Original Article

Impact of Corporate Governance Practices on Earnings Management Strategies

JHSS
1-27
©The Author(s) 2024
Article reuse guidelines:
ojs.uop.edu.pk/jhss/Copyright
Vol. 32 (1), 2024

Muhammad Arif [1] Laila Taskeen Qazi [2]
Dr. Atta ur Rahman[3]

Abstract

The study investigates the relationship between good corporate governance factors, including board size and board composition, which represent the number of non-executive directors, CEO and chairman duality with inflating or deflating income, known as earnings management. A set of 100 manufacturing companies listed on KSE has been investigated over four years (2019-2023) to analyze the intended relationship. Quality of corporate governance has been measured by allocating values to each variable, whereas earnings management is measured on the basis of discretionary accruals by using the Modified Cross Sectional Jones model. Results obtained through the weighted Least Square (WLS) Method of estimation point out a positive relation between the number of directors on board and discretionary accruals, a negative relation between board composition and earnings management, while duality of CEO shows a positive relationship with earnings management. The overall result of the study shows a significant impact of corporate governance practices on earnings management.

Introduction

The study highlights the importance of corporate governance over the financial disclosure of companies. With the evolution of modern business, different techniques have been developed by the management of listed firms and family-owned businesses to imply financial information for different

[1] Graduate Student, Institute of Management Sciences, Peshawar, Pakistan
[2] Assistant Professor, Institute of Management Sciences Peshawar
laila.taskeen@imsciences.edu.pk
[3] Professor, Institute of Management Sciences, Peshawar
attaurrahman@imsciences.edu.pk

purposes. A major cause of conflict between shareholders and management is because of the conflict of interest between family-owned businesses and minority shareholders as well as between the shareholders and management, which reduces the level of trust in published information by internal management. A major failure of corporate businesses in the past was because of the wrong use of financial information by the management for their own favor. Hence, it is imperative to raise the importance of good corporate governance practices to ensure the credibility of corporate-level businesses and secure the wealth of shareholders. Best corporate performance requires good quality of corporate governance to remove discretionary behavior of management to prevent expropriation, which leads to inflating or deflating income by different earnings management techniques. The corporate governance code indicates a greater need for good corporate governance practices by the rules proposed in 2002.

A number of studies have been conducted (such as Pizzo, 2000; Beliga et al., 1996) to check the effect of corporate governance on information disclosures, but few on earnings management around the world, and those conducted are mostly about financial firms none of them study this relationship for manufacturing sector in Pakistan. This study attempts to take a closer look at the impact of corporate governance practices on the earnings management of manufacturing sectors in Pakistan.

A good level of Corporate Governance helps managers to save the interest of shareholders by efficiently allocating the available resources in order to encourage the outside stakeholders to invest their money in corporate business more aggressively. Such type of governance increases the credibility of the firms, which helps them in developing loyal relationships with their supplier and employees.

The ethical failure of well-known businesses like Enron has garnered the attention of fair financial reporting. Such failures occur because of ineffective corporate governance practices for which the CEO is held responsible, and active steps must be taken against this type of failure by the Securities and Exchange Commission of Pakistan (SECP) in the Code of Corporate Governance. Good corporate governance can assure investors' interest in the capital market. Weak corporate governance can lead to a loss of control over

the corporation, influencing the behavior of internal management to manipulate financial news and reports in their own interest. Such actions lead to a poor financial information flow, and the board of directors and central ownership are held responsible for such unfair flow of information. Several studies have documented significant results between board of directors and information disclosure (Rahman & Ali, 2006), but only the board of directors cannot be associated with the failure of business. There are other factors that also affect financial reporting, including board composition, audit committee independence, and CEO/Chairman duality. Different studies have examined the relationship of financial reporting with the above-mentioned variables of corporate governance, among which Yermack and David (1996, p. 210) found a negative relationship between board size and financial disclosure, the Code of Corporate Governance found greater improvement in financial reporting from 2005 to 2010 after the proposal of the act that suggests a negative relation between the increase in the number of non-executive directors and the quality of financial reporting. Fama and Jensen (1993) emphasized the importance of CEO/Chairman Duality in providing the right direction to companies while reporting a negative relationship between duality and financial disclosure. Financial information can be inflated or deflated for different purposes; the inflation or deflation of income due to false disclosure of information is known as earnings management.

The purpose of this study is to check the relationship in the Pakistani corporate culture of manufacturing firms to find out the link between earnings management and variables of corporate governance, including board size, board composition, and CEO/Chairman duality within the time frame of 2009-2012. Among developing countries, more attention is needed in Pakistan to improve corporate governance practices and reduce issues of unfair practices in both publicly owned and family-owned businesses. The study's objective is to raise awareness among corporate investors about earnings management strategies and enhance the future predictability of earnings.

The rest of the study is organized as follows: The second section provides a review of the past literature. In the third section, a detailed description of the methodology adopted for the measurement of corporate governance and earnings management is provided. The fourth section presents the empirical results of the study, and the fifth section concludes the study.

Literature Review

Corporate governance (CG) is mainly concerned with maintaining a constructive relationship between shareholders, management, and the Board of Directors (BOD) (Gulzar and Wang, 2011). CG refers to a corresponding set of lawful, efficient, and social institutions that safeguard the interest of corporate investors (Iqbal, 2010). Corporate governance includes several practices, such as financial reporting disclosures, executive compensation, size, and composition of the board. CG plays several roles in corporate governance, among which the integrity of the financial reporting process is vital because it has a critical linkage with companies (Torng-Her, et al., 2012).

