IMPACT OF FINANCIAL DISTRESS ON EARNINGS MANAGEMENTAND MODERATING ROLE OF INTERNAL QUALITY: EVIDENCE FROM PAKISTAN

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ABSTRACT

This study investigates the effect of financial distress (FD) on real earnings management (REM) in non-financial firms listed in Pakistan with an emphasis on the moderating role of internal controls (IC). A fixed effects model is used to test the hypotheses using data from non-financial firms registered on the Pakistan Stock Exchange (PSX). The study sample consist of secondary data from year 2018 to 2022 and nature of data is panel data. The Altman Z-Score model is used for the calculating of FD, whilst proxies like abnormal cash flows cash flows, discretionary expenses, and production costs is used to measure REM. The study additionally add control variables such as return on assets, firm size, and current ratio. However FD is independent variable while REM is dependent variable. The findings indicate that FD and REM have a negative but statistically significant relationship, which may indicate that financially troubled enterprises participate in less REM. But when internal controls were taken into account, audit quality had a negligible moderating effect, suggesting that strong internal controls might not be enough to stop REM in financial distress companies.

Keywords: *Internal Control, Real Earnings Management, Financial Distress, and Audit Quality.*

INTRODUCTION

An important occurrence in the business world is financial distress (FD), which is defined as a company's incapacity to pay its debts. As we observe, when it comes to reducing agency conflicts between business owners and management and other stakeholders who are worried about the actual financial performance of companies they may or may not be financing, financial data is crucial. Businesses that see a decline in their financial performance face the possibility of having to pay back creditors and lenders sooner, which would limit their ability to borrow money (Mafrolla and D'Amico, 2017). Economic downturns, bad managerial choices, high debt loads, and unfavorable market conditions are some of the causes of FD (Altman, 1968; Shumway, 2001). It is vital to comprehend the ramifications of FD since it can have a substantial impact on a company's financial reporting procedures and in turn on the decision-making processes of stakeholders. Iatridis & Kadorinis (2009), confirms that when firms are distress financially, it affects the decision making process of managers as well as behaviors which results in a poor performance.

As a result managers manipulate their earnings in order to lessen the negative

effects of financial turmoil (Dechow & Skinner, 2000). The deliberate manipulation of financial statements to present a desired financial performance is known as earnings management (EM) (Healy & Wahlen, 1999). Businesses may use accruals management, income smoothing, and deferrals of discretionary expenses to artificially improve their financial situation and stave off bankruptcy when faced with financial difficulties (Jones, 1991; Roychowdhury, 2006). These practices can distort the information presented in financial statements, leading to misallocation of resources and reduced market efficiency.

Managers can control earnings primarily through two methods: real earnings management (REM) and accrual earnings management (AEM) (Cohen et al., 2008, Gunny, 2010; Mao and Renneboog, 2015; Roychowdhury, 2006; Dinh et al., 2016; Zang, 2012). Carangelo & Ferrillo (2016) and Economist (2026) reports that when it comes to the decision between these two instruments, managers have been gradually moving toward REM since there is less room for manipulating accrual earnings due to check and balance by policy makers and regulators like the Securities and Exchange Commission and auditors. While REM takes place throughout the whole fiscal year, it is favored since it is less susceptible to inspection by auditors and regulators (Li et al., 2020). That is why in this study we will analyze the impact of FD on REM.

However different countries has implemented different policies, internal controls, laws ans regulations to mitigate EM practices. IC mechanisms play a crucial role in mitigating EM practices during FD. Robust governance frameworks, internal audit departments, and risk management programs are examples of effective internal controls that can improve financial reporting's accountability and openness (COSO, 2013). Assuring the accuracy of financial data by stakeholders, these techniques can serve as a disincentive to EM practices (DeZoort & Harrison, 2016). Furthermore, Pflugrath et al. (2011) reports internal control systems can help with the prompt identification and rectification of deceptive accounting techniques, protecting the interests of creditors and shareholders.

