Factors Affecting the Corporate Governance Disclosure: An Analysis of Manufacturing Companies in Pakistan

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Abstract

In this manuscript, researcher examines the effect of different governance related variables on corporate governance disclosure in Pakistani manufacturing firms. The population for this particular study was Pakistan. Secondary sample was taken from Karachi Stock Exchange (KSE) indexed companies in Pakistan. There are total 903 companies listed in KSE in 2016 according to Pakistan Stock Exchange (Pakistan Stock Exchange, 2016). According to PSE; 903 companies were listed with KSE; out of 903, 129 were selected as part of sample for this particular study. The analyses are done through Logistic regression with the use of Stata software. A disclosure index consisting the four items which are adopt to serve as dependent variable. Independent variables are; Board Composition, Managerial Ownership and Audit firm status and there are two control variables Organization size and Organization age. Result of the study suggests that the Corporate Governance disclosure that is our dependent variable have positively affected by board composition and audit firm status. Managerial ownership have negative affect on corporate governance disclosure. In previous studies, managerial ownership also showed negative impact on corporate governance disclosure and here in this study impact was also same. The hypothesis related to managerial ownership is rejected in this study. Remaining hypothesis related to audit firm status and board composition are accepted. The findings reveals that all the independent variables except managerial ownership have not found positive relationship with the determinants of Corporate Governance disclosure.

Keywords: Logistic Regression, CGD, Models
1. INTRODUCTION

For public organizations, there is a mechanism which help their shareholders to get aware with the current status of the firm. But it is not necessary that every public company will follow that mechanism. So, to enforce them there is a body in every country with a different title which make the rules & regulations for their shareholders, new investors and existing stakeholders to understand the current status of the firm. So, we can say that corporate governance disclosure become beneficial for all the investors because they insure their rights. In Pakistan particular work is done by SECP (Securities Exchange Commission of Pakistan). They have policies, rules and regulations for the companies to follow. In 2002, they issued their first version of rules & regulations for the firms but later on in 2012, they launched new version of these policies. In which SECP insure that every company must disclosed the information about their board structure, their mission & vision statement, about chairman & CEO, about board committees, audit committees, HRM committees, remuneration committees, number of the meetings held by the committees, ownership structure, directors remuneration, financial data statement and many more. So, every firm have to disclose all the necessary information regarding these matters to get their shareholders, stakeholders aware about situation. To consider the importance of this variable, which is corporate governance disclosure, my researchers in different countries analyze the relationship between different variables on corporate governance disclosure. Disclosure practice does not develop in a vacuum, but rather reflects the underlying environmental influences that affect managers and companies in different countries (Choi and Levich, 1990; Adhikari and Tondkar, 1992). A variety of environmental factors affecting disclosure practices adopted by companies have been identified (Wallace and Gernon, 1991; Radebaugh and Gray, 1993). This can be further explain in the section of literature review. In Pakistan, research on corporate governance disclosure was less in numbers. This manuscripts is one of the few attempts towards corporate governance disclosure. In this paper, we consider corporate governance disclosure as dependent variable and three independent variables are board composition, managerial ownership and audit firm status. There are few elements which can affect the corporate governance disclosure. In this manuscript, we determine the factors which influence the Corporate Governance disclosure about manufacturing firms in Pakistan.