The BOD can be defined as the governing body to which responsibility is delegated by shareholders to oversee managers and to approve major strategic projects (Mukti, et al., 2012). Different studies have been conducted to check the impact of board size on corporate performance, among which Abed et al., (2012) confirmed a negative correlation between the firm's value and its board size. However, this cannot hold true in every case because as the board size increases, the CEO's power over outside directors decreases, and companies adhere to fair accounting procedures and regulations. With an increasing number of board members, the ability to resist the CEO also increases. Abed et al., (2012) argued about the performance of CEOs on large boards, who operate with less strength due to the fear of dismissal. Larger boards thus ensure the CEO's integrity based on performance. Moreover, a larger board size creates communication problems between the various hierarchical levels of the company, rendering the board incapable of controlling the management (Abed et al., 2012). To enhance checks and balances on boards with more members, the proportion of outside directors must be increased, as external directors face reputational loss in case of board failures (Meeampol et al., 2012). The key players are BODs and the Audit Committee. The effectiveness of the financial reporting system and corporate governance is positively correlated (Ugbede et al., 2013; González & García-Meca, 2013).

The failure of CG can be reduced by fair financial reporting because corporate-level decisions wholly depend on financial reporting (Swastika, 2013). Every CG practice needs a good level of disclosure to eliminate information asymmetries between them; thus, disclosure may be considered the foundation

of CG. The use of GAAP ensures a better quality of information disclosure reported by financial controlling agents (Swastika, 2013).

The internal mechanism of CG mainly concerns the reorganization of BODs, such as the numbers of independent directors, board size, and the separation of the chairman and CEO's titles. With the increase in the number of independent members on the board, more information is processed by these independent members due to audit committee support, leading to strict control overboard activities. It can be concluded that good CG (greater board size) has a positive impact on financial reporting. Both CG and fair financial reporting are important to each other because they are highly correlated (Waweru & Riro, 2013).

Among the corporate governance practices, chairman and CEO duality are important factors to consider, along with board size and composition, which impact the performance of various committees (Ahmed et al., 2008; Kabir et al., 2011). The chairman is primarily responsible for nominating the CEO and organizing meetings. Separating the roles of chairman and CEO can negatively affect company performance. Regarding CEO-Chairman duality, dividing the power between the CEO and chairman decreases the CEO's control over external directors (Firth et al., 2007). Splitting the CEO and chairman titles can reduce costs associated with conflicting interests among managers and shareholders in large organizations (Bradbury et al., 2006; Petra, 2007; Klapper & Love, 2002). Good corporate governance helps secure external financing at a lower cost, emphasizing the importance of high-quality corporate governance for large organizations. Companies facing significant information asymmetries due to internal procedures and business practices require top-notch corporate governance to protect their investors (Beekes et al., 2004).

The importance of examining earnings management (EM) arises due to financial reporting fraud, driven by the personal interests of management and CEOs, leading to the failure of many listed companies in the stock market (Houqe et al., 2010). EM techniques reduce earnings inconsistencies, thereby decreasing uncertainty and enhancing future earnings expectations to elevate the Price/Earnings ratio (Hasan et al., 2013). A fundamental tool for earnings management is discretionary accruals (DA) (Houqe et al., 2010).

According to Swastika (2013), all models are suitable for measuring DA, but Jones' model, proposed in 1991, yields the most powerful results. It focuses on revenue-based earnings, minimizing type two errors, and separates earnings into two components: Discretionary (DA) and non-discretionary accruals (NDA). Regulatory bodies have implemented measures to prevent financial scandals, safeguard investor interests, and enhance confidence in the capital market (Bhuiyan et al., 2013).

There are different reasons and interests of managers and CEOs behind earnings management (EM), such as enhancing financial reports for initial public offerings or seasoned public offerings to attract better evaluation. The cause of EM can be secondary equity offering and initial public offering (Apostolou et al., 2009). Earnings are mostly managed one quarter before the initial public offering. Seasoned offerings are followed by significant earnings declines (Hansen & Crutchley, 1990). Most firms manage their earnings to meet financial analysts' needs. EM practices aim at increasing reported earnings for executive compensation to gain bonuses. EM is measured through discretionary accruals (DA), which are most important in the quarter in which the offering is announced and in the subsequent quarter. It also helps fulfill loan requirements by inflating income to benefit from raising low-cost funds from creditors and enhancing regulatory benefits. Oil companies in the US manipulate their earnings due to antitrust regulations and tax increases (Zimmerman & Watts, 1986). They also manage their earnings in response to natural disasters such as Katrina and Rita (Brown et al., 2010).

Major motivation for handling earnings is through seasoned offerings to enhance income, attracting investors and equity holders (Healy & Whalen, 1999). Among the motives of an EM manager is the benefit he can derive from insider trading of securities due to his awareness of financial report misstatements. Institutional investors are often short-term profit-oriented rather than long-term, which influences their approach to managing earnings (Koh, 2003). Institutions focus on managing their earnings due to this orientation (Koh, 2003). Some studies suggest that managers aggressively manage their earnings to prevent losses, anticipating market rewards for earnings growth.

