Impact of Corporate Governance Mechanisms, Firms Risk and Performance on Disclosure Quality: Evidence from Pakistan

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Abstract

The purpose of this study is to investigate the influence of CG mechanisms, risk, and financial performance on the disclosure quality of annual financial statements of Pakistani firms. After applying the censored regression model, i.e., Tobit regression on 167 firms listed on PSX, we found that board size, the dual role of CEO, independency of the audit committee, the concentration of ownership, and early disclosure of financial statements by the board members are the key factors to increase the disclosure quality of Pakistani firms. Board independence has a negative impact on the disclosure quality; however, board independence having CEO duality and an independent audit committee positively impacts the disclosure quality. We also found that companies with more business risk are reluctant to disclose quality information in annual reports.

Keywords Disclosure quality, CG mechanisms, Tobit regression, Firms risk, Firms performance, PSX listed firms.

Introduction

Corporate reporting has transformed from the traditional type of reporting, which includes financial information, to the current style of reporting called integrated reporting. The levels of corporate disclosure between companies within and between countries are affected by this change. Disclosure assumes a significant part and tackling the issue of data imbalance among chiefs and investors. Disclosure gives data about the previous occasions and future expectations to current and future investors (Al Attar, 2016). Likewise, the right and ideal disclosure help financial backers at foreseeing stock costs in securities

exchanges (Zhang, Zhao, and Zhao, 2015). Consequently, the nature of disclosure data in fiscal summaries assists with deciding the correspondence level and its exactness between the administration and its present partners, future partners, and administrative bodies (Mohan, 2006). The requirement for disclosure nature of yearly reports is because of data unevenness and office issues among the executives and partners (Jiang, Habib, and Hu, 2011).

This study aims to bring light on the Corporate Governance (CG) mechanisms, firm's riskiness, and the timeline of reporting that helps listed companies in Pakistan disclose quality information. Pakistan is an emerging economy, and most of the Pakistani firms have greater ownership concentrations with a lack of protection to investors. Most of the companies listed in Pakistan do not disclose their information to investors, and as a result, investors think many times before investing due to a lack of knowledge. The investors will invest in those companies that provide their information to the investors through annual reports on time. We choose the non-financial firms of Pakistan for our analysis because most of these firms are reluctant to disclose their information compared to financial companies.

Our analysis shows that board size (BS), audit committee independence (AUIND), CEO duality (CDU), ownership concentration (OC), and timeline of reporting (TLINE) are associated with increased disclosure quality (DQ) of financial statements of Pakistani firms. Furthermore, this study shows surprising results that CDU with BIND and BIND with AUIND positively impact DQ. The results also suggest that the more the firm faces business risk, the less they disclose their information, and firms with more performance disclose more quality information.

Firms financial statement contains both required (by law) and voluntary information's; such information's are not explicitly addressed to stakeholders but are behaved that providing information can help the stakeholder. However, communication to stakeholders through financial statements has many shortcomings. Firstly, information asymmetry occurs, which occurs when management discloses more information about the company than its stakeholders. Secondly, the disclosure of information leads to agency problems because the company discloses its resources, and possession causes superior knowledge about its stakeholders (Schroeder, Clark, &

Cathey, 2001). Thirdly, the information contained in financial statements doesn't capture the events and items that are caused by technological and environmental changes, which bears the interest of stakeholders (Graham, Harvey, & Rajgopal, 2005). Lastly, the problem arises as to how much to disclose in annual reports. Stakeholder's demand complete information, but it is not advisable for both companies and a stakeholder because it leads to information overload and ultimately leads to poor decisions by users(Paredes, 2003). The ideal situation is to provide balanced information because total disclosure costs outweigh the benefits (Riahi-Belkaoui, 2004).

All capital markets use high-quality disclosure information of financial statements because these types of information provided by the companies may influence the overall decisions of the capital markets. The research on CG demonstrates the structure of ownership within an organization that may affect the DQ of financial statements (Shiri, Salehi, & Radbon, 2016). Many researchers in the past conducted their studies on the OC and voluntary disclosure by using one or two types of block ownerships for measuring the ownership concentration (Makhija & Patton, 2004); (Mak, 1991); (Eng & Mak, 2003); (Luo, Courtenay, & Hossain, 2006).

