

A Comprehensive Study Employing Panel Data to Analyze Managerial Overconfidence and Accounting Misstatements in Pakistan

Muhammad Altaf¹, Ali Haider², Sehar Asif³ and Madiha Naseem⁴

<https://doi.org/10.62345/jads.2024.13.1.62>

Abstract

The core objective of this research is to establish a relationship between managerial overconfidence and accounting misstatement. However, the research demonstrates that managerial overconfidence significantly affects accounting misstatement. Overconfident managers may employ aggressive accounting approaches to project profitability, resulting in irrational projections and skewed financing and investment decisions. If the firm's decisions are not upheld, accounting misrepresentation may eventually be taken into consideration to avoid being accused of incompetence. A panel data regression model will be used to make an empirical guess about the hypothesis. This study employs Panel data for regression analysis since the board provides detailed conclusions on cross-sectional and time-series data. Data collected for this study based upon 37 companies listed on the Pakistan Stock Exchange are included in the sample from the Pakistan economy from 2013 to 2020. The study also provides direction for future research by including the function of corporate governance in controlling accounting misstatements and managerial overconfidence.

Keywords: Managerial Overconfidence; Accounting Misstatement; Panel Data; Earning Management; Feasible Generalized Least Square.

Introduction

The effects of accounting misrepresentation have been the subject of numerous financial and accounting studies, especially regarding executive overconfidence. According to research, overconfident managers tend to overestimate projected returns or project success rates, resulting in financial reporting errors (Shekarkhah et al., 2019; Rathnayake et al., 2021). This pattern emphasizes how crucial it is to comprehend how management arrogance affects the accuracy of financial reporting. Overconfident managers could fail to see the resources that are accessible, which could result in long-term miscalculations and reporting errors (Presley & Abbott, 2013). The information value of financial reports is thereby reduced by these inaccuracies, especially for stakeholders with limited access to various information sources. By objectively assessing the effect of managerial overconfidence on financial reporting misstatement, this study seeks to solve the problem and shed light on the behavioural dynamics that underlie these phenomena in organizational settings.

Accounting misstatement is defined by the International Federation of Accountants (IFAC) (2009) as differences between items reported in financial statements and those required by the relevant financial reporting framework. It was formerly defined as manipulating financial reporting and deviating from recognized accounting norms (Dechow et al., 2011). A deviation

¹Lahore School of Accountancy & Finance, The University of Lahore. Email: mbsm.altaf@gmail.com

²Lahore School of Accountancy & Finance, The University of Lahore. Email: alihaidar138138@gmail.com

³Lahore School of Accountancy & Finance, The University of Lahore. Email: asifsehar750@gmail.com

⁴Lahore School of Accountancy & Finance, The University of Lahore. Email: madihaatif05@gmail.com



from the required standards in the quantity, categorization, presentation, or disclosure of financial items is the official definition given by IFAC (IFAC, 2009). Financial misstatements, frequently fake, skew investors' perceptions and decision-making by distorting a company's financial situation (Dechow et al., 2011).

Accounting misstatements result from any departure from accurate financial representation, regardless of the cause (Hennes et al., 2008; Hussain et al., 2016). ISA 450, which distinguishes between material and immaterial misstatements, emphasizes the critical importance of such misstatements. Although immaterial misstatements are present but do not significantly affect decision-making, they do not require special attention. In contrast, material misstatements impact stakeholders' decisions and must be corrected to address accounting concerns (Hussain et al., 2016).

From 1997 to 2006, the U.S. General Accounting Office (GAO) recorded 2,705 occurrences of restatements; from 2005 to 2011, the number of restatements increased to 6,436 (GAO, 2013). These variations in accounting fraud cast doubt on the accuracy of financial reporting and harm the accounting industry overall, particularly auditing. Regardless of whether the restatements are the result of fraudulent activity, the Securities Exchange Commission (SEC) views misstatements as a critical indicator of improper accounting practices (Romos et al., 2019), further undermining stakeholder and investor confidence in the accuracy of financial reporting (Chen & Gavius, 2015).