Managers of the publicly listed firms influence their reported earnings in a positive or negative direction to increase firm stock prices. Firms with a high value of accruals are overvalued by the stock market initially but devalued later (Sloan, 1996). Firms that experience high earnings growth and sales growth have high initial valuations but perform poorly subsequently. DA has a negative relationship with abnormal stock returns over the four-year post-offering period (Teoh et al., 1998). For the relevant decision-maker to base decisions on EM is costly. When earnings are managed, firms can raise capital at a more affordable cost.

EM Vehicles for Korean firms provide evidence that firms manage their earnings in different directions. Those firms that inflate their income repeatedly utilize non-cash revenues, including asset disposal gains, while income-deflating firms employ non-cash expenses, such as bad debt expenses (Miguel, Pindado, & De la Torre, 2004).

Different corporate governance components have their own impact on earnings management, as studied in detail by previous literature that includes ownership structure, ownership concentration, board size, board composition, and CEO duality. Previous studies have investigated the effect of internal ownership on earnings management (Teshima & Shuto, 2008). Major shareholders on the board represent ownership concentration (Miguel, Pindado, & De la Torre, 2004). Most literature indicates that internal ownership could be an effective mechanism of corporate governance in monitoring management decisions for the validity of earnings (Wang & Ali, 2006).

Agency theory suggests that managers have different interests than shareholders because they are not the owners of the firm. This is why they can facilitate efficient management for their own benefit (Jensen, Meckling & Fama, 1976; Healy & Fama, 1985; Jensen & Ruback, 1983). If managers' personal benefits are tied to the firm, for example, by granting them shares to reduce their discretionary behaviors (Mehran, 1995), the level of discretionary accruals is negatively associated with internal ownership (Wartfield, Wild, & Wild, 1995). Firms with internal ownership demonstrate higher-quality earnings through accurate information provided in financial reports compared to those with lower managerial ownership. A high level of ownership

concentration often infringes on the rights of minority shareholders, exacerbating agency problems (Boubraki, Cosset & Guedhami, 2005). A study conducted in Brazil found a direct relationship between the size of the board and the management team. The smaller the board size, the smaller the management team, leading to an increase in discretionary accruals by management due to information asymmetry for their personal interests (Davila & Watkins, 2009).

Hence, a board consisting of more members presumes the best regulation of the management team and a higher quality of CG (Pearce & Zahra, 1992). A sample of 313 firms in Hong Kong found a negative relationship between the size of the Board and earnings management (Chin, Firth, & Kim, 2006). Larger members on the board experience lesser practices of earnings management made by the management of companies. A larger board is supported by many authors to remove the discretionary behavior of managers, but at the same time, it has some obstacles. Those firms that need efficient and quick decisions face problems of coordination and communication due to a larger board size. A previous study conducted by Brazil took a sample of 97 companies and found a positive relationship between the size of the Board and earnings management. Such a relationship represents that in Latin America companies separate ownership and control. A larger board size decreases the level of monitoring, which increases the risk of income manipulation by controlling shareholders on the board. The purpose behind manipulation of earnings is to establish a high level of remuneration and bonuses (Fernandez, Gomez, & Fernandez, 1997).

Most of the past CG literature suggests that only board independence and its size influence monitoring capabilities (Fernandez, Gomez, & Fernandez, 1997). The increase in non-executive members on the board enhances the quality of information that firms issue (Cheng & Courtenay, 2006). Most of the literature affirms that an independent board has strong control over the company's development by carrying out the process of accountability to various groups within the company since independent directors have no ties to management (Willekens, Bauwhede, Gaeremynck, & Van De Gucht, 2005). An independent board ensures fairness in the long-term decisions made by the board, and it monitors the effectiveness of decisions and managerial activities to ensure transparent information, presenting an accurate image of the firm to

the outside world (Chen & Jaggi, 2000). Some studies show that a higher proportion of outside directors ensures better quality financial information, reducing earnings management (Xie, Davidson, & Dadalt, 2003).

When one person holds both the positions of CEO and Chairman (CEO duality), there is a concentration of power. Corporate governance codes recommend separating these roles to enhance best practices. However, some firms, like those in Latin America, continue to practice this duality. In Mexico, 85% of companies listed on the Stock Exchange have the same individual in the roles of CEO and Chairman (Wati & Malik, 2021; Castanseda, 2000). In East Asia, there is dual ownership and a significant gap between cash flow rights and voting rights, leading to diminished earnings quality for external investors. Consequently, reported earnings lose their informative value, which may promote earnings management. In businesses with substantial voting control disparities, reported earnings offer limited insights.

Warfield et al. (1995) found a negative relation among the size of the Board and abnormal accruals. The duality of the CEO is common in the US, while in Europe, it is less widespread. Dechow and Sloan (1995) found that earnings are manipulated by firms with CEOs serving as chairmen of the board, while other studies did not find a significant negative association between CEO duality and earnings management. If CEO duality limits the monitoring of the board of directors, there is a greater chance of discretionary accruals.

Based on the literature mentioned above, this paper examines the impact of corporate governance (board size, board composition, and chairman-CEO duality) on earnings management (EM) using discretionary accruals as a measure for manufacturing sectors listed on the KSE.