In the ever-changing world of corporate finance, financial strain is a real problem for all the businesses operating all over the world. The incapacity of a business to fulfill its financial commitments or FD, has far-reaching effects on all stakeholders, including creditors, employees, and investors. EM or the deliberate manipulation of financial reporting to meet certain aims, is one important factor influenced by FD (Healy & Wahlen, 1999). Like Iatridis & Kadorinis (2009), reports that when firms are FD, it affects the decision making process of managers which results in a poor performance and EM. The relationship between EM and financial crisis raises questions regarding corporate governance, transparency, and the accuracy of financial data.

The impact of IC and FD on EM has been examined in the literature to date, with contradictory results with special focus on emerging and developed economies (Ashbaugh-Skaife et al., 2008, Cohen et al., 2008, Doyle et al., 2007, Järvinen and Myllymäki, 2016). However fewer study has done in Pakistan's economy, specifically on AEM. In this study we have analyze the impact of FD on REM and the moderating role of IC on the relationship between them in Pakistan's listed non financial firms that in presence of audit quality what happens to the association of FD and REM.

The remaining of the paper consists of following sections. In chapter 2 literature review is explained. Chapters 3 explains the methodology of the study. Chapter 4 discuss the results and discussion of the study. While chapter 5 consist of conclusion of the study.

Literature Review

This study has a strong theoretical background agency theory. Understanding the association between FD, EM, and IC is made easier with the help of agency theory. Jensen & Meckling (1976) state that a contract between the manager (agent) and the owner or shareholder (principal) is what creates the agency relationship. According to Jensen and Meckling (1976), accountability between the principle and the agent will arise from the existence of an agreement between the two. There are

various issues with the agency connection between the manager and the owner. According to Suwanti and Wahidahwati (2017), the first is knowledge asymmetry, and the second is conflicts of interest brought on by unequal aims. Consequently, it is unethical to carry out the activity (Scott, 2012). Agency disputes between managers and shareholders may worsen in financially troubled companies as managers work to safeguard their own interests. This could result in opportunistic actions like profits manipulation (Jensen and Meckling, 1976). There are multiple approaches to address the issue of information asymmetry. These include: (1) establishing an ideal agreement between investors and management; (2) establishing a board of commissioners to oversee manager conduct on behalf of the principal and other stakeholders; and (3) obtaining adequate information from intermediaries, including financial analysts and rating agencies (Zulfikar et al., 2015), which will resolve the issue of agency conflict and it will strengthen the IC system and in return minimizes EM issues.

Financial Distress and Earnings Management

FD is a significant event in a company's life cycle marked by an inability to satisfy its financial obligations. FD companies frequently engage in EM tactics to conceal their true financial situation (Graham et al., 2005). EM is the manipulation of financial data to provide a more positive impression of firm's performance (Healy & Wahlen, 1999). In times of hardship, corporations may use aggressive accounting procedures to falsely exaggerate profitability, assuaging stakeholders' fears and preserving access to capital markets (Dechow et al., 1995). However, these measures can be damaging to the company's long-term viability and shareholder value (Beneish & Press, 1993).

The amount of literature that is now available highlights the problems that managers have when faced with financial issues; this has a big influence on their decision-making processes and behavior, especially when it comes to EM (Iatridis and Kadorinis, 2009). When an organization's assets are worth less than its total liabilities after liquidation, FD occurs and could lead to insolvency (Chen et al.,

1995; Fan et al., 2013). Research has indicated a connection between FD and EM (Dechow et al., 1995; Xu, 2018). FD organizations are more prone to use accrual EM, the data indicates. This is due to accrual manipulation's ability to modify accounting estimates and principles without impacting cash flows or business operations, which makes it an affordable solution for financially troubled firms (Cohen et al., 2008; Zang, 2012).