Problem Statement

Accounting misstatements resulting from financial report fraud impact tax compliance and shareholder confidence (Eshagniya & Salehi, 2017). Dual bookkeeping procedures, managerial arrogance, and financial hardship cause errors like these.

Due to its many advantages, such as comparative qualities, resource allocation, better investments, diversified portfolios, and enhanced financial statements, recent studies highlight the significance of applying International Financial Reporting Standards (IFRS) (Rashid et al., 2022). Nonetheless, little is known about the reasons behind accounting fraud, especially in emerging nations like Pakistan. Due to biased variable selection, certain studies—conducted in developing Asian countries like Pakistan—have produced equivocal results (Abdullah et al., 2010; Hasnan et al., 2020; Wahab et al., 2014). Furthermore, findings may differ among cultures and nations due to differences in business environments, financial reporting standards, and legal frameworks, especially in Pakistan. Thus, by developing hypotheses and conducting empirical research, this study intends to address research objectives by examining the aspects of managerial overconfidence and accounting deception.

Research Gap

Previous research has mostly concentrated on accounting misstatements resulting from management discretion (Dechow et al., 2011; Gleason et al., 2008; Hussain et al., 2016; Kinney, 2000), suggesting that management may manipulate financial records for their ends rather than for the benefit of stakeholders. Alternative explanations of accounting misstatements, such as tax evasion, policy changes, conflicting interests, and revenue recognition procedures, have been proposed by recent research (Aubert et al., 2019; Peterson et al., 2020; Tanyi et al., 2020).

Additionally, a correlation between managerial overconfidence and the incidence of substantial accounting misstatements was proposed by (Saari et al., 2020). They did not discover a statistically significant correlation between these characteristics, nevertheless. Future studies should look at the debt-to-equity ratio as a proxy for managerial overconfidence to better investigate the impact of managerial overconfidence in accounting misstatements (Shekarkhah et al., 2019). This method presents a viable way to examine how management arrogance affects

the accuracy of financial reporting and the likelihood of misstatements. By using alternate proxies and considering other variables, such as debt levels, researchers can better understand the intricate dynamics that underlie accounting misstatements.

Using liability-based proxies and overinvestment, this ground-breaking study examines the connection between accounting errors and managerial overconfidence, specifically emphasising Pakistan. Filling a vacuum in the literature, this study provides insights into the influence of managerial overconfidence on misstatement occurrence by looking at the debt-to-equity ratio, a crucial indicator of how much debt businesses use for growth (Shekarkhah et al., 2019).

Study Significance

Studying how executive overconfidence affects financial reporting misrepresentation has great academic and practical value. Our understanding of the behavioural elements influencing financial reporting decisions is improved by the study's examination of the connection between accounting misstatement and managerial overconfidence (Shekarkhah et al., 2019). This understanding is essential to improving corporate governance practices and reducing the dangers of biased decision-making.

Moreover, the study sheds light on the real-world consequences of accounting fraud, which can compromise the accuracy and legitimacy of financial data given to stakeholders and investors (Rathnayake et al., 2021). The study provides insights that can guide regulatory initiatives to promote financial transparency and accountability by clarifying the possible effects of managerial overconfidence on financial reporting accuracy (GAO, 2013).

This research is crucial for accounting practitioners because it emphasizes the need for accurate financial accounts. It also affects stakeholders that depend on trustworthy financial data, like shareholders and legislators (Chen & Gaviious, 2015). The study contributes to the field of accounting and finance by examining the impact of managerial overconfidence on financial reporting misstatements and fostering confidence in the accuracy of financial reporting.

Research Objective

1. To find out the impact of managerial overconfidence on financial reporting misstatement.

Research Question

1. Does managerial overconfidence influence the firm's financial reporting misstatement?

Research Hypothesis

H1: There is a significant impact of managerial overconfidence on the financial misstatement of the firm.

