Relationship between Corporate Governance, Earnings Management & Investor Reaction: A Case of KSE.100 Index (2009-2014)

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Abstract
The objective of the study is to investigate the relationship of corporate governance with investor reaction and earnings management. For earnings management discretionary accruals are used as proxy that is attained through various models interpretation. The data is obtained from Karachi stock exchange 100 index listed companies. Connivance sampling technique is used to acquire the data. Moreover, outliers of the data are evicted and then heterogeneity is managed through various tests to normalize the data. Then correlation test and regression tests are executed that has shown significant relationship of governance with investor reaction and earnings management.
Keywords: Discretionary Accruals, Sampling, KSE 100 Index, Correlation, Outliers

Introduction

Corporate sector is operated by various stakeholders. And it is observed by the past studies and corporate literature that various corporations are family listed companies. Thus, such family listed companies raise the conflict of interest among key stakeholders because of various job roles uniformity and agency issues.

So, corporate governance is emerged in the field of study and in plethora of corporate sector. It is the governance that not only makes decisions it also make a corporation accountable for the betterment of all stakeholders (Shah, Butt and Hasan, 2009). And it is the governance that is also for the purpose to maximize shareholders wealth.

But such wealth maximization through corporate governance has some technical issues in financial ways that are maintained through accounting and financial standards. Such accounting standard leads towards financial reporting by corporate governance to make clarity about corporate matters for stakeholders concern. And there are various issues that are less investigated in Pakistani context. Earnings management and its relationship with corporate governance facets is one of them.

Earnings management is determined by analyzing and interpreting matter of accruals i-e discretionary and non-discretionary accruals. And it is the sentiment in financial market that sound and well managed earnings or earning trends by governance of corporation makes sound perception of investor towards financial instruments (Iqbal, Nasir and Bilal, 2015). Thus, study aims to investigate the relationship between corporate governance facets, earnings management and investor perception.

Moreover, the study will reveal key implications for theorists and practitioners to plan governance codes in Pakistan, plan to manage earnings and to manage in a way that to maximize investor perception in a positive way regarding financial instruments of corporation.

The scheme of the study is executed in a way that part one describes the objectivity of study, literature and study implications. Part two briefly clarifies about sectorial representation, hypothesizes, sample & population of study, study model and measurement models as well. Part three explains study results and analyses. While, part four explains findings of the study.

Study Methodology

The KSE.100 index companies have been selected for data and the sample period consists of 2009 – 2014. Moreover, state bank of Pakistan database, Karachi stock exchange database, opendoors.com database and yahoo finance database are used to extract the data for current study. Thus, companies by financial sector are excluded because of their variant nature of investment, debt & equity mix and companies whose data is found missing is also excluded. The convenience sampling technique is used to acquire the data from above databases. Thus, study hypothesized that

H1: Corporate governance facets have significant relationship with earnings management.

H2: Corporate governance facets have significant relationship with investor perception.

In order to test above hypothesizes the model of the study is as follows,

$$"\boldsymbol{CG}" = \ " \propto " + "\boldsymbol{f}(\boldsymbol{\beta}\mathbf{1}"\boldsymbol{EM}" + \ \boldsymbol{\beta}\mathbf{2}\ "\boldsymbol{IR}" + \ \acute{\varepsilon})"$$

The model represents the CG is corporate governance, EM as earnings management and IR as investor reaction and $\acute{\varepsilon}$ represents the error term. While, the measurement models of corporate governance, earnings management and investor reaction are as follows respectively.

While, the Klapper & Love, (2002) estimated the corporate governance quality by incorporating board structure, ownership structure and audit committee independence. And such model is used in current study to measure the corporate governance. The model of corporate governance quality is as follows,

$$"QCG" = " \propto " + "f("BS" + "OS" + "ACI")"$$

For earning management accruals are used. Such accruals are calculated through balance sheet as well. While, the balance sheet approach is used by incorporating methodology of Jones, (1991) and Shah, Butt & Hasan, (2009). For true earnings management only discretionary accruals are used that are derived by deducting total accruals from non-discretionary accruals. And this is the based on Modified Cross Sectional Jones Model, (1995). Thus, the models are as follows,

$$"NDA = \propto 1" ["1" / "At-1"] " + \propto 2" ["\Delta REVt - \Delta RECt" / "At-1"] " + \propto 3" ["PPEt" / "At-1"]$$

Where: TAt is total accruals in year t scaled by lagged total assets

t ΔREV is revenues in year t less revenue in year t-1

PPEt is gross property plant and equipment at the end of year t

ΔRECt is net receivables in year t less net receivable in year t-1. All of the variables have been scaled by lagged total assets.