Since companies are not compelled to reveal material information about their activities, REM is less noticeable by the auditors or law enforcement. To make accounting statistics more apparent to auditors and regulators, accrual EM involves altering them for disclosure in financial reports. In contrast to managers of financially sound companies those aim to meet analyst expectations and smooth earnings, managers of financially fragile firms may employ EM to survive (Graham et al., 2005) or escape delisting. Managers may not have the resources to manage REM when a firm faces delisting or survival issues, which may require alterations to corporate plans or operations. REM entails changing the economic operations of businesses. Examples of these changes include introducing slack credit practices, cutting back on R&D expenses, or promoting an irregular amount at the conclusion of the accounting quarter. Zang (2012) claims that because departing from ideal business plans for a distressed organization carries a high marginal cost, managers may consider altering real operations to be costly. With accrual EM, outcomes are manipulated by modifying asset impairment techniques, estimations, and accounting rules without influencing firm cash flows or economic activity. This makes it affordable and easy to execute.

In order to alleviate the effects of FD, organizations are obligated to implement corrective measures or undergo restructuring which include effective internal control (El-Gohary et al. 2023; Sudarsanam and Lai, 2001).

Financial Distress, Earnings Management and Internal Control

The relationship between EM and IC has been widely researched by the researchers

since SOX was implemented in the US. Contradictory outcomes are obtained, though. As, Ashbaugh-Skaife et al. (2008) reports that even if some businesses may have IC shortcomings at first, their EM is less than that of businesses whose IC has not been powerful. According to Doyle et al. (2007), AEM and lax IC are strongly correlated. Because other prior research has found that companies with IC weaknesses are associated with poor inventory management (Feng et al., 2015) and increased insider trading (Skaife et al., 2013), it has been suggested that IC does have a "economically significant effect on firm operations" (Feng et al., 2015). Lenard et al. (2016) argue that, in the interim companies that lack a robust IC framework can manipulate their real operations, leading them to inflate revenues or generate excess cash flows through production increases or reductions in discretionary spending. Furthermore, Järvinen and Myllymäki (2016) find that companies with weak IC modify real operations more than companies with high IC, making it more difficult for outsiders to notice or prohibit. Cohen et al. (2008) show that true EM has increased following SOX, despite their overall finding of a decline in accruals-based earnings management.

According to DeFond et al. (2017), there is solid empirical evidence connecting the BAF to higher AQ in contrast to auditors who are not Big 4 firms. Regarding the interacting effect of IC quality on the link between REM and FD, empirical research has produced contradictory results. According to some research, even in times of financial hardship, companies with better IC are less likely to manipulate REM (Ashbaugh-Skaife et al., 2008). However, other research suggests that in extremely distressed organizations, when management override and manipulation are common, the effectiveness of ICs in reducing REM may be restricted (e.g., Doyle et al., 2007b).

Hypothesis

Based on the above discussion following hypothesis has been developed.
H1= FD firm has a positive impact on REM.
H2= IC moderates the relationship between FD and REM.

Research Methodology
Population and Sample

The study uses quantitative method to study FD, IC of the firms and EM. Study population consists of all the 350 non-financial firms of the Pakistan stock exchange listed firms. While study sample consist of non-financial firms which data is available from the period 2018-2022. The nature of data is panel and data is collected form state bank of Pakistan websites and from annual reports of the respected firms.

Variables of the Study
Earnings Management

In accordance with Cohen et al. (2008) and Roychowdhury (2006), this study uses REM as a dependent variable. REM is calculated by taking three proxies namely; the abnormal cash flows from operational activities (AbCFO), the abnormal discretionary expenditures (AbDISX), and abnormal production costs (AbPROD).

In last all three proxies residuals are added to calculate the value for REM.