During the 1980s and 1990s, the corporate governance scandals resulted in forming different types of inquiry committees in developing countries that deal with corporate governance affairs. The audit committee (AU) recently highlighted the literature because of corporate governance failures and irregularities in financial statements. Auditors receive their remunerations according to their goodwill in the market, nature of work, and firm size. On the other hand, the financial statements provide investors information for making investment decisions and evaluating their risks with those investments. Therefore, investors will make their investments confidently if they get adequate information from the company. The studies conducted in the 70s and 80s(Wright, 1996) explains the professional criteria, which combines the audit practices and financial statements to form CG.

The matter of CG disclosure in financial statements is a critical issue around the globe. Glassman (2003) posed a significant inquiry: What reason would we say we are keen on the company's annual reports? The appropriate response was that the economic engine and the data are the oil that makes it work efficiently. Therefore the data

remembered for the annual reports should be decidedly ready and steady of an undeniable degree of divulgence. This incorporates the exposure relating the outside and inside the financial summaries, whether they were economic or non-financial data. DQ's significance lies in how when the divulgence quality is high, and it assists with diminishing the condition of vulnerability that encompasses different gatherings connected by contracts and worried about the establishment. The current study's primary purpose is to investigate whether CG mechanisms, ownership concentration, and audit quality influence the DQ of annual reports of Pakistani-listed firms.

This study has the following research questions:

- What is the impact of CG mechanisms on the DQ of annual reports of non-financial PSX listed firms?
- What is the impact on the DQ of annual reports of non-financial PSX listed firms when we combine the role of CDU with BIND and BIND with AUIND?
- What is the influence of business risk and firm's performance on the DQ of annual reports of non-financial PSX listed firms?

The following objectives set for achieving the results of the study:

- To investigate the impact of CG mechanisms on DQ of annual reports of non-financial PSX listed firms from 2011 to 2015.
- To investigate the combined effect of CDU with BIND and BIND with AUIND on the DQ of annual reports of non-financial PSX listed firms from 2011 to 2015.
- To investigate the impact of business risk and firm's performance on the DQ of annual reports of non-financial PSX listed firms from 2011 to 2015.

Literature review and hypothesis development

CG alludes to the structure through which the lead of an association is noticed moreover, controlled. The vitality of CG is that, in present-day economies, significant associations are routinely associated with a division of work between the get-togethers who give the capital (investors) and the social events who manage the resources (the executives). Past investigations showed that poor CG was one of the

genuine advocates to the structure up of weaknesses in the affected countries that at long last provoked the Asian monetary emergency in 1997 (Zhuang, Edwards, Webb, and Capulong, 2000).

In East Asia countries, there is the inescapability of feeble CG in the five most observably terrible impacted countries, explicitly Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand generally consequently of significantly as an outcome of extremely focused possession structure (Claessens and Fan, 2002). Moreover, the high grouping of possession lessens the sufficiency of some fundamental instruments of investor protection, for instance, the course of action of the board leaders, investor speculation through casting a ballot during investor social occasions, straightforwardness, and disclosure.

In the past, there are too many discussions on the CG disclosure of firms. In the past, (Jensen & Meckling, 1976)determines the level of disclosure and ownership structure and found that OC is related to the agency theory. The study conducted by Firth (1979) measured the voluntary DQ of the annual reports by developing an index score and found that larger companies disclose more information in their yearly reports than small companies because they are answerable to their investors.

The studies conducted in the 1980s investigated the association between CG disclosure, company size, and leverage. The study concludes that the extent of disclosing the information in the annual reports is positively associated with the DQ. Furthermore, they found the different levels of disclosure in 52 Mexican firms (Chow & Wong-Boren, 1987). Schipper (1989) investigates the story on influences on volume, information, and timeline of disclosed information in financial statements. Cooke (1989) found that the DQ of annual reports of domestically listed Swedish firms was lower than the listed companies.

