/j.0306- 686X.2005.00630.x

Richardson, V. (2000). Information asymmetry and earnings management: Some evidence. *Review of Quantitative Finance and Accounting,* 15 (4), 325-347. http://dx.doi.org/10.2139/ssrn.83868

Ronen, J., &Yaari, V. (2008). Earnings management: *emerging insights, in theory, practice, and research (Vol. 3).* New York: Springer

Roodposhti F., R., &Chashmi, S., A., N. (2010). "The Effect of Board Composition and Ownership Concentration on Earnings Management: Evidence from IRAN", *World Academy of Science, Engineering and Technology,* Volume 4 2010-06-27, Page 135 - 141.

Rotemberg, J., &Scharfstein, D. (1990). Shareholder value maximization and product market competition. *Review of Financial Studies,* 3(3), 367–391.

Saleh, N., M., Iskandar, T., M., &Rahmat, M., M. (2005). "Earnings Management and Board Characteristics: Evidence from Malaysia", *Journal of Pengurusan,* Volume 24, Page 77-103, 1,88-91

Shah S., Z., A., Butt, S., A., and Hasan, A. (2009). "Corporate Governance and Earnings Management an Empirical Evidence from Pakistani Listed Companies", *European Journal of Scientific Research,* Volume 26 No. 4(2009), Page 624-638.

Siam, Y., Laili N., and Khairi K. (2014). "Board of directors and earnings management among Jordanian listed companies: Proposing conceptual framework", *International Journal of Technical Research and Applications,* e-ISSN: 2320-8163, www.ijtra.com Volume-2, Special Issue 3 (July-Aug 2014), Page 1, 2-5.

SivaramakrishnanK.Yu SH. (2008). On the association between corporate governance and earnining quality. *http://ssrn.com*

Soliman M., M., and Ragab A., A., (2013), "Board of Director's Attributes and Earning Management: Evidence from Egypt", *Proceedings of 6th International Business and Social Sciences Research Conference* 3 – 4, January 2013, Dubai, UAE, ISBN: 978-1-922069-18-4, Page 1,8-11,15.

Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics,* 22, 249−281.

Sukeecheep S., Yarram S., R., Al-Farooque O. (2013). "Earnings Management and Board Characteristics in Thai Listed Companies", The 2013 IBEA, International Conference on Business, *Economics, and Accounting*, Volume 20 – 23 March 2013, Bangkok – Thailand, Page 1,5-8,12.

Talbi, D., Omri, M., Guesmi, K., and Ftiti, Z. (2015). "The Role Of Board Characteristics In Mitigating Management Opportunism: The Case Of Real Earnings Management", *The Journal of Applied Business Research* – March/April 2015, Volume 31, Number 2

Tinaikar, S. and Xue, S., 2009. Product market competition and earnings management: Some international evidence. Working paper, University of Florida

Wang, T. Y., and A. Winton. 2012. Competition and Corporate Fraud Waves. University of Minnesota

Xie, B., Davidson, W. N., &DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of corporate finance,* 9(3), 295-316. doi:10.1016/S0929-1199(02)00006-8

Xie, B., Davidson, W.n III and DaDalt, P.J., (2003). Earnings Management and Corporate Governance: the Role of Board and Audit Committee, *Corporate Finance, Vol.9.*

Young, M., Peng, M., Ahlstrom, D., Bruton, G., and Jiang, Y. (2008). "Corporate Governance in Emerging Economies: A Review of the Principal-Principal Perspective", *Journal of Management Studies,* Volume 45 No.1, Page 196-220.

Yugroho, B., Y., and Eko U. (2011). "Board characteristics and earnings management", *Journal of Administrative Science & organization, January 2011,* Volume 18, Number 1, Page 1,4-5,9.

Zhao, Y., Chen, K., Zhang, Y., & Davis, M. (2012). Takeover protection and managerial myopia: Evidence from real earnings management. *Journal of Accounting and Public Policy,* 31(1), 109–135.

Zhu, Y. & Tian, G., G. (2009). "CEO pay-performance and board independence: the impact of earnings management in China", *4th International Conference on Asia-Pacific Financial Markets (CAFM)*, Page 1-39, Seoul, Korea: Korean Securities Association

Jana Oehmichen, (2018). "East meets west—Corporate governance in Asian emerging markets: A literature review and research agenda". *International Business Review 27 (2018) 465–480.*

Aguilera, R. V., & Jackson, G. (2010). Comparative and international corporate governance. *The Academy of Management Annals, 4(1), 485–556.* http://dx.doi.org/10.1080/19416520.2010.495525.

Filatotchev, I., Jackson, G., & Nakajima, C. (2013). Corporate governance and national institutions: A review and emerging research agenda. Asia Pacific Journal of Management, 30(4), 965–986. http://dx.doi.org/10.1007/s10490-012-9293-9.

Oehmichen, J., Schrapp, S., & Wolff, M. (2017). Who needs experts most? Board industry expertise and strategic change—A contingency perspective. Strategic Management Journal, 38(3), 645–656. http://dx.doi.org/10.1002/smj.2513.