A linear function of sales and change in sales can be used to express a normal CFO as follows:

$$CFO_{it}/A_{it-1} = \alpha_0 + \alpha_1 (1/A_{it-1}) + \alpha_2 (Sales_{it}/A_{it-1}) + \alpha_3 (\Delta Sales_{it}/A_{it-1}) + \varepsilon_{it}\dots.(1)$$

The normal rate of production costs is estimated as follows:

$$PROD_{it}/A_{it-1} = \alpha_0 + \alpha_1 (1/A_{it-1}) + \alpha_2 (Sales_{it}/A_{it-1}) + \alpha_3 (\Delta Sales_{it}/-A_{it-1}) + \alpha_4(\Delta Sales_{it-1}/A_{it-1}) + \varepsilon_{it} \dots\dots(2)$$

The normal rate of discretionary spending is calculated by using the following equation:

$$DISX_{it}/A_{it-1} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2 (Sales_{it-1}/A_{it-1}) + \varepsilon_{it} \dots..(3)$$

In last, REM measures is combined into one proxy by adding eq 1,2 and 3. The sum of the three as follows:

$$REM_{it} = AbPROD_{it} + AbDiSX_{it} + AbCFO_{it}$$

Financial Distress

Financial distress is a situation where firms face problems to pay their debts. In this study, FD is an independent variable. It is quantified using the Altman model Z-Score, which was put forth by Altman in 1968 and was based on five financial ratios also used by (Bugeja, 2015, and Zang, 2012). The company's financial situation can be

divided into three groups using the Z-Score methodology, specifically:

(1) Firms with a Z-Score of less than 1.81 are classified as having the possibility of experiencing bankruptcy.

(2) Firms with a Z-Score > 2.67 are classified as healthy (not potentially bankrupt).

(3) and firms in the range of 1.81-2.67 are classified as gray areas (it is unclear if the business is currently experiencing bankruptcy or not). The following is the systematic formulation of Altman's Z-score model (1968):

$$Z = 0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.999X5$$

Hence Z defines Z-score,

X1 is calculate by dividing working capital on total assets,

X2 is determine by dividing retained earnings on total assets,

X3 is equivalent to EBIT divided by total assets,

X4 is equal to market value of equity by total liabilities, while

X5 is equals to sales divided by total assets

Moderating Variable

Internal control is taken as a moderating variable. The audit quality on the company's financial statements serves as the study's proxy for IC. A variable dummy is used to monitor internal control, 1 is assigned to a company when it is audited by a Big-4 audit firm, otherwise 0 is assigned (Khan et al., 2020; Viana Jr et al., 2022).

Control variables

This study uses three control variables namely return on assets (ROA), firm size (FS), and current ratio (CR). FS is computed by taking the natural logarithm of total assets (Zamri et al., 2013). ROA is determined as the ratio of net profit to total assets (Lazzem & Jilani, 2018; Rasheed et al., 2023). While CR is calculated by dividing current assets on current liabilities.

Economic Models

Following mathematical models are used to assess the hypotheses:

$$REM = α0 + β_1FDit + β_2AQit + β_3FSit + β_4ROAit + β_5CRit + ε ….(1)$$

$$REM = α0 + β_1FDit + β_2AQit + β_3FD*AQit + β_4FSit + β5ROAit + β_6CRit + ε …..(2)$$

In the above equations REM is dependent variable, FD is financial distress, AQ is moderating variable, while ROA, FS and CR are control variables.

Results and Discussion
Descriptive Statistics
Table 4.1 Descriptive Statistics

Variables	Mean	Std. Dev.	Min	Max	Skew.	Kurt.
REM	0.403	0.971	-2.701	2.664	-0.496	3.951
FD	-0.069	0.281	-1.062	0.513	-0.865	4.524
AQ	0.705	0.456	0.000	1.000	-0.899	1.809
FS	0.839	0.039	0.721	0.912	-0.447	2.974
ROA	0.035	0.077	-0.210	0.282	0.011	4.918
CR	0.019	0.249	-0.891	0.520	-1.142	5.349