The authors (Gibbins, Richardson, & Waterhouse, 1990) empirically derived a structure for explaining and managing corporate governance disclosure. They suggest that changes in age, financial performance, CEO personality, and company size change the firm's disclosure position. For example, hiring a new CEO from the outside organization may influence corporate disclosure position. Revsine (1991) explains incentive management and its impact on controlling the DQ. Lev (1992) talked about how organizations could outline and

actualize corporate DQ procedures. According to Forker (1992), the BIND and BS are associated with increased DQ. The study of John Holland & Stoner (1996); Marston (1996); Barker (1997); John Holland (1997); and JB Holland & Doran (1998) found that disclosure of information in annual reports was the practical means by which companies disclose their voluntary and non-voluntary information and their intangibles. As study conducted by Ahmed & Courtis (1999), in Pakistani firms, the firm's size and their leverage are the main factors that can influcnece in the DQ of PSX listed firms.

The examination led by Charles and Bikki (2000) clarifies the breadth of monetary exposure. They found that the proportion of free chiefs is decidedly related to disclosures. Ho and Wong (2001) found the connection between CG structure and the degree of deliberate revelation. They found that there is no connection between CG design and willful exposure. Coulton, James, and Taylor (2001) discover the relationship between CEO pay and DQ and discovers no connection. Eng and Mak (2003), track down's the negative connection among CG and deliberate disclosure. Gupta, Nair, and Gogula (2003) found the difference in data quality and the degree of data uncovered by the organizations in their yearly reports. Mangena and Pike (2005) track down's a positive connection between AU ability and exposure, though AU size and degree to unveil not related to divulgence. Herawaty and Hoque (2007) analyze that administration offices reveal less compulsory revelation and high deliberate disclosure. Akhtaruddin and Haron (2010), found that board proprietorship is related to lower willful divulgences. The negative connection between board proprietorship and corporate intentional exposure is, notwithstanding, more fragile for firms with a greater extent of autonomous chiefs on the review advisory group, demonstrating that free directors moderate board possession or corporate willful divulgence relationship.

The authors Ben-Amar & Zeghal (2011) found that independent boards are positively associated with DQ. Wu, Quan, & Xu (2011) found that disclosure quality is affected by CEO duality and its influence on firms' performance; as DQ increases, the firm's performance decreases. (Torchia, Torchia, Calabrò, & Calabrò, 2016) found a relationship among the composition of boards and DQ. According to Jensen & Meckling (1976), the larger boards are keener on investors' interests. The empirical evidence suggests that block

holders have a more substantial influence and better opportunities to exercise than small shareholders. (Claessens, Djankov, & Pohl, 1997) investigates the relationship among OC and performance. Organizational performance is also associated with different aspects like leadership and employee engagement (Usmani, Sami, Baig, & Irfan, 2019; Anwar, Tawab, Kinza & Sami, 2020); Razzaq, Sami, Sib-tul-Manum, & Hammad, 2020). DQ is characterized here as comprising both willful and required things of data given in the fiscal summaries, notes to the records, the board's investigation of activities for the current and impending year, and any valuable data. Such a definition compares intimately with that proposed by (Walk, Francis, and Tearney, 1989).

Pakistan's way of life isn't to vote based society. Nevertheless, in a vote-based community, more solicitation to willful reveal firm private information since everybody who has a quick or deviant association with that firm is more interested in quantifying their danger. So the associations in Pakistan don't reveal the customers' prerequisites because of the lack of execution of the revelation laws and the need for business ethics. However, reveal material information about association tasks is rapidly extending in Pakistan since revelation has shown that it upgrades the firm's image besides achieving the long stretch accomplishment of the firm. To fulfill the market information needs, to think about private corporate activities and improve straightforwardness, more people are presently enlivened by the advancement of traditional monetary announcing prerequisites (Lev and Zarowin, 1999).

Figure 1 to 3 shows the conceptual framework of the study.