At-1 is total assets at the end of year t-1

α1, α2, α3 are firm specific parameters

ε is the residual, which represents the firm specific discretionary portion of total accruals.

$$"TAt" = "\Delta CAt" - "\Delta Casht" - "\Delta CLt" + "\Delta DCLt" - "DEPt"$$

The above model measures the total accruals. From above model TA represents the total accruals, ΔCA represents the change in current assets at t time period, $\Delta Cash$ represents the change in cash, ΔCL represents the change in current liabilities at t time period, ΔDCL represents the change in debt in current liabilities at t time period and DEP represents the depreciation cost at t time period. Thus, these total accruals are not sufficient to measure the earnings management. As already mentioned, for earnings management measurement there is discretion among accruals that is derived by deducting total accruals from non-discretionary accruals. So the equation is,

$$"DA" = "TA" - "NDA"$$

Thus, the above model represents DA as discretionary accruals used as proxy of earnings management that are found by subtracting total accruals represented as TA from non-discretionary accruals represented as NDA.

Moreover, the investor reaction is the attitude of investor to shares purchase or repurchase. While, the investor reaction is calculated by taking natural log of current price of the stock divided on the base price of stock. Investor reaction is adopted from methodology of Iqbal, Nasir & Bilal, (2015). Thus, the model of investor reaction is as follows,

$$"IR" = "\log\left[" Pn" / "Po"\right]"$$

Study Analyses

Table 01

Correlation Analyses

Variables	CG	EM	IR
CG	1		
EM	0.38247**	1	
IR	-0.65927**	-0.54378**	1

** Significance level at p value <0.01

The table 01 reveals the results of correlation matrix of the study. In above table corporate governance is significantly correlated with earnings management. Earnings management is significantly correlated with corporate governance with the value of .38247** (p<0.01). And investor's reaction is significantly correlated with corporate governance with the value of -0.65927** (p<0.01) and with earnings management with the value of -0.54378** (p<0.01).

Table 02
Regression Analyses

Variables	Beta	t. Stats	Probability
C	0.533	2.71	0.4329
CG	0.7399	0.4189	0.000
EM	0.5445	0.14531	0.000
IR	0.7835	0.45819	0.002
R- Square	0.00458	Mean Dependent Variation	0.07523
Adjusted R. Square	0.00197	S.D Dependent Variation	0.06956
Durbin Watson	2.013	F – stats	0.9537

Under OLS individual regression is applied where r square shows the value as 45.8% that shows model represents less phenomena as of earnings management and investor reaction. Thus, more are unexplored. Moreover, f- stats is 95% that represented favor to the study. Therefore, corporate governance is 54.45% regressed with earnings management and 78.35% regressed with investor reaction. And it revealed all hypotheses as accepted.

Conclusion

As per objective of the study relationship between corporate governance, investor reaction and earnings management is investigated. The study clarified significant correlation of corporate governance with earnings management and investor reaction. And both hypothesizes are accepted. Thus, study concluded that qualitative corporate governance decisions and their accountability leads corporation towards managed earnings and boosts investor perception. Hence, study revealed correlated findings with studies of Shah, Butt & Hasan, (2009) and Iqbal, Nasir & Bilal, (2015). Future research could be conducted in a way that does corporate governance reduces idiocyntric risk of corporation or not. Another study will reveal significant results that corporate governance quality and accountability helps to manage systematic risk of corporations or not.

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Appendix – 01

Corporate Governance Quality		
1	INED's Presence	59%
2	Internal Audit Committee	59%
3	Ownership Structure	48.7%

Appendix – 02

No of INED's		No of INED's In Audit Committee		Ownership Concentration	
Range	Score	Range	Score	Range	Score
0------20%	1	0------20%	1	0------20%	1
21------40%	2	21------40%	2	21------40%	2
31-------60%	3	31-------60%	3	31-------60%	3
61--------80%	4	61--------80%	4	61--------80%	4
>. 81%	5	>. 81%	5	>. 81%	5