Table 4.1 shows the descriptive statistics of the study. On average REM has a mean of 0.403 and a standard deviation of 0.971, indicating a moderate level of earnings manipulation in the sample, with firms engaging in both positive and negative REM, as suggested by the range (-2.701 to 2.664). The negative skewness (-0.496) and kurtosis (3.951) suggest a left-skewed distribution with moderately heavy tails, implying the presence of some firms with extreme values in EM practices. FD with a mean of -0.069 and a standard deviation of 0.281, reflects a generally stable financial position for firms, although the range (-1.062 to 0.513) highlights the existence of firms experiencing varying degrees of financial difficulties, where a minority of firms experience severe FD.

AQ has a mean of 0.705 and a standard deviation of 0.456, with values ranging from 0 to 1. The negative skewness (-0.899) and low kurtosis (1.809) indicate a distribution where a higher proportion of

firms have relatively strong audit quality, aligning with research showing firms tend to adopt higher-quality audits to mitigate agency issues (DeAngelo, 1981). FS exhibits a relatively small standard deviation (0.039) around a mean of 0.839, indicating that the sample firms are of comparable size. ROA has a mean of 0.035, means on average firms earn 3.5% return on their assets. The standard deviation of 0.077 and the range (-0.21 to 0.282) show that while most firms perform positively. CR, with a mean of 0.019 and a standard deviation of 0.249, shows that on average, firms have low liquidity, as reflected by a minimal ratio of current assets to liabilities. In conclusion, the descriptive statistics suggest significant variability in financial management practices, profitability, and liquidity among the firms.

Correlational Analysis

Table 4.2: Correlational Analysis

Variables	REM	FD	AQ	FS	ROA	CR
REM	1.000					
FD	-0.068	1.000				
AQ	-0.004	0.040	1.000			
FS	-0.188	-0.060	0.139	1.000		
ROA	-0.346	0.333	0.005	0.196	1.000	
CR	-0.238	0.275	0.051	0.137	0.503	1.000

Table 4.2 shows the correlational analysis of the study. The association between REM and FD is weak and negative (-0.068), suggesting that companies that use more REM are generally less financially distressed. However this relationship is statistically insignificant. This is consistent with findings from Roychowdhury (2006), suggesting that companies may adopt REM to reduce indications of financial hardship . REM and AQ also have a negative and insignificant relationship (-0.004) with REM. This is opposite to research indicating that improved audit quality can limit EM activities (Francis et al., 1999). Similarly, REM and FS have a weak negative relationship (-0.188), indicating that REM is less common among larger companies and results are consistent with findings of Becker et al., (1998). However the relation between ROA and REM have a statistically significant negative relationship. It suggests that which shows that more profitable businesses typically engage in less REM. Stronger financial performance is thought to lessen the incentive for manipulating earnings (Dechow et al., 1995). Additionally, there is also a negative correlation between REM and CR (-0.238), suggesting that companies with higher liquidity also likely to engage in less REM.

A company's likelihood of experiencing financial distress appears to be lower for those with superior liquidity and higher profitability, as indicated by the positive correlations between FD and CR (0.275) and ROA (0.333). This is in line with research demonstrating that companies in good financial standing are less likely to experience difficulty (Altman, 1968). Larger, more lucrative, and more liquid companies appear to engage in less REM, whereas AQ does not appear to significantly limit EM.

Besides descriptive statistics and correlation matrix, other diagnostic test for OLS assumptions are also checked. Such as, Variance inflation factor (VIF) is tested to check the problem of multicollinearity. The results of VIF showed that all the variables have a value less than 1.5, which means that there is no problem of multicollinearity in the data. However to check the autocorrelation in the data, the Breusch-Godfrey LM test for autocorrelation is applied and found that there is a prolem of autocorrelation. As the P-vlaue is less than the critical value of 0.05. The test of the Breusch-Pagan is also applied for heteroskedasticity, and found insignificant results (P-value greater than 0.05). which means data is free from heteroskedasticity. The results for diagnostic tests are

appended in appendix 1. As diagnostics tests suggested that data has a problem of autocorrelation and can affect the final results of the research. That why panel data test is used to check which panel data model (Fixed effect(FE) or Random effect(RE)) is more suitable to test the hypothesis.