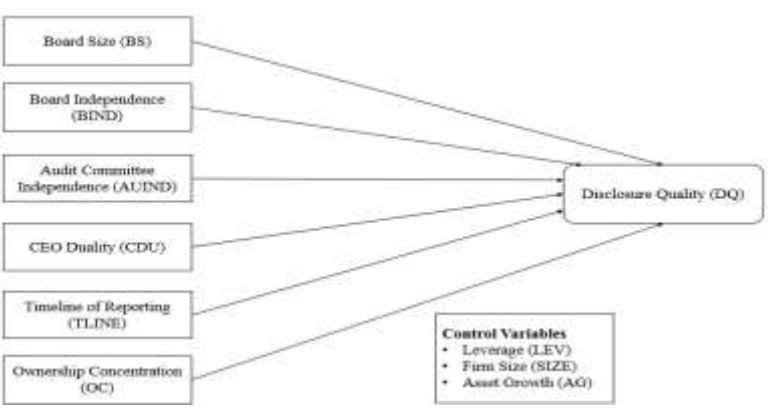

Figure 1: Conceptual framework of Model 1of the study

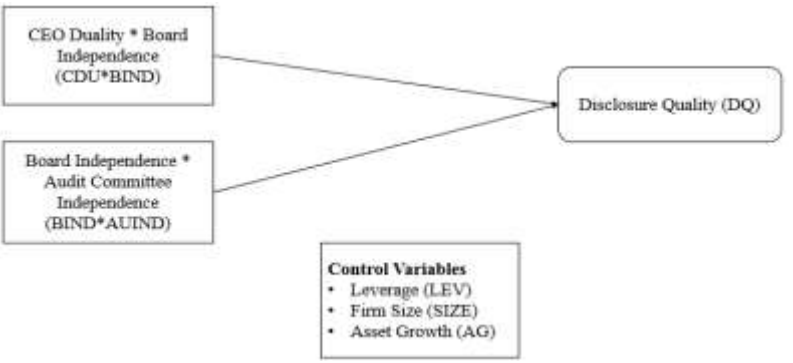

Figure 2: Conceptual framework of Model 2 of the study

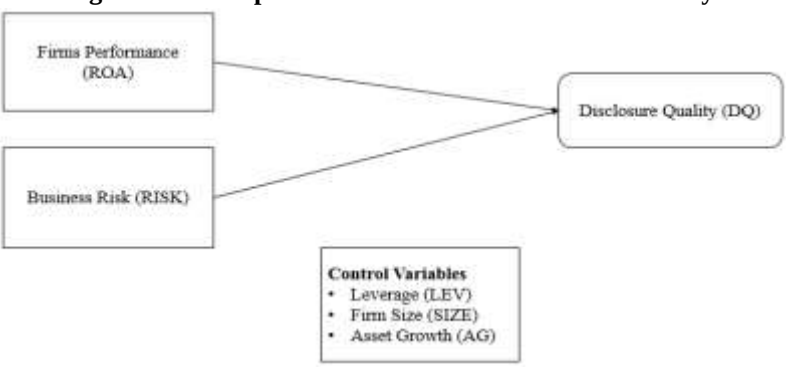

Figure 3: Conceptual framework of Model 3 of the study

The first hypothesis consists of the CG mechanism, which includes variables relating to corporate governance; these are BS, BIND, AUIND, CDU, OC, TLINE of financial statements. Soheilyfar, Tamimi, Ahmadi, & Takhtaei (2014) investigate the association among CG and DQ and found a positive association among AUIND, OC, CDU, and BIND. Thus our main hypothesis is:

Hypothesis 1: There is a relationship between CG mechanisms and DQ.

The sub hypotheses are:

Hypothesis 1a: There is a relationship between BS and DQ.

Hypothesis 1b: There is a relationship between BIND and DQ.

Hypothesis 1c: There is a relationship between AUIND and DQ.

Hypothesis 1d: There is a relationship between CDU and DQ.

Hypothesis 1e: There is a relationship between the TLINE of annual reports and DQ.

Hypothesis 1f: There is a relationship between OC and DQ.

In this study, we combine the effects of governance variables to test its impact on DQ as (Nosheen & Chonglerttham, 2013) combines the role of CEO and ownership concentration and found its adverse effects on DQ. Therefore this study combines the role of CDU with BIND and AUIND with BIND. Hence hypotheses are:

Hypothesis 2a: CDU and BIND affect the DQ.

Hypothesis 2b: BIND and AUIND affect the DQ.