Methodology

In this study, a sample of 100 manufacturing companies has been employed, including companies from the cement industry, chemical industry, textile industry, automobile industry, and OGDCL. From the above-mentioned industries, 4 years of panel data (2019-23) have been selected for analysis. From the 400 annual reports of these industries, corporate governance variables are taken, including Board size, Board composition, and chairman & CEO duality. Discretionary accruals are used to measure earnings management; this is calculated from total accruals and non-discretionary accruals obtained from balance sheets, income statements, and cash flow statements. Corporate Governance is considered the independent variable for the study, while earnings management is the dependent variable. The research hypotheses studied in this research are as follows.

H0: There is no impact of Corporate Governance Practices of a firm on earnings management.

H1: There is an impact of Corporate Governance Practices of a firm on earnings management.

For testing the designed hypothesis following corporate governance variables have been employed in this study.

CG = f (BS, BC, CEO/Chairman duality)

BS = Board size and is measured on the basis of the total number of directors on the board.

BC = Board Composition and is measured by the formula given below,

Board composition = number of non-executive directors / total number of directors

CEO/Chairman Duality is measured through 0, 1 coding, if the CEO plays dual rule value encoded is “1” and if not, then “0”.

For measuring earnings management, there are two approaches:

- Balance sheet approach
- Cash flow statement approach

The method employed in this study is the cash flow statement approach because many authors recommend it to be the best one among the two methods. Bartov, Gul and Tasui (2000) used a balance sheet approach. The reason they give for using this approach is the unavailability of data regarding cash flows from operations.

$$TA_t = NI_t - CFO_t \dots\dots\dots (1)$$

Where, $TA_t$is total accruals in year t, NI_t is the net income in year t, CFO_t is cash flows from operating activities in year t.

The formula mentioned above does not give us the results for earnings management because earnings management can only be measured through discretionary accruals. Since there are two types of accruals—discretionary and non-discretionary accruals—to determine the discretionary accruals, we subtract non-discretionary accruals from total accruals.

Different authors have used various models to identify discretionary accruals. Notable models include the Jones model (1991), the modified Jones model (1995), the Healy model (1985), the DeAngelo model (1986), and the Biswas et al. model (2022). The most recent model used in this study is the Modified Cross-Sectional Jones model proposed by Dechow et al. (1995). This model calculates discretionary accruals by subtracting non-discretionary accruals from total accruals.

The formula for calculating non-discretionary accruals is,

$$NDA_t = \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \alpha_2 \left(\frac{\Delta REV_t - \Delta REC_t}{A_{t-1}}\right) + \alpha_3 \left(\frac{PPE_t}{A_{t-1}}\right) \dots\dots\dots (2)$$

Where NDA_t represents non-discretionary accruals in the year t, ΔREV_t represents change in revenue in the year t, ΔREC_t represents the change in net receivables in the year t and PPE_t represents the gross property plant and

equipment at the end of year t. All of the variables described above are scaled by lagged total assets given by A_{t-1} being total assets at the end of year t-1.

To calculate α1, α2, α3, weighted least squares have been used for regression. Total accruals have been regressed on the difference between changes in revenue in the current year and changes in receivables in the current year and property plant and equipment. Regression has been run using the weighted least squares (WLS) method due to the presence of small and large companies in the considered sample. Results obtained from the analysis conducted through Gretl provide the alpha values listed below.

α1	0.00738461
α2	0.02112
α3	-0.525974

These alpha values are adjusted in non-discretionary accruals (2) to find out the non-discretionary component of the total accrual equation mentioned below.

$$DA_t = TA_t - NDA_t \dots\dots\dots 3$$

In the (3) above, DA_t represents Discretionary Accruals for the year t, TA_t represents Total Accruals for the year t and NDA_t represents Non-Discretionary Accruals for the year t.

After obtaining the values of DA, they are regressed with the corporate governance variables. Board size, board composition, and chairman & CEO separation are considered independent variables, while discretionary accruals are considered dependent. Prior to conducting WLS, a correlation test was performed to examine the relationship between discretionary accruals and corporate governance. Weighted least squares are used for regression instead of ordinary least squares because OLS leads to issues of heteroskedasticity.

$$DA_t = \alpha + \beta_1 Board\ Size + \beta_2 Board\ Composition + \beta_3 Chairman\ CEO\ Duality + \varepsilon_t \ldots\ldots\ldots 4$$

The results of the regression (4) have been presented and discussed in detail in the next section.

Empirical Results

The empirical findings of the study have been presented in this section.

Descriptive statistics

Table 1 below describes the CEO/Chairman Duality situation in the sampled listed companies of Pakistan using frequency tables. The sample includes 100 companies with data spanning 4 years, totaling 400 company-years.

Table 1: CEO/Chairman Duality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	338	84.5	84.7	84.7
	1	61	15.2	15.3	100.0
	Total	399	99.8	100.0	
Missing	System	1	.2		
Total		400	100.0		

From the frequency Table 1 above, it can be inferred that out of the 400 company years, CEO/Chairman duality has been reported for only 61 company year observations, whereas for the rest of the cases, the two positions are held by two different people in an organization.

Correlation test

Results obtained by applying a correlation test are shown in the following Table 2.

Table 2: Correlation Matrix			
Board size	Board composition	CEO/Chairman duality	
1.0000	0.0475	-0.1946	Board size
	1.0000	-0.1501	Board composition
		1.0000	CEO/Chairman duality

From the obtained results, it’s clear that independent variables do not have multi-collinearity problems.