Literature Review

Managerial Overconfidence and Accounting Misstatement

Accounting academics have studied managerial overconfidence's impact on financial reporting in great detail over the past few decades. Managerial overconfidence has been shown to cause financial misreporting (Schrand & Zechman, 2012). Similarly, according to Ahmed and Duellman's (2013) research, organisational uncertainty negatively impacts accounting conservatism, independent of external scrutiny. Studies reveal that managers with excessive confidence frequently underestimate future profits, the consequences of their decisions, and the possibility of unfavourable outcomes (Heaton, 2002; Malmendier & Tate, 2005). As these data highlight, understanding the behavioural biases that can affect financial reporting decisions is crucial.

Many studies in accounting and finance over the last ten years have shown that managerial overconfidence has a major negative impact on financial reporting (Hillary & Hsu, 2011; Schrand & Zechman, 2012; Ahmed & Duellman, 2013; Presley & Abbott, 2013; Chen & Gaviious, 2015). The information's usefulness may be reduced by this bias, especially for users outside the organization who depend on it. According to behavioural studies, overconfident managers underutilize information sources and exaggerate their performance (Chen & Gaviious, 2015; Presley & Abbott, 2013).

According to Presley and Abbott (2013), managerial projections that are overly optimistic frequently diverge from actual results, which may cause persistent errors in subsequent financial reports. In the Pakistan Stock Exchange, overconfidence and accounting fraud are related. This paper attempts to explore this relationship experimentally.

Managerial Overconfidence and Accounting Misstatement in Pakistan

The regulatory body in charge of monitoring and prosecuting businesses for accounting fraud is the Securities and Exchange Commission of Pakistan (SECP). However, even with its supervisory role, the profusion of financial schemes in Pakistan and lax regulatory enforcement make it difficult for SECP to keep thorough records of accounting misstatements. The court system's corruption and insufficient restrictions threaten the accuracy of financial reporting, which is why financial misstatements are so common in Pakistan.

While the SECP requires financial statement restatements and imposes fines on corporations found guilty of fraudulent misstatements, these measures frequently fall short of the financial effect of the false claims, indicating comparatively lax enforcement (Verschoor, 2014). As a result, investors and other stakeholders are losing faith in the integrity and accuracy of the financial information that businesses offer, and the credibility of financial reports in Pakistan is fast declining.

Despite these obstacles, research on accounting fraud in developing economies such as Pakistan is scarce. Research carried out in affluent nations has illuminated the fundamental reasons behind accounting fraud; nevertheless, the implications of these discoveries for low-income nations such as Pakistan may be limited (Lau & Ooi, 2016). By investigating the opportunities and motives that lead to serious accounting malpractice in Pakistan, this study seeks to close this research gap.

In particular, managerial overconfidence is examined as the cause of material accounting misrepresentation since it is thought to impair judgment and raise the possibility of material accounting misstatements by businesses. The study intends to provide ways to reduce the likelihood of significant accounting misstatements and rebuild confidence in financial reporting by analyzing the underlying causes and potential triggers of accounting fraud in Pakistan.

Research Methodology

This is a descriptive and empirical study as it examines the causal relationship between the variables. The research was conducted on the companies listed on the Pakistan Stock Exchange from 2013 to 2020. The study sample consisted of 37 companies, and the statistical analyses were based on 375 firm years of observations. The research data were extracted using websites related to the Pakistan Stock Exchange. The unbalanced panel and the short panel were used in this study since the number of cross-sectional companies (subject) N is more than the period.

$$FR - Misstatement = \alpha + \beta_1 X_{M-OVER-Conf} + \beta_2 X_{Profitability} + \beta_3 X_{F-Size} + \beta_4 X_{F-Growth} + \epsilon_{it} \dots \dots \dots (1)$$

Whereas model-I: subscript FR-misstatement represents a reporting misstatement measured through earning management; M-over-conf represents managerial overconfidence measured through debt-to-equity ratio; is representing profitability; is representing the firm size and; is representing firm's growth.