Risky firms disclose less information's to their shareholders and investors. Previous studies investigate litigation risk, which is the outcome of significant disappointments from earnings, and finds that DQ is exaggerated by different types of litigation (Field, Lowry, & Shu, 2005). Many researchers like Core, Holthausen, & Larcker (1999); Cheng (2008); uses standard deviation (SD) of Return on Assets (ROA) as a measure of business risk (RISK) and testing its impact on performance. We use a different approach for measuring the business risk of the firms. Therefore, our hypothesis is:

Hypothesis 3a: Ceteris paribus, business risk affects the DQ.

For testing the influence of financial performance on DQ, we develop the following hypothesis:

Hypothesis 3b: There is a relationship among a firm's performance and DQ.

Research design

1. Population and sample

This study uses non-financial companies listed on the Pakistan Stock Exchange (PSX) for 2011-2015. The rationale behind choosing this sample period was that in 2011, the Sustainability Accounting Board was established, and it has an impact on the disclosure quality of annual reports of the companies globally. There is a total of 900 companies listed on PSX from different sectors. The total market capitalization of the PSX was 7.33 trillion (US$72 billion (July 10, 2015), whereas it was 2.95 trillion (US$35 billion (July 30, 2011).

2. Data and methods

We use the company's annual reports to extract the data of CG and its mechanisms. The sample data covers 167 companies listed on PSX for five years from 2011-2015, which constitutes 835 observations.

3. Tobit Regression Analysis

The dependent variable is the DQ score, a censored variable with values from 14 and 100. As the literature suggests, the Tobit regression model is a more suitable method for obtaining results when the dependent variable is censored (Agnihotri & Bhattacharya, 2015); (Maddala & Lahiri, 1992). The primary purpose of this study is to find the impact of independent variable CG and OC on the DQ of Pakistani-listed firms. The operational models that are used in this empirical research are as follows:

$$DISCLOSURE\ QUALITY_{it} = \beta_0 + \beta_1(BS_{it}) + \beta_2(BIND_{it}) + \beta_3(AUIND_{it}) + \beta_4(CDU_{it}) + \beta_5(TLINE_{it}) + \beta_6(OC_{it}) + \beta_7(LEV_{it}) + \beta_8(LSIZE_{it}) + \beta_9(AG_{it}) + \mu_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$DISCLOSURE\ QUALITY_{it} = \beta_0 + \beta_1(CDU * BIND_{it}) + \beta_2(BIND * AUIND_{it}) + \beta_3(LSIZE_{it}) + \beta_4(LEV_{it}) + \beta_5(AG_{it}) + \mu_{it} \ldots\ldots (2)$$

$$DISCLOSURE\ QUALITY_{it} = \beta_0 + \beta_1(ROA_{it}) + \beta_2(RISK_{it}) + \beta_3(LSIZE_{it}) + \beta_4(LEV_{it}) + \beta_5(AG_{it}) + \mu_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Equation 1, 2 and 3 are our operational models. In equation 1, disclosure quality score is dependent variable; β = slope of regression line; BS = total board size of company; BIND = board independence; AUIND = audit committee independence; CDU = CEO duality (Dummy variable); TLINE = date of authorization of annual reports by directors (Dummy variable); OC = ownership concentration. The control variables are LEV = leverage of the company; LSIZE = natural log of total assets; and AG = assets growth year over year.

In equation 2, disclosure quality is a dependent variable; β = slope of the regression line; CDUBIND = the product of CDU and BIND; BINDAUIND = the product of BIND and AUIND and control variables are LEV, LSIZE, and AG.

In equation 3, disclosure quality is the dependent variable; β = slope of the regression line; ROA = is the measure of firms performance; RISK is the business risk, and control variables are LSIZE, LEV, and AG.

4. Operationalization of dependent variable

In this study, DQ is measured by the disclosure score assigned to the following category in annual reports. The same criteria for calculating DQ is used by Nosheen & Chonglerttham (2013) in their study.

- Corporate objectives
- Director's report / Chairman's / CEO overview
- Disclosure
- Stakeholders information
- Shareholders information
- Corporate governanc

5. Measurement of independent variables

Table 1 shows the measurement of independent variables used in the study.