Weighted Least Square Regression Results

Table 3 below contains Weighted Least Square Regression Results striving to test the research hypothesis empirically.

Table 3: Weighted Least Square Regression Results

Independent Variables	Coefficients	t-test	P values
Constant	-0.00818585	-1.8213	0.06931*
Board size	0.00133674	2.3109	0.02135**
Board composition	-0.00565541	-2.248	0.02513**
Chairman & CEO duality	0.00779205	5.354	<0.00001***
R-Squared	0.085242		
F-test (p-value)	0.000000109***		

***Significant at 1%, **Significant at 5%, *Significant at 10%

From the obtained results coefficient of board size shows a positive relation with discretionary accruals. As board size increases, the value of discretionary accrual will also increase. Board size is reported to be significant at 5%. The second coefficient is of board composition and shows a negative relationship with discretionary accruals. As the number of non-executive directors on board decreases, discretionary accrual increases. The coefficient of board composition is also significant at 5%. The last coefficient value is of CEO/Chairman duality, which indicates a positive relation of CEO/Chairman duality with discretionary accruals. The increase in duality would bring an increase in discretionary accruals. From the p-value of CEO/Chairman duality at a 1% significance level, it can be concluded that the results are significant and the alternative hypothesis is accepted.

Overall, the empirical results of the study lead to the acceptance of the main research hypothesis, supporting a significant relationship between the

corporate governance practices of a firm and its earnings management strategies. Moreover, the R-squared of the study is 8%, indicating an 8% variation in the earnings management strategies of a firm due to its corporate governance practices. Additionally, the model is also considered fit based on the significant F-test statistic. The study's results are consistent with the literature for the manufacturing sector of Pakistan during the time period of 2009 to 2013.

Discussion and Conclusion

A company includes many governing bodies and different levels of operations, such as the board of directors, non-executive directors, chairman, CEO, audit committee, human resource committee, and many managers. Each of these has its own interests that create numerous problems related to the corporation. The major issue related to the corporation is the disclosure of information because it reflects the image of the corporation to the outside world, and the investment decisions of investors mainly depend on information disclosure.

The historical failures of large businesses like Enron, WorldCom, and Adelphia, etc., made corporate governance practices of vital importance. The main cause of the failures was falsifying annual reports due to management's personal interests. Among the major key players of corporations, CEOs and boards of directors are held responsible for such failures. The code of conduct proposed by SECP in 2002 proposes the inclusion of outside directors to the board and also independent directors to have a greater say in management decisions and obtain timely and accurate information with the support of the audit committee. Such practices increase the quality of financial reporting and information disclosure, leading to more accurate decisions. Agency problems that arise due to differences in interests between shareholders and internal managers can be solved by appointing outside directors because such problems lead to an incomplete flow of information, and managers can use internal information for their own benefit.

With the increase in the duality of the CEO and Chairman, the incomplete flow of information about financial reports will increase. Previous literature also provides evidence of a direct relation between a CEO who is serving as a chairman at the same time and ambiguous financial information (Jensen &

Ruback, 1983; Sonnenfeld, 1988; Lorsch & Lipton, 1993; Klapper & Love, 2002). Literature favors dividing the authority into two different entities for sound financial practices inside the company, but in some cases, it also initiates a conflict between the two different entities: the CEO and the Chairman (Willekens, Bauwhede, Gaeremynck, & Van De Gucht, 2005).

This study measures the CG through three elements, which include board size, board composition, and CEO/Chairman duality. Results of the study suggest that all three mentioned variables have an impact on information disclosures. Furthermore, it is also revealed that an incomplete flow of information leads the CEO and management to inflate or deflate income for their personal interest or for the purpose of the company's best performance, which is known as discretionary accruals. There are different reasons behind inflating or deflating income by providing incomplete information to shareholders. In some cases, CEOs inflate income to attract investors or shareholders to initial public offerings or seasonal offerings in order to gain higher share prices. This is prevalent in situations when the company CEO has some personal interest or benefit associated with the company, for instance, when the CEO is also a shareholder of the company. Some studies argue that firms manage their earnings to raise loans at a lower cost by inflating their income. Here, the benefit of increasing discretionary accruals is given to the company. In such types of companies, CEOs tend to have a personal interest in the business, or mostly in family-oriented businesses, income is inflated for the mentioned purposes.

Mostly, income is deflated by CEOs or internal managers for their own interest to gain benefits through internal trading of securities. In the U.S., oil companies deflate their income to shield themselves from higher government taxation during crises or antitrust regulations. Accruals primarily contribute to increasing stock value but at the expense of lower returns in the future. Income is usually inflated one period before the IPO.

Different models have been proposed in the literature for the measurement of discretionary accruals, among which the Jones model is preferred the most because it favors revenue-based earnings (Leuz, Nanda, & Wysocki, 2003). Two approaches are used for measuring discretionary accruals, among which the cash flow statement approach is favored. Previous literature provides

strong support for the use of this approach for measuring discretionary accruals (Leuz, Nanda, & Wysocki, 2003). Some studies use the balance sheet approach due to the unavailability of the cash flow statement. This study also favors the cash flow approach for measuring discretionary accruals. The model used for this study fits strongly and does not exhibit any type 2 errors, as documented in previous studies (Leuz, Nanda, & Wysocki, 2003).