The regression analysis determines the indepeutilizedriables' coefficients and evaluates their influence on accounting miss. Based on the Hausman test, the right regression model is chosen to guarantee the analysis's robustness and enable the discovery of important correlations between the variables. Variance inflation factor (VIF) testing and other post-estimation tests are performed to address possible problems such as multicollinearity. Furthermore, applying robust regression methods, like feasible generalised least squares (FGLS), reduces the effects of autocorrelation and heteroscedasticity. These two problems are frequently encountered when analysing panel data.

Overall, analyzingach used in this study is sound, firmly based on current research, and methodically carried out to offer reliable insights into the connection between accounting misstatement and managerial overconfidence. The validity and trustworthiness of the results are guaranteed by meticulous testing and procedure selection, which advances our understanding of accounting and finance.

Table 1: Operationalization of variables

Variables	Types	Measurement
Accounting Misstatement	Dependent variable	modified Jones Model (1991). $DACit = TACit - [\alpha(1 / TAit - 1) + \beta 1 (\Delta REVit / TAit - 1) + \beta 2 (PPEit / TAit - 1)] + \varepsilon it ---(I)$
Managerial overconfidence	Independent variable	Debt to Equity Ratio= Total Debt/ Total Equity
Firm Size	Control variable	It is measured by the natural logarithm of total assets (Usman et., al 2020).
Profitability	Control variable	It is measured by the book value of earnings before tax and interest divided by the total asset
Growth	Control variable	The Market-to-book equity ratio; Share Price / Net Book Value per Share Where, Net Book Value = Total Assets – Total Liabilities

Table 2: Sample size

Sr. no.	Company name	Total No. shares outstanding
1	AL-Ghazi Tractors Ltd.	579,600,000
2	Atlas Honda Limited	579,600,000
3	Ghandara Nissan Limited	579,600,000
4	Ghandhara Ind. Ltd	579,600,000
5	Ghani Automobile Industries Limited	579,600,000
6	HinoPak Motors Ltd.	579,600,000
7	Honda Atlas Cars (Pakistan) Ltd.	579,600,000
8	Indus Motor Company Limited	579,600,000
9	Millat Tractors Ltd.	142,800,000
10	Pak Suzuki Motor Co. Ltd.	142,800,000
11	SazgarEngineering Works Ltd.	142,800,000
12	Agriautos Industries Limited.	142,800,000
13	Atlas Battery Limited	142,800,000

14	Baluchistan Wheels	142,800,000
15	Exide Pakistan Ltd.	142,800,000
16	General Tyre and Rubber Co.	57,000,000
17	Thal Limited.(Thal Jute Mills Limited)	57,000,000
18	PAEL	57,000,000
19	PCAL	57,000,000
20	SIEM	57,000,000
21	SING	57,000,000
22	ACPL	57,000,000
23	BWCL	57,000,000
24	CHCC	213044
25	FLYNG	213044
26	ATRL	213044
27	BYCO	213044
28	NRL	213044
29	PRL	213044
30	GLPL	213044
31	ISIL	213044
32	NATF	200000000
33	MFFL	200000000
34	AABS	500000000
35	ALNRS	500000000
36	BAFS	500000000
37	JDWS	850000000

Table 3: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Acc-Misstatement	296	47.491	34.013	125	1728
Moveconf	296	0.975	0.232	.31	1.74
Fsize	296	17.155	4.241	8	25
Profitability	296	1.014	.201	0	2
Growth	296	1.219	.314	.3	1.91

Table 4: Pair wise correlations

Variables	(1)	(2)	(3)	(4)	(5)
(1) Acc-Misstatement	1.000				
(2) moveconf	-0.242*	-0.264*	1.000		
(3) fsize	-0.611*	-0.583*	0.308*	1.000	
(4) profitability	0.522*	0.475*	-0.058	-0.280*	1.000
(5) growth	0.274*	0.332*	0.166*	0.103	-0.104

Accounting misstatement or earning management has a negative but significant relationship with managerial overconfidence. As managerial overconfidence increases, the earning management or accounting misstatement will decrease. The managerial overconfidence or use of a large proportion of debt financing, despite equity financing, puts management on top, and management must be more responsible for its decision-making. Also, when management has more debt financing, it gives asymmetric market information about its liquidity position. In

short, debt financing assures that firms have enough resources to pay off debt obligations (Mitra et al., 2019; Presley & Abbott, 2013; Shekarkhah et al., 2019).