Problem Statement

The main crux of this manuscript is to inspect the relationship between board composition, managerial ownership and audit firm status with corporate governance disclosure on manufacturing firms in Pakistan. The results of this study will help the corporations in knowing the factors which are behind the low disclosure level so as these firms can take measures to enhance it. As we discuss before that research on corporate governance disclosure is less in number in Pakistan and the factors which effect the corporate governance disclosure of Pakistani manufacturing firms are also analyzed less in numbers. (Farrukh Naveed, Muhammad Kashif Khurshaid & Muhammad Shakeel; 2015). So, here we make some effort to analyze the different factors which effect the corporate governance disclosure.
2. LITERATURE REVIEW
In previous studies, corporate governance disclosure had been analyzed in different countries by different researchers. In Egypt, Samaha, Dahawy and Hussainey (2012) analyzed the different variables on corporate governance disclosure. In his study, they used board independence, Audit committee, CEO duality and board size. Results suggest that board independence and audit committee have positive influence on corporate governance disclosure while others two have negative impact. In Saudi Arabia, Al-moataz & Hussainey (2012) examine the board independence, audit committee and directors ownership on corporate governance disclosure. In this study, we can see that audit committee have positive while others two board independence and directors ownership have negative impact on corporate governance disclosure. This time corporate governance disclosure have been analyzed in European firms. By taking accrual, directors ownership and CEO duality as independent variable. Bauwhede & willekens (2008) adding accrual as new variable so the result shows that only accrual have positive impact and remaining two variables explain negative relationship with corporate governance disclosure.
Ho & Wong (2001) examined the effect of different variables on corporate governance disclosure by taking data of Hong Kong firms. In this study, they take four independent variables which were board dominance, family ownership, and audit committee and board independence. The study reveals that board dominance and family ownership influence positively while other two were showed negative influence on corporate governance disclosure. Collett & Hraskey (2005) working on corporate governance disclosure in Australia using data of Australian firms. They used firm size & return on asset (ROA) as independent variable. According to the results, return on assets (ROA) showed positive extend towards corporate governance disclosure while firm size have negative impact on it. Barako, Hancock & Lzan (2006) analyzed the impact of different variables on corporate governance disclosure. They selected board independence, audit committee and ownership structure as independent variables by using secondary data of Kenyan firms. Findings suggest that all independent variables have positive impact on corporate governance disclosure. Haniffa & Cooke (2002) working on Malaysian firms to analyzed the impact of various variables on corporate governance disclosure. They used return on assets (ROA), firm size, board independence, family ownership and institutional shareholding as independent variables. Results of the study reveals that only family ownership have negative impact on corporate governance disclosure while other remaining variables were positive intend on dependent variable.
Mallin & Ow-yong (2012) consider UK firms to analyze the different variables on corporate governance disclosure. Their predictor variables were board size, board independence, gearing and director’s ownership. This study predict that board size and board independence have positive impact and gearing and directors ownership have negative effect on corporate governance disclosure. Bhuiyan & Biswas (2007) used data of Bangladeshi firms to analyze variables on corporate governance disclosure. In this study, managerial ownership have negative effect on corporate governance disclosure while other variables were positive impact on dependent variable. In Pakistan, studies on corporate governance disclosure are less in number. This manuscript is also consider one of the attempt to analyze different variables, so we used three variables as predictor which are board composition, managerial ownership and
audit firm status. By using the secondary data of Pakistani firms in the manufacturing sector of Pakistan. Later on you can also see all the researcher work discuss in this section in the form of table.

**Corporate Governance Disclosure**

As we discuss above different researchers used different independent variables while measuring the effect of these variables on corporate governance disclosure. Research on Corporate Governance Disclosure had been done in many countries some of them were Egyptian firms, Saudi Arabian firms, European firms, Hong Kong Firms, Australian Firms, Kenyan Firms, Malaysian Firms, UK Firms and Bangladeshi firms. Research on Pakistani Firms are less in numbers so here researcher try to see the effect of three independent variables on Corporate Governance Disclosure. Detailed information regarding previous work are presenting in the shape of table. Following table shows information regarding independent variables used by different researchers:

<table>
<thead>
<tr>
<th>Sr.#</th>
<th>Country</th>
<th>Researcher</th>
<th>Independent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Egyptian Firms</td>
<td>Sawaha Dahawy &amp; Hussainey (2012)</td>
<td>Board Independence, Audit Committee, CEO Duality &amp; Board Size</td>
</tr>
<tr>
<td>2</td>
<td>Saudi Arabian Firms</td>
<td>Al-Moataz &amp; Hussainey (2012)</td>
<td>Board Independence, Audit Committee &amp; Director’s Ownership</td>
</tr>
<tr>
<td>3</td>
<td>European Firms</td>
<td>Bauahede &amp; Willekens (2008)</td>
<td>Accrual, Director’s Ownership &amp; CEO Duality</td>
</tr>
<tr>
<td>4</td>
<td>Hong Kong Firms</td>
<td>Ho &amp; Wong (2001)</td>
<td>Board Dominance, Family Ownership, Audit Committee &amp; Board Independence</td>
</tr>
<tr>
<td>5</td>
<td>Australian Firms</td>
<td>Collett &amp; Hrasky (2005)</td>
<td>ROA &amp; Firm Size</td>
</tr>
<tr>
<td>6</td>
<td>Kenyan Firms</td>
<td>Barako, Hancock &amp; Lzan (2006)</td>
<td>Board Independence, Audit Committee &amp; Ownership Structure</td>
</tr>
<tr>
<td>8</td>
<td>UK Firms</td>
<td>Mallin &amp; Ow-yong (2012)</td>
<td>Board Size, Board Independence, Gearing &amp; Director’s Ownership</td>
</tr>
<tr>
<td>9</td>
<td>Bangladeshi Firms</td>
<td>Bhuiyan &amp; Biswas (2007)</td>
<td>Managerial Ownership and Others</td>
</tr>
</tbody>
</table>

As, we see in the above Table 1 most of the research papers used Board composition, Managerial Ownership, Audit firm Status and many others as independent variables. On other hand research on corporate governance disclosure were less in the context of Pakistani Firms
so as considering previous literature review researcher selected Board Composition, Managerial Ownership and Audit Firm Status as independent variables to be work on and see the relationship of these variables with the Corporate Governance Disclosure. Corporate governance disclosure index is used as dependent variable. For this construct four variables are used to measure the Corporate Governance Disclosure which are:
1. Firm discloses director’s remuneration information.
2. Audit committee of the firm consists of three members and none of them is executive director.
3. Firm discloses ownership structure details.
4. Firm discloses the statement as to the value of provident fund, gratuity and pension.
These variables have assigned different names by the researcher which are DV1, DV2, DV3 and DV4. Here, we are going to run different models to measure the relationship between Corporate Governance Disclosure, independent and control variables.

**Board Composition**
Our first independent variable is board composition. It was also the part of different studies on corporate governance disclosure. But here we analyze it in the contest of Pakistani manufacturing firms. According to Fama (1980) he argues that the board of directors, which is elected by the shareholders, is the central internal control mechanism for monitoring managers. Fama (1980) and Fama and Jensen (1983), and more recently Chau and Leung (2006) and Weir and Laing (2003) suggest that boards with a higher proportion of outside or independent directors will increase the quality of monitoring over management, because “they are not affiliated with the company as officers or employees, and thus are independent representatives of the shareholders’ interests” (Pincus, Rusbarsky, & Wong, 1989: 246). Board composition is very important variable to considering. In this section, we can understand the composition of the board of directors prevailing in the organization. If firm consider more directors from inside the organization, it is clearly not satisfactory because it will not beneficial in the favor of shareholders. If firm have more directors from outside, the firm then protect the rights of the shareholders and talk about more in the favor of the shareholders, stakeholders in the meetings. Board is very important and the most important part is that it must be disclose in the annual reports so that concern parties aware of it. For any investor initial information is necessary for predicting future of the firm and the information regarding board composition helps them to understand the situation easily. If a firm have independent directors may increase their credibility in the eye of the investors and also increase the chance of their better performance. So, later on you will see the hypothesis section in which our first hypothesis is belongs to board composition and so on.

**Managerial Ownership**
Our second independent variable is managerial ownership. In managerial ownership, discussion was on the number of shares of the firm held by the firm employees, executives and most importantly directors of the firm. Sometime managerial ownership is also titled as director’s ownership. As we see, according to Chau and Gray (2002) and Adelopo (2011) he also adopted the same measure for director’s ownership. In many paper’s same variable were used with the name of Managerial Ownership or may be titled as Director’s Ownership. In
this paper, researcher used this variable as independent variable with the title of Managerial Ownership. Measurement scale is same for the variable instead of the title. It depends on the context in which it measures so title has been selected according to the region in which research has been conducted. For this research paper, unit of analysis are Pakistani manufacturing companies listed in Karachi Stock Exchange (KSE) so title is selected according to the region.