Table 1. Measurement of variables

Variables	Abbreviations	Variable description
Board size	BS	BS is the total number of members of board in a company.
Board independence	BIND	BIND is the ratio of non-executive directors to total board members in a company.
Audit committee independence	AUIND	AUIND is the ratio of non-executive directors in audit committee.
CEO duality	CDU	CDU is a dummy variable that means it has assigned 1 number when CEO holds two positions at same time i.e., CEO and Chairman, otherwise 0.
Time line	TLINE	TLINE is the timeline of financial reporting is a dummy variable and assigned 1 if statements are authorized with 45 days of the fiscal year ending or otherwise 0.
Ownership concentration	OC	OC is the most significant shareholders block that holds 10% or more.
CEO duality with board independence	CDU*BIND	It is the product of CEO duality and board independence.

Board independence with audit committee independence	BIND*AUIND	It is the product of BIND and AUIND.
Return on asset	ROA	ROA = Net income / Total assets of the company.
Business risk	Business risk	RISK is calculated as: PROFIT(X) - PROFIT(X-1) / PROFIT(X-1)
Leverage	LEV	LEV = long-term debt / The total assets of a company.
Size of the company	LSIZE	SIZE = natural log of total assets.
Assets growth	AG	AG = Current year's assets - Previous year's assets / Previous year's assets.

Results and discussions

1. Summary of statistics

Table 2 demonstrates descriptive statistics of all variables that are used in this study for 2011-15. The average DQ score is 68.46 with a median of 68.60 and having a standard deviation of 23.08, showing considerable variations in the disclosure practices among companies during five years. The maximum DQ score is 100, and the minimum is 14. The average number of BS is 8.26, with a median of 8 and a standard deviation of 1.68. The maximum number of directors in a board is 15, and minimum is 4.The mean of BIND is 0.55with median of 0.57 and standard deviation of 0.24. The maximum ratio of independent directors in a board size is 0.93, and minimum is 0. AUIND has a mean of 0.71 with a median of 0.75 and standard deviation of 0.33. The maximum ratio of independent directors in an audit committee is 1 and minimum is 0. CDU is a dummy variable with a mean of 0.85 and a median of 1 and standard deviation of 0.36. The average of CDU*BIND is 0.47 with a median of 0.57 and a standard deviation of 0.29. The average of BIND*AUIND is 0.44 with a median of 0.43 and a standard deviation of 0.26. TLINE is a dummy variable with a mean of 0.26 and a median of 0 and standard deviation of 0.44.The average of OC is 50.45% in sample companies with a median

of 55.08 and having a large standard deviation of 27.63. The mean of LEV is 0.13 with a median and standard deviation of 0.07 and 0.21. The mean of natural log of assets is 22.44 with a median and standard of 22.38 and 1.68. The average ROA is 0.06% with a median ROA of 0.05 and standard deviation of 0.14. The maximum ROA during 5 years sample data is 0.77 and the minimum ROA is -1.21 due to losses faced by the companies during sample period. The average business risk faced by the companies is Rs.2252 million with a median of Rs.159 million and a variation of Rs.10122 million. The maximum amount of risk is Rs.123914 million and the minimum is Rs.-9749 million. The average assets growth in a year is Rs.22767 million with a median of Rs.5217 million and a standard deviation of Rs.58152 million. The maximum assets growth per year is Rs.553789 million and minimum is Rs.2 million.

Table.2 Summary statistics

Variables	Average	Median	Std. Dev.	Min	Max	N
DISCLOSURE QUALITY	68.46	68.60	23.08	14	100	798
BS	8.26	8.00	1.68	4.00	15.00	795
BIND	0.55	0.57	0.24	0.00	0.93	795
AUIND	0.71	0.75	0.33	0.00	1.00	789
CDU	0.85	1.00	0.36	0.00	1.00	798
CDU*BIND	0.47	0.57	0.29	0.00	0.93	798
BIND*AUIND	0.44	0.43	0.26	0.00	0.93	798
TLINE	0.26	0.00	0.44	0.00	1.00	797
OC	50.45	55.08	27.63	0.00	99.05	799
LEV	0.13	0.07	0.21	0.00	3.70	801
LSIZE	22.44	22.38	1.68	14.57	27.04	801
ROA	0.06	0.05	0.14	-1.21	0.77	800
RISK (Rs. In million)	2252	159	10122	-9749	123914	799
AG (Rs. In million)	22767	5217	58152	2	553789	800
Note: For variable definitions, see table 1.						