Institutional investors manage their earnings by increasing internal ownership concentration to enhance the quality of information and reduce discretionary accruals, mostly in the case of family businesses. The agency problem reduces discretionary accruals, and ownership concentration increased in the past, as documented by various authors.

Board size has a greater impact on discretionary accruals. Past studies indicate that an increase in board size decreases discretionary accruals because as board size increases, checks and balances increase by the members of the board. This, in turn, supports an audit committee and ensures fair auditing of accounts. Some studies have documented that with the increase in board size, discretionary accruals increase in those companies where there is no proper check and balance of financial reports, allowing managers and CEOs to deflate income for their own purposes. In Brazil, a smaller board is found to inflate discretionary accruals for executive compensation and bonuses (Fernandez, Gomez, & Fernandez, 1997). However, in Hong Kong, board size is negatively related to EM due to a tight monitoring system that facilitates the timely flow of information (Chin, Firth, & Kim, 2006). The results of this study support the positive relation between board size and discretionary accruals, indicating that in Pakistan, the companies included in the sample have a large board size, with a maximum of 11 directors and a minimum of 6, but lack proper checks and balances. It can be inferred that the larger the board of manufacturing companies in Pakistan, the greater the chance of discretionary accruals due to asymmetric information. To mitigate this risk, shareholders of these companies need to review their financial reports quarterly and consider adding trusted individuals to the audit committee to safeguard their interests. Furthermore, for sound accounting practices, GAAP principles should be applied to financial records, and external auditors should be hired. Often, these companies' Board of Directors may inflate their income to attract a larger market share or secure low-cost loans through substantial

cash inflows resulting from the sale of old assets. These businesses tend to dispose of assets during periods of poor performance or when additional capital is needed during a business capital slump. The Boards of Directors of the selected manufacturing companies in this study are found to disregard sound accounting practices by favoring income inflation, whether for personal bonuses or company benefits.

Similar as board size, board composition is also one of the most important components of corporate governance, representing the power of independent non-executive directors on the board to have a say in management decisions and ensure different corporate practices. These non-executive directors are appointed to the board based on shareholders' opinions; they may also become part of the audit committee to enhance audit committee independence. As the number of non-executive directors on the board increases, the power of the CEO decreases. This helps secure the rights of minority shareholders on the board.

Past literature provides evidence of a negative relation between independent directors and discretionary accruals, as also demonstrated by this study (Willekens, Bauwhede, Gaeremynck, & Van De Gucht, 2005; Cheng & Courtenay, 2006). If shareholders of the manufacturing companies under study believe that CEOs or managers are prioritizing their own interests through false information outflows, they should increase non-executive directors on the board to reduce discretionary accruals. The results of this study suggest that a decrease in the number of non-executive directors on the board increases discretionary accruals for unethical management purposes. When companies seek to manipulate income for personal gain, they should decrease the number of non-executive directors on the board before the desired inflation period. Additionally, when shareholders feel that their interests in the corporation are at risk of being compromised by internal management, it would be advantageous to increase the number of non-executive directors. The results of this study indicate that the boards of the sampled companies have a limited presence of non-executive directors, thereby promoting unethical management practices and allowing income manipulation for personal or company gain.

Now, considering the other variable of the study, the duality of the title of CEO and Chairman means that two different authorities reside in one body. There are both good and bad points about this corporate governance practice as documented by researchers in various studies (Dechow & Sloan, 1995). According to previous literature, some support the dual nature because the CEO's strong control over management and awareness of current market trends and conditions contribute to the firm's optimal performance (Dechow & Sloan, 1995). Following the financial failures of some well-known organizations, the significance of investigating corporate governance practices has increased. Researchers in different countries have examined various failures and discovered that the CEO's dual role leads to the dissemination of false information to the market, resulting in incorrect investor decisions and ultimately, the firms' failures. In many cases, a CEO who also acts as a chairman exploits his power for personal gain and influences various committees within the corporation.

The dual nature of a CEO can encourage earnings management practices, which can be for the personal gain of the CEO or for the best of the company. This study supports the view of past literature that is against the dual nature of the CEO title because findings argue that the dual nature of the CEO is positively related to discretionary accruals, with the increase in duality, discretionary accruals increase, leading to earnings management. The sample selected consists of 61 company years, indicating dual-natured CEOs, and that's why the encouragement of discretionary accruals by dual-titled authorities is very low in the manufacturing sector.

Different countries' companies have different approaches to managing their earnings. Some support large board sizes, while others prefer smaller boards. This study supports larger board sizes with tight monitoring control. It also approves a greater number of non-executive directors on the board and disagrees with the dual role of CEO/Chairman, which, in turn, discourages incomplete and ambiguous flow of financial information.

As proposed by the SECP, the code of corporate governance provides rules for corporations and gives recommendations for sound financial recording practices. The corporate governance code suggests a larger board size to ensure tight monitoring, a recommendation not followed by the manufacturing

sector. Companies in this study require stricter controls to discourage earnings management with larger board sizes. The representation of non-executive directors on the board, as proposed by the SECP for sound practices, is not implemented by the manufacturing sector due to a negative relationship between discretionary accruals and the number of non-executive directors. The study recommends increased representation of non-executive directors on the boards of manufacturing companies to reduce earnings management practices. This study supports the SECP's proposal for the separation of titles to address agency problems and reduce earnings management practices in the sampled companies. Companies with CEOs serving dual roles should eliminate the duality of CEO roles to curb earnings management practices in their respective companies.

In conclusion, the corporate governance culture for the manufacturing sector in Pakistan can be developed by the above-mentioned three factors of CG to obtain the best quality of corporate governance for better and fair disclosure of financial reports. This leads to the reduction of EM practices conducted by manufacturing firms. Thus, CG practices have a significant impact on the EM of manufacturing sectors listed on KSE.

Limitations of the study

1. The amount of inflating or deflating of income is not known.
2. There is no identification of firms specifically who inflate or deflate their income.
3. Those firms who use the disposal of assets or non-cash expenses to manipulate their earnings are not known.
4. Miss specification biases due to lack of control variable.

References

Ahmed, H.L., Alam, M.J., Jafar, S.A. and Zaman, S.H. (2008). A conceptual review on corporate governance and its effect on firm’s performance: Bangladesh perspective. Working Paper No. AIUB-BUS-ECON-2008-10, pp. 1-24

Abed, S., Al-Attar, A. and Suwaidan, M. (2012). Corporate governance and earnings management: Jordanian evidence, International Business Research, 5(1), pp. 216-225.

Apostolou, K.A. and Konstantinos A.N. (2009). Voluntary accounting disclosure and corporate governance: Evidence from Greek listed firms, International Journal of Accounting and Finance, 1(4), pp. 395-414.

Bartov, E., Gul, F. A. & Tsui, J. S.L., (2000). Discretionary-Accruals Models and Audit Qualifications. Available at SSRN: http://ssrn.com/abstract=214996 or http://dx.doi.org/10.2139/ssrn.214996

Beekes, W., Pope, P. and Young, S. (2004). The link between earnings and timeliness, earnings conservatism and board composition: Evidence from the UK, Corporate Governance: An International Review, 12(1), pp. 14-59.

Beekes, W., Pope, P. and Young, S. (2004). The link between earnings and timeliness, earnings conservatism and board composition: Evidence from the UK, Corporate Governance: An International Review, 12(1), pp. 14-59.

Beliga. (1996). Outside Directors and the Adoption of Poison Pills. *Journal of Financial Economics*, 371–390.

Bhuiyan, M.B.U., Roudaki, J. and Clark, M. (2013). Corporate governance compliance and discretionary accruals: New Zealand Evidence, Australasian Accounting, Business and Finance Journal, 7(2), pp. 87-110

Boubraki, N., Cosset, J., & Guedhami, O. (2005). Post-privatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics*, pp. 369-399.

Bradbury, M.E., Mak, Y.T. and Tan, S.M. (2006). Board characteristics, audit committee characteristics and abnormal accruals, Pacific Accounting Review, 18(2), pp. 47-68.

Brown, J., Falaschetti, D. and Orlando, M. (2010). Auditor independence and earnings quality: Evidence for market discipline vs. Sarbanes-Oxley proscriptions, American Law and Economics Review, 12(1), pp. 39-68.

Chin, K., Firth, M., & Kim, J. (2006). Earnings management,corporate governance, and the market performance of seasoned equity offerings. *Journal of contemporary accounting and economics*, pp. 73–98.

Castanseda, G. (2000). Governance of large corporations in Mexico and productivity implications. *Revista Abante*, pp. 57-89.

Biswas, S., Bhattacharya, M., Sadarangani, P. H., & Jin, J. Y. (2022). Corporate governance and earnings management in banks: An empirical evidence from India. *Cogent Economics & Finance*, *10*(1), 2085266.

Cheema, A. (2003) Corporate Governance in Pakistan: Issues and Concerns. *The NIPA Journal*, 8(2): June, 7-19.

Chen, C., & Jaggi, B. (2000). Association between non-executives directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, pp. 285–310.

Cheng, E., & Courtenay, S. (2006). Board composition, regulatory regime and voluntary disclosure. *International Journal of accounting*, pp. 262–289.

Davila, M., & Watkins, K. (2009). Corporate Governance and Turnovers in Mexico. *Universidad Popular Auto´noma de Puebla*, pp. 1-34.

Dechow, P., & Sloan, R. (1995). Causes and Consequences of Earning Causes and Consequences of Earning. *Contemporary Accounting Research*, pp. 1-36.

DeAngelo, L. (1986). Accounting numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders, *The Accounting Review*, Iss.7, pp. 400-420.

Fama, E. F., & Jenson, M. (1993). Separation of Ownership and Control. *Journal of Law and Economics*, 301–325.

Fernandez, A., Gomez, S., & Fernandez, C. (1997). *The effect of board size and composition on corporate performance.* Kluwer Academic publishers.

Firth, M., Fung, P. and Rui, O. (2007). Ownership, two-tier board structure, and the informativeness of earnings: Evidence from China, Journal of Accounting and Public Policy, 26(4), pp. 463-496.

Gani, W. I., & Ashraf, J. (1999). *Corporate Governance, Business Group Affiliation, and Firm Performance: Descriptive Evidence from Pakistan.* Lahore: Lahore University of Management Sciences.

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

Gulzar M.A., Wang.Z.(2011). Corporate governance characteristics and earnings management: Empirical evidence from Chinese listed firms International Journal of Accounting and Financial Reporting, 1 (1) (pp. 133–151

Hasan, M.S., Hossain S.Z. and Swieringa, R.J. (2013). Corporate governance and financial disclosures: Bangladesh perspective, Research Journal of Finance and Accounting, 4(1), pp. 109-119.