Model Selection
Table 4.3: Hausman (1978) Specification Test

	Model 1
	Coef.
Chi-square test value	38.07
P-value	0.0000

Table 4.4: Breusch and Pagan Lagrangian Multiplier Test for Random Effects

	Model 1
	Coef.
chibar2(01)	458.19
Prob > chibar2	0.0000

To determine if FE or RE model is better suitable for the data. The Hausman test is employed and results are given in table 4.3. With a p-value of 0.0000 and a chi-square test result of 38.07, the null hypothesis which holds that the RE model is appropriate, is rejected. This clearly indicates that for model that FE model is chosen above the RE model. According to Hausman test, the FE model provides consistent and efficient estimates. Breusch and Pagan Lagrangian Multiplier test for RE is shown in Table 4.4. With a p-value of 0.0000 and a test statistic of 458.19, the null hypothesis that there are no RE is rejected.

This finding implies that RE are present in the data and that a RE model can explain unobserved heterogeneity better than a pooled ordinary least squares (OLS) model.
In conclusion, both tests offer valuable information. The Hausman test indicates that the FE model is the better option because of the correlation between the individual effects and the explanatory factors, even though the Breusch and Pagan test supports the existence of RE. Therefore, based on the Hausman test results, a FE model is chosen to ensure consistent and unbiased estimation

Fixed Effect Model for both Individual and Moderating Effect
Table 4.5 Fixed Effect Model for both Individual and Moderating Effect

Variables	Without Moderating Effect REM	With Moderating Effect REM
FD	-0.523*	-0.434
	(-2.51)	(-1.31)
AQ	1.514**	1.393*
	(2.73)	(2.13)
FDAQ		-0.132
		(-0.35)
FS	10.75***	10.69***
	(3.56)	(3.53)
ROA	-2.994***	-3.003***
	(-6.40)	(-6.41)
CR	-0.0393	-0.0294
	(-0.17)	(-0.31)
Constant	-9.726***	-9.481***
	(-3.79)	(-3.62)
R2	0.0977	0.0984
Adj R2	-0.0878	-0.0889

Table 4.5 explains the regression analysis of the study with and without a moderating impact, FE model analysis shows the relationship between REM, AQ, and FD. FD has a statistically significant negative relationship with REM (β = -0.523, t = -2.51) in the absence of the moderating effect, indicating a less REM by FD enterprises. These results are consistent with previous literature, which suggests that FD firms may face strict scrutiny, reducing opportunities for manipulation (DeFond & Jiambalvo, 1994). However, this relationship becomes statistically insignificant (β = -0.434, t = -1.31) when the moderating effect is taken into account, suggesting that in presence of AQ reduces the impact of FD on REM. FD organizations are more prone to use accrual EM, the data indicates. This is due to accrual manipulation's ability to modify accounting estimates and principles without impacting cash flows or business operations, which makes it an affordable solution for financially troubled firms (Cohen et al., 2008; Zang, 2012).

In both models, AQ has a statistically significant positive effect on REM. However, the effect is significantly stronger when moderation is absent (β = 1.514, t = 2.73), and it is still significant when moderation is included (β = 1.393, t = 2.13). This shows that companies with good AQ may paradoxically engage in more REM. This may be because REM is more difficult for auditors to uncover than AEM (Cohen et al., 2008). Also, Carangelo & Ferrillo (2016) & Economist (2026) reports that when it comes to the decision between choosing AEM and REM, managers have been gradually moving toward REM since there is less room for manipulating AEM due to check and balance by policy makers and regulators like the Securities and Exchange Commission and auditors. Moreover, REM takes place throughout the whole fiscal year, it is favored since it is less susceptible to inspection by auditors and regulators (Ashbaugh-Skaife et al. (2008); Li et al., 2020).

The moderating variable (FDAQ) exhibits a negligible negative coefficient (β = -0.132, t = -0.35), suggesting that there is no significant effect of the moderation analysis of AQ and FD on REM. This implies that the interaction between AQ and FD is not a significant factor in influencing REM practices.

In both models FS (β = 10.75, t = 3.56, without moderation; β = 10.69, t = 3.53,), has a continuously positive and highly significant impact on REM, suggesting that larger firms are more likely to participate in REM. This result is in line with earlier research suggesting larger companies would have greater resources and motivations to manipulate earnings (Kim et al., 2003). Additionally, the results indicate that there is a significant negative relationship between ROA and REM in both models. This suggests that firms that are more profitable are less likely to engage in REM. This is consistent with the theory that companies that perform better financially are less inclined to distort earnings (Tufail et al., 2020; Kothari et al., 2005). Also, there is statistically insignificant relationship between the CR and REM, suggesting that liquidity is not a major factor influencing REM practices in this sample. However, the low R^2 values imply that the model's capacity for explanation is constrained. These results add to the continuing discussion in the literature about how well CG and external auditing work to prevent earnings manipulation.

Conclusion

This study examined the moderating effect of IC in relation to the impact of FD on REM in Pakistan's listed non-financial enterprises. The study contributes to existing literature by focusing on REM in the context of FD. As REM is less studied as compared to AEM and by addressing the lack of research in emerging economies like Pakistan. The results show a strong negative correlation between FD and REM, indicating that FD firms are less likely to participate in REM. This finding are contrast to some previous research that claims struggling companies frequently increase their earnings in order to hide their financial problems.

Moreover, REM and AQ have a strong positive correlation. Remarkably, companies with better AQ tend to employ REM more frequently. This could be because REM is harder for auditors to find than AEM (Carangelo & Ferrillo, 2016).

This result is consistent with earlier research that suggests companies may still influence earnings through legitimate business operations even in the face of thorough audits (Ashbaugh-Skaife et al., 2008).

The study discovered that, when taking into account its moderating role, IC does not substantially change the link between FD and REM. This shows that although IC are generally necessary to maintain financial transparency, there may be a limit to how well they work to prevent REM in times of financial hardship.

Recommendations of the Study

In order to identify and stop EM techniques, businesses should give top priority to strengthen their IC systems. This entails setting up strong risk management initiatives, internal audit divisions, and governance frameworks. Even though the study's moderating effect of IC was not statistically significant, its significance for overall CG cannot be understated. Also, more attention should be give to REM oversight by regulators like the Securities and Exchange Commission of Pakistan (SECP). More regulatory attention should be given to REM since it is more difficult to identify than AEM, particularly in financially troubled organizations. Specific standards could be set to ensure that enterprises do not participate in tactics that mislead their true operations to manipulate earnings.

Moreover, audit companies ought to concentrate on developing techniques for REM detection. The study shows that companies with high AQ can still use actual operations to affect profitability. Traditional approaches may not be sufficient to uncover such behaviors, thus audit firms must employ new strategies and technologies.

In conclusion, even though FD does not substantially influence REM practices in Pakistani non-financial companies, regulatory oversight, audit requirements, and internal control enhancements should be prioritized in order to guarantee financial openness and safeguard stakeholder interests.

Limitations of the Study

It is important to note limitations in this research, despite its intention to offer significant insights into the interaction among FD, EM and IC in Pakistani listed non-financial firms.

1. Although they might not be fully taken into account in the analysis, external variables like market conditions, regulatory changes, and economic volatility have an impact on the results.

2. Because the study's focus is restricted to non-financial companies listed on Pakistani stock exchanges, conclusions drawn from it might not apply to other sectors of the economy or nations.

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