2. Model Results

Table 3 summarizes of Tobit regression results of our models. Regression is run in a stepwise manner. Our first hypothesis states that there is a relationship between CG mechanisms and DQ. The results

show that all the independent variables show a relationship with DQ. All are significant; this leads to accepting the hypothesis because it proves a relationship between CG mechanism and disclosure quality of Pakistani firms. The regression result of each variable contains sub hypotheses. We find the evidence supporting all sub hypotheses, and that are; $H1_a$ (β = 1.269, p <0.01), which states that board size is significant at 1% confidence interval level and positively relates with DQ. The bigger the BS is the greater the DQ will be. This establishes a relationship between BS and DQ, and lead to accept hypothesis. The $H1_b$ (β = -9.256, p <0.05), states that BIND is significant at 5% confidence interval level and negatively relates with DQ. The $H1_c$ (β = 17.047, p <0.01), states that AUIND is significant at 1% confidence interval level and positively relates with DQ. The more the AUIND the greater the disclosure will be, because it forces to disclose more quality and accurate information's in annual reports of Pakistani firms. This will also lead to accept our hypothesis. The $H1_d$ (β = 14.192, p <0.01), states that CDU is significant at 1% confidence interval level and positively relates with DQ. The $H1_e$ (β = 19.336, p <0.01), states that timeline is significant at 1% confidence interval level and positively relates with DQ. The $H1_f$ (β = 0.061, p <0.05), states that OC is significant at 5% confidence interval level and positively relates with DQ. Furthermore, leverage is insignificant but has negative impact on DQ. This is because firms with more debt financing disclose less information's in annual reports. The size is significant at 1% and positively relates with disclosure quality whereas, AG is significant at 10% and negatively relates with DQ.

Our second hypotheses state that CDU with BIND and BIND with AUIND affects the DQ. To test these hypotheses we run model 2.The regression results support our claim positively. The $H2_a$ (β = 14.161, p <0.01), states that the combine role of CDU with BIND is significant at 1% and positively relates with DQ. The $H2_b$ (β = 11.873, p <0.01), states that the combine effect of BIND and AUIND is significant at 1% and positively relates with DQ. Furthermore, only size id significant and has positive impact on disclosure whereas, LEV and AG is insignificant.

Our third hypotheses are to test the impact of risk and performance on DQ. To test these hypotheses we run model 3. The results support our claim by proving $H3_a$ (β = -2.57, p <0.05, which

states that business risk is significant at 5% and negatively related with the DQ. The $H3_b$ ($\beta = 30.351$, $p < 0.01$), states that firms performance is significant at 1% and positively relates with DQ.

Table 3. Tobit Regression Results

Dependent Variable: Score						
	Model 1		Model 2		Model 3	
Independent variable	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.
Constant	-71.501	0.000***	-76.060	0.000*	-56.221	0.000*
BS	1.269	0.003 ***	—	—	—	—
BIND	-9.256	0.023**	—	—	—	—
AUIND	17.047	0.000***	—	—	—	—
CDU	14.192	0.000***	—	—	—	—
TLINE	19.336	0.000***	—	—	—	—
OC	0.061	0.011**	—	—	—	—
CDUBIND	—	—	14.161	0.000***	—	—
BINDAUIND	—	—	11.873	0.000***	—	—
ROA	—	—	—	—	30.351	0.000***
RISK	—	—	—	—	-2.570	0.0185**
LEV	-1.516	0.605	-1.545	0.660	-1.319	0.719
LSIZE	4.655	0.000***	5.961	0.000***	5.519	0.000***
AG	-2.440	0.085*	-1.300	0.429	2.350	0.269
Observations	771		783		782	
Prob > chi 2	0.000		0.000		0.000	
Left-censored observations	0		3		3	
Uncensored observations	738		747		746	
Right-censored observations	33		33		33	
Note:						
*** Statistically significant at 1%						
** Statistically significant at 5%						
* Statistically significant at 10%						