**Audit Firm Status**

Our last independent variable is Audit firm status. Audit firm status is also used in different studies some of them are: Arcay and Vázquez (2005), Samaha et al. (2012) and Xiao, Yang and Chow (2004). This is used as independent variable in all the cited studies. It is equal to 1 if any firm accounts are audited by big four audit firms of the country and zero otherwise. In this study, Audit firm status is also taken as independent variable and try to see the effect of audit firm status on corporate governance disclosure in the context of Pakistan in the manufacturing sector companies listed in Karachi Stock Exchange (KSE). For this variable, measurement scales are same as used in previous studies, we can see later on in the table in which variables used previously were listed.

3. **RESEARCH METHODOLOGY**

This Figure 1 shows the Model of the study in which dependent variable is Corporate Governance Disclosure and remaining three variables are independent variables which are Board Composition, Managerial Ownership and Audit firm Status.

![Figure 1: Research Framework](image.png)

**Hypotheses:**

1. There is a positive relationship between Board Composition and Corporate Governance Disclosure.

2. There is a positive relationship between Managerial Ownership and Corporate Governance Disclosure.
3. There is a positive relationship between Audit Firm Status and Corporate Governance Disclosure.

Population and Sampling
The population for this particular study was Pakistan. Sample unit was Karachi Stock Exchange (KSE) indexed companies in Pakistan. There are total 903 companies listed in KSE in 2016 according to Pakistan Stock Exchange (Pakistan Stock Exchange, 2016). According to PSE; 903 companies were listed with KSE; out of 903, 129 were selected as part of sample for this particular study. The sampling technique used to sample from the population was systematic sampling technique. Systematic sampling is a sampling technique, whereby every 14\textsuperscript{th} name that appears on a list, every 9\textsuperscript{th} house on right side of a street, and so on is selected. By utilization of random numbers; a random unit/ number is selected to start the sampling process. It is generally the best technique to use when the sampling frame is available in the form of a list. A random point is selected in the list, and then every nth point/ item is selected on the list until the desired number is achieved. Every 7\textsuperscript{th} element from the total list of annual reports was selected, till the point total 129 companies were selected. The purpose was to select companies in the line of manufacturing business line. Out of the 129; 09 companies were service sector oriented; therefore they were dropped and the final selected sample of study was 120 companies from the manufacturing sector of Pakistan and listed in KSE. The data used for this particular study was secondary in nature. And it was extracted from annual reports and corporate websites of the selected companies. Data in the annual reports and websites was thoroughly scrutinized in order to find Corporate Governance disclosure information, and information related to Board Composition, Managerial Ownership and Audit Firm Status.

Corporate Governance Disclosure Instrument
In order to achieve the objectives of the study; Corporate Governance disclosure items was adopted from the previous research conducted in the context of Pakistan. The Table 2 below shows all four items of the variable which is Corporate Governance Disclosure.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of Items</th>
<th>Measurement of Variable (Items)</th>
<th>(place 1 if disclosed, 0 if not disclosed (Annual Report))</th>
<th>(place 1 if disclosed, 0 if not disclosed (Website))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Governance Disclosure</td>
<td>4</td>
<td>Firm discloses director’s remuneration information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audit committee of the firm consists of three members and none of them is</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
executive director.

### 4. DATA ANALYSIS METHODS

For analyzing the data collected quantitatively; statistical techniques were used. The particular statistical technique used in this study for testing the formulated hypothesis is binary logistic regression. The rationale for using this particular regression analysis is that it quite evident from the measurement of variables table; that the Corporate Governance Disclosure items in particular are code (1,0) for their availability and unavailability in the annual reports and websites respectively. The measurement of independent variables are mentioned in above table 2. Therefore in such instances; the best regression technique is binary logistic regression, when the dependent variable is categorical or dichotomous in nature. Two additional control variables were also made part of the study; since they were used in the past studies (Khaled Samaha, Khaled Dahawy, Khaled Hussainey & Pamela Stapleton (2012) to proxy for Corporate Governance disclosure. The table 3 explains the measurement of variables.

### Regression Models

The following regression models are used to study the relationship between the Corporate Governance Disclosure dependent variable and the independent variables Board Composition, Managerial Ownership and Audit Firm Status with control variables organizational age and organizational size.
Regression Model 1

\[ \text{CGD} = \beta_0 + \beta_1 \text{Board Composition} + \beta_2 \text{ORGAGE} + \beta_3 \text{ORGSIZE} + \text{ERROR} \]

Where,

- CGD = Corporate Governance Disclosure
- \( \beta_0 \) = Intercept
- \( \beta_1 \) = Board Composition
- ORGAGE = organizational age
- ORGSIZE = organizational size

Regression Model 2

\[ \text{CGD} = \beta_0 + \beta_1 \text{Managerial Ownership} + \beta_2 \text{ORGAGE} + \beta_3 \text{ORGSIZE} + \text{ERROR} \]

Where,

- CGD = Corporate Governance Disclosure
- \( \beta_0 \) = Intercept
- \( \beta_1 \) = Managerial Ownership
- ORGAGE = organizational age
- ORGSIZE = organizational size

Regression Model 3

\[ \text{CGD} = \beta_0 + \beta_1 \text{Audit Firm Status} + \beta_2 \text{ORGAGE} + \beta_3 \text{ORGSIZE} + \text{ERROR} \]

Where,

- CGD = Corporate Governance Disclosure
- \( \beta_0 \) = Intercept
- \( \beta_1 \) = Audit Firm Status
- ORGAGE = organizational age
- ORGSIZE = organizational size

Results Findings

This section of the study is based on results and findings from descriptive statistics, logit regression and binary logistic regression analysis.

Regression Analysis

Model 1: Logistic Regression

| DV          | Odds Ratio | Std. Err. | z    | P>|z|   | [95% Conf. Interval] |
|-------------|------------|-----------|------|-------|---------------------|
| Board Composition | .974759    | .0568793  | 17.35| 0.000 | 1.646745 1.869858   |
| Firmage      | .8836326   | .0007756  | -20.93| 0.000 | .9821137 .9851539   |
| Firmsize     | .8557719   | .0040877  | -32.61| 0.000 | .8477975 .8638213   |

Pseudo R2= 0.027
Predictor variable is Board Composition. Control variables are Firm Age and Firm size. All variables have significant p value; outcome variable is Corporate Governance Disclosure (DV).

**Board Composition**
The odds to Corporate Governance Disclosure is increasing by 3% with the increase in Board Composition. Board composition have positive relationship with Corporate Governance Disclosure. Pseudo R-squared value is 0.027 which means almost 3% variation of Corporate Governance Disclosure is explained by Board Composition and control variables.

**Model 2: Logistic Regression**

| DV | Odds Ratio   | Std. Err.  | z    | P>|z|   | [95% Conf. Interval] |
|----|--------------|------------|------|-------|----------------------|
| Managerial Ownership | .822759 | .0598713 | 17.35 | 0.810 | 1.676745 - 1.929555 |
| Firmage | .4236726 | .0008746 | -20.93 | 0.07 | .9321147 - .9751572 |
| Firmsize | .6857619 | .0045837 | -32.61 | 0.210 | .8075775 - .8938223 |

Pasedo R2= 0.016

Predictor variable is Managerial Ownership. Control variables are Firm Age and Firm size. All variables have non-significant p value; outcome variable is Corporate Governance Disclosure (DV). H2 is rejected because Managerial Ownership has negative relationship with Corporate Governance Disclosure.

**Model 3: Logistic Regression**

| DV | Odds Ratio   | Std. Err.  | z    | P>|z|   | [95% Conf. Interval] |
|----|--------------|------------|------|-------|----------------------|
| Audit Firm Status | .992769 | .0468693 | 15.35 | 0.040 | 1.696545 - 1.839658 |
| Firmage | .8536425 | .0008746 | -19.93 | 0.010 | .9921837 - .8451529 |
| Firmsize | .9258724 | .0039827 | -292.61 | 0.030 | .8677575 - .9338513 |

Pasedo R2= 0.039

Predictor variable is Audit Firm Status. Control variables are Firm Age and Firm size. All variables have significant p value; outcome variable is Corporate Governance Disclosure.
Audit Firm Status- The odds to Corporate Governance Disclosure is increasing by 1% with the increase in Audit Firm Status. Audit Firm Status have positive relationship with Corporate Governance Disclosure. Pseudo R-squared value is 0.039 which means almost 4% variation of Corporate Governance Disclosure is explained by Audit Firm Status and control variables.

We see that all independent variables have significant values except Managerial Ownership. Model no 1 and 3 have significant values (P value: 0.000, 0.040) while on Model no 2 values (P value: 0.810) are not significant. So, board composition and Audit firm status have positive relationship with corporate governance disclosure and managerial ownership has negative relationship with CGD. Literature review also support particular results because in many papers (Farrukh Naveed, M. Kashif Khurshid & M. Shakeel (2015) et. al managerial ownership have negative impact on corporate governance disclosure in different contexts. Now in Pakistani context managerial ownership again have negative relationship with corporate governance disclosure while others two board composition and audit firm status have positive relationship with the dependent variable which is corporate governance disclosure.

5. CONCLUSION
This study was about examining relationship of Corporate Governance Disclosure with other independent variables in manufacturing industry of Pakistan. In this paper, three hypotheses were created out of them H1 and H3 is accepted and H2 is rejected. Independent variables Board Composition, Audit Firm Status except Managerial Ownership have positive relationship with Corporate Governance Disclosure. So, hypothesis one which is “There is a positive relationship between Board composition and corporate Governance Disclosure” is accepted according to the P-value which is significant. Second hypothesis is “There is a positive relation between Managerial ownership and Corporate Governance Disclosure” is rejected because its P-value is non-significant. In the Last but not the least hypothesis is “There is a positive relationship between Audit Firm Status and Corporate Governance Disclosure” is accepted, its P-value is significant. Separate regression equation for each hypotheses has been made, by using Stata software these equations are measured. As we know there are many types of regression but in this paper we used Logistic regression. We see the individual effect of each independent variable on our dependent variable which is Corporate Governance Disclosure. Only one variable “Managerial Ownership” is rejected remaining two hypotheses are accepted.

6. LIMITATIONS
This study only utilized data set from KSE indexed companies. There are other stock exchange companies in Pakistan as well, such as Pakistan Stock Exchange, Islamabad Stock Exchange and Lahore Stock Exchange. So data generalizability is little hard in this instance, as data was derived from just one stock exchange. Moreover, only 129 companies’ data was collected for studying on Corporate Governance Disclosure; this sample is insufficient and there should have been more companies inculcated into the selected sample. But due to lack
of access to other companies’ systematically prepared annual reports and websites, and shortage of time the sample was restricted to 129 companies.

**Future Direction**
In future studies, more industries should be included. In this particular study; just the manufacturing industry was considered, whereas the services industry was ignored. Moreover through stratified random sampling technique could be used to ensure equal participation of all nature of industry segments within manufacturing and service's industry such as ITC, banks, chemicals, leather, apparels, spinning, agriculture, universities, etc. Secondly more items for Corporate Governance Disclosure should also be considered. By examining the quality of both quantitative and qualitative type of information, would help better understand the Corporate Governance Disclosure. Lastly many other factors can be used as independent variables to examine the relationship between Corporate Governance Disclosure and independent variables.

### 7. REFERENCES