Furthermore, accounting misstatement or earning management has a negative but significant relationship with firm size. This means that companies make earnings management or accounting misstatements whenever firm size increases to improve the presentation of their financial assets. Firm size represents the firm's internal control system; thus, companies usually tailor their reporting numbers to present the firm size. However, accounting misstatement or earning management has a positive but significant relationship with a firm's profitability and growth. Companies are burdened by their stakeholders regarding the firm's performance. Companies usually earn a management or accounting misstatement to achieve high-level performance indicators. The other growth indicators were also improvised by making cookie jar accounting to attract shareholders and stakeholders (Albring et al., 2013; Collins et al., 2017). Restatements can damage contracts between a company, its suppliers, and customers (Karpoff et al., 2008). The restatement has negative reputational repercussions and decreases business cash flows. Reducing cash flows can affect firm growth, especially internally financed development. With these arguments, a firm's growth and firm profitability are affected in two ways. Dufour et al. (2018) suggested that restatements raise information asymmetry between borrowers and lenders, increasing monitoring costs and debt costs. It ultimately impacts the firm growth and profitability.

Regression Analysis

The model selected is based on the Hausmann test, used as a foundation (Sheytanova, 2015). In this test, the null hypothesis is that the FEM and ECM estimators are not very different from each other. A chi-square distribution decides whether to reject or accept the null hypothesis. If the null hypothesis is not true, the ECM does not work because it is likely that one or more repressors cause random effects.

Test 5: Hausman (1978) specification test	
	Coef.
Chi-square test value	-9.11
P-value	1

As a result, we can conclude that FEM is preferable to ECM. The chi-square statistic, the chi-square degree of freedom, and the probability value are the three components of the inferential Hausmann test (Torres-Reyna, 2007).

Table 6: Regression results

Acc-Misstatement	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Moveconf	18.505	28.222	0.66	.512	-36.81	73.82	
Fsize	-4.405	2.212	-1.99	.046	-8.74	-.07	**
Profitability	-27.994	23.437	-1.19	.232	-73.93	17.941	
Growth	-13.286	23.866	-0.56	.578	-60.063	33.491	
Constant	-999.533	66.888	-14.94	0	-1130.631	-868.434	***
Mean dependent var		474.912	SD dependent var		340.013		
Overall r-squared		0.745	Number of obs		296		
Chi-square		3296.342	Prob > chi2		0.000		
R-squared within		0.896	R-squared between		0.60		

*** $p < .01$, ** $p < .05$, * $p < .1$

However, after running this FE model, it has found some post-estimation diseases in the model, and to achieve model robustness, following test has been made; Multicollinearity occurs when one independent variable in a multiple regression equation is substantially associated with another independent variable. Multicollinearity undermines an independent variable's statistical significance. It has been tested through the VIF test as follows.

Table 7: Variance inflation factor

	VIF	1/VIF
Fsize	1.825	.548
Growth	1.613	.62
Profitability	1.505	.665
Moveconf	1.214	.824
Mean VIF	1.801	.