Hansen, R., & Crutchley. (1990). The Modern Corporation and Private Property:A Reappraisal. *Journal of Law and Economics*, pp. 273–289.

Healy, P., & Fama. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, pp. 83–107.

Healy, P., & Whalen. (1999). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, pp. 83–107.

Houqe, M.N., Zijl, T.V., Dunstan K. and Karim, A.K.M. (2010). Does corporate governance affect earnings quality?: Evidence from an emerging market. Business Management Review, 7(3), pp. 48-57.

Iqbal, A. Y. (2010). Corporate Governance in Pakistan: corporate evaluation, ownership, and financing. Pakistan Institute of Development Economics, Iss. 7.

Jensen, M., Meckling, W., & Fama. (1976). Theory of the firm: managerial behavior, agency. *Journal of Financial Economics*, 305-360.

Jensen, M., & Ruback. (1983). Agency Problems and Residual Claims. *Journal of Law and Economics*, 327– 349.

Jones, J. J. (1991), Earnings Management during Import Relief Investigations, Journal of Accounting Research, Vol. 2, Iss. 2, pp. 193-228.

Klapper, L., & Love, I. (2002). *Corporate Governance, Investor Protection and Performance in Emerging Markets.*

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

Lang, & Lundholm. (2002). *Social Reporting and New Governance Regulation.* Ross School of Business University of.

Leuz, C., Nanda, D., & Wysocki, P. (2003). Earnings management and investor protection: An international comparison. *Journal of financial economic*, pp. 505–527.

Lorsch, & Lipton. (1993). A Modest Proposal for Improved Corporate Governance. *Business Lawyer*, pp. 59–77.

Meeampol, S., Rueangsuwan, S., & Jaithat, P. (2012). An Empirical Analysis of the Relation between Corporate Governance and EarningsManagement: Case Study of Thailand. In *Knowledge and Learning: Global Empowerment; Proceedings of the Management, Knowledge and Learning International Conference 2012* (pp. 913-913). International School for Social and Business Studies, Celje, Slovenia.

Mehran, H. (1995). Executive compensation structure, ownership and firm performance. *Journal of financial economics*, pp.163–184.

Miguel, A., Pindado, J., & De la Torre, C. (2004). Ownership structure and firm value: new evidence from Spain. *Strategic Management Journal*, pp. 1199–1207.

Mukti, A.H. and Wardhani, R. (2012). Corporate governance mechanism, audit quality, and accrual quality: Indonesia manufacturing company evidence. IAMURE International Journal of Business and Management, 3, pp. 19-37

Pearce, J., & Zahra, S. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, pp. 411–438.

Petra, S. (2007). The effect of corporate governance on the informativeness of earnings, Economics of Governance, 8, pp. 129-152.

Rehman, Ali, Hashim, & Devis. (2006). Corporate Board Size, Its Composition and Corporate Failure in the Field of Retailing Industr. *Journal of Management Studies*, 400–417.

Sloan, (1996). Causes and Consequences of Earnings Manipulation: An Analysis. *contemproary accounting research*, pp. 193-225.

Sonnenfeld. (1988). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, pp. 288-307.

Swastika, D.L. (2013). Corporate governance, firm size, and earning management: Evidence in Indonesia stock exchange,IOSR Journal of Business and Management, 10(4), pp. 77-82

Torng-Her, L., Ku, C., Chen, H. and Chen, J.-F. (2012). A Study of corporate governance factors and earnings management behaviors of Taiwan public companies, International Journal of Business, Humanities and Technology, 2(5), pp. 79-88.

Teshima, N., & Shuto, A. (2008). Managerial ownership and earnings management Theory and empirical evidence from Japan. *Journal of International Financial Management and Accounting*, pp. 107–132.

Ugbede, O., Lizam, M. and Kaser, A. (2013). Corporate governance and earnings management: empirical evidence from Malaysian and Nigerian banks, Asian Journal of Management Sciences & Education, 2(4), pp. 1-21.

Wittington, (1993). Corporate Governance Mosaic and Financial Reporting Quality. *Journal of Accounting Literature.*

Wang, D., & Ali. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research*, pp. 619–656.

Wati, E., & Malik, A. Q. (2021). Corporate Social Responsibility and earnings management: The moderating role of corporate governance. *Journal of Accounting Research, Organization and Economics*, *4*(3), 298-307.

Waweru, N.M. and Riro, G.K. (2013). Corporate governance, firm characteristics and earnings management in an emerging economy, JAMAR, 11(1), pp. 43-64

Wartfield, T., Wild, J., & Wild, K. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting Economics*, pp. 61–91.

Willekens, M., Bauwhede, H., Gaeremynck, A., & Van De Gucht, L. (2005). Internal and external governance and the unitary disclosure of financial and non-financial performance. *SSRN*

Xie, B., Davidson, W., & Dadalt, P. (2003). Earnings management and corporate governance: The roles of the board and audit committee. *Journal of Corporate Finance*, pp. 295-316.

Yermack, & David. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 185-211.

Zimmerman, J., & Watts, R. (1986). Agency Problem, Auditing and the Theory of the Firm: Some Evidence. Journal of Law and Economics, pp. 613-633.