Concluding Remarks

The primary purpose of this study is to investigate the impact of CG mechanisms, risk, and performance on DQ of PSX listed firms. We expand our previous study Nosheen & Chonglerttham (2013), in the following ways. First, this study aims to investigate the impact of CG mechanisms of Pakistani-listed companies empirically. We introduce a

new variable as TLINE of authorization of annual reports by the board of directors and its impact on DQ. Second, we present CDU's combined effect with BIND and BIND with AUIND on the DQ of Pakistani listed companies. Third, we examine the impact of business risk and firm's performance on the DQ of Pakistani listed companies. Based on a sample of 167 Pakistani listed companies, we find that CG mechanisms affect the DQ of the firms. BS is positively associated with DQ. The reason is that larger boards significantly influence management to disclose more information in Pakistan. BIND has been negatively associated with DQ in Pakistan. Studies conducted by Charles & Bikki (2000) and Beasley (1996) found that BIND is positively related to the board's ability to make disclosure decisions. Our results suggest that independent dominated boards limit managerial opportunism in the firm's disclosure policy and, due to pressure of independent board's management, determines its disclosure quality.

Audit committee independence has a significant positive relationship with disclosure quality because BIND can cause to increase more disclosure in financial statements. Carcello & Neal (2003) and Jatiningrum et al. (2016) find a positive relationship between AUIND and disclosure. CDU is positively associated with DQ in Pakistani firms. Forker (1992); Ben-Amar & Boujenoui (2007); Gul & Leung (2004); Lakhal (2003); Nosheen & Chonglerttham (2013) found the negative relationship between CDU and disclosure practices of the firms. Our results are consistent with researchers like Soheilyfar et al. (2014), who found a positive relationship between CEO duality and DQ of firms. The timeliness of financial statements is positively associated with DQ. This means that the firms who authorize their financial statements early disclose more information's in their financial statements; thus, their DQ is more. OC is positively associated with DQ in Pakistani firms. In Pakistan, most of the companies are family-controlled and OC in few hands. The concentrated ownership exerts vital monitoring of the operations and ultimately reduces the possibility of the firm's insiders using the information for their benefits. This helps us conclude that firms with more concentrated ownership will disclosures its information more and discloses quality information in financial statements. Our results are consistent with Huafang &

Jianguo (2007); Nosheen & Chonglerttham (2013) and Javid & Iqbal (2010).

We found interesting results by combining the role of CDU with BIND and BIND with AUIND. BIND is significant and negatively related to DQ. Still, when we combine it with CDU, the results are surprisingly good with high and positive coefficient and smaller p-value, i.e. (β = -9.256, p <0.05) to (β = 11.873, p <0.01), which suggest that the sample firms produce more DQ if CDU and BIND both exists at the same time. Furthermore, we also find firms with BIND and AUIND produce more quality disclosure of information's in annual reports.

Business risk is negatively associated with DQ, which means that if a company has more risk, it avoids disclosing its information to investors because of their goodwill and bad impression. In contrast, firms disclose more quality information in annual reports when their performance is good. This is because the firms show their strengths to attract investors and outsiders by disclosing more quality information in yearly reports.

Finally, we find that more prominent firm has greater disclosure in their financial statements while firms with growth opportunities are reluctant to disclose more in their financial statements. Overall findings are consistent with the self-interested hypothesis. This study makes some unique contributions to the literature on the relationship between CG and DQ. First, this study measures the DQ of companies listed on PSX. Second, this study empirically investigates the impact of CG mechanisms and OC on the DQ of Pakistani listed companies for 2011-2015 using the censored regression model, Tobit regression. These results have potential implications for CG policymakers such as the Pakistan Institute of Corporate Governance to encourage the listed companies to have larger board size, to more independent directors involved in AU, to encourage the dominant role of CEO, to authorize their financial statements within 45 days, to encourage block holder ownership. This study might be beneficial for the investment community for making their investments in companies that disclose more quality information to investors.

The current study has some limitations, i.e., the sample size of 167 non-financial firms covering five years of data may not apply to all companies listed on PSX. Furthermore, the results of this study cannot be generalized to developed countries or emerging markets. Despite

these limitations, this paper does provide complete insights. Future research could conduct a more extensive panel study on the determinants of DQ mechanisms. In addition, using a larger sample and extending the current research in other countries is a path for future research.

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