The mean VIF value is less than ten and assumes no multicollinearity is found in the model (Rockwell, 1975). In this analysis, there has been a heteroscedastic and auto/serial correlation issue because each company has the same type of indicators to measure the constructs. To address these issues, the STATA program has some commands; xtglm fits linear models for panel data with the help of feasible generalized least squares. This command enables an estimate when cross-sectional correlation, heteroskedasticity, and AR (1) autocorrelation exist between panels as well as within them (Davidson & MacKinnon, 1993; Greene, 2003; Maddala & Lahiri, 2006); all provide information about GLS (1985). Furthermore, it provides features similar to those of xtglm but disallows cross-sectional correlation, especially if you have several panels per period. However, as long as the same correlations hold true across all panels, xtgee command permits a deeper description of the correlation inside the panels. Xtglm offers two special features. Panels (correlated) can be used to model cross-sectional correlation. The AR (1) correlation coefficient may be distinct among panels. In contrast to simple FE model or REM, it accepts models without heteroskedasticity and no cross-sectional correlation. The assumption of equal variances is relaxed by xtgee with the vce (robust) option, at least in terms of the standard error calculation.

Thus, in the light of the above discussion, following model has been running as considering the final model:

Table 8: Cross-sectional time-series FGLS regression

Acc-Misstatement	Coef.	St. error	T-value	P-value	95 % conf	Interval	Sig
Moveconf	40.166	11.49	3.50	0	17.645	62.687	***
Fsize	-4.209	.845	-4.98	0	-5.865	-2.553	***
Profitability	77.58	37.836	2.05	.04	3.424	151.737	**
Growth	-41.456	11.712	-3.54	0	-64.411	-18.502	***
Constant	-1035.19	42.919	-24.12	0	-1119.309	-951.07	***
Mean dependent var	474.912	SD dep. var	340.013				
Number of obs	296	Chi-square	7797.193				
Overall r-squared	0.745	Prob > chi2	0.000				

The model's findings suggest that the model as a whole is noteworthy. 74% of R² within entities is captured. It explains how variations in the independent factors affect the dependent variable. This analysis unequivocally demonstrates that operating income and cash flows as independent variables account for both firm success and failure. The F-statistic, which has a chi-square

probability of less than 0.000 and indicates the model's relevance up to 99 percent, is also used to fit the overall model.

The model coefficients indicate different pictures with their value and sign. For instance, managerial overconfidence has a significant but positive impact on accounting misstatement or earning management; one unit change in managerial overconfidence will increase the accounting misstatement of earning management by 40 percent (Mitra et al., 2019; Presley & Abbott, 2013; Shekarkhah et al., 2019).

Alternatively, firm size has a negative but significant impact on accounting misstatement or earning management; if one-unit changes in firm size, it will lead to a decrease in the accounting misstatement of making management by 4.2 percent (Aier, et al., 2005; Amel-Zadeh & Zhang, 2015; Hasnan et al., 2020). In the same line, firm's growth has a negative but significant impact on accounting misstatement or earning management; if one unit changes in firm size, it will lead to a decrease in the accounting misstatement of earning management by 41 percent (Albring et al., 2013; Eshagniya & Salehi, 2017). However, profitability has a significant but positive impact on accounting misstatement or earning management; if one unit changes in a firm's profitability, it will lead to an increase in the accounting misstatement of earning management by 77 percent (Hasnan et al., 2020; Indracahya & Faisol, 2017; Rahmah & Iskandar, 2021).

Findings

Descriptive statistics and correlation analysis are quite helpful regarding the properties of the variables under investigation and their interrelationships. Significant trends emerge from these analyses, including the negative but substantial correlation between accounting misrepresentation and managerial arrogance. These results are consistent with past research's empirical findings and theoretical predictions (Mitra et al., 2019; Presley & Abbott, 2013; Shekarkhah et al., 2019). The central tendencies and dispersion of the data are explained using these statistics as a basis.

Overconfidence among managers and accounting misstatements has a negative but significant association, indicating an intriguing relationship. From the conclusion, accounting misstatement tends to decline with managerial overconfidence. Overconfident managers may have been more circumspect in their financial reporting because they felt pressured to uphold their good name and image. Furthermore, the negative association between firm size and accounting misstatement highlights the importance of internal control systems in reducing the risk of misstatement. There is less chance of misstatements in larger companies since they may have more effective control procedures.

On the other hand, it is noteworthy that there is a positive but considerable association between accounting misstatements and corporate growth and profitability. This implies that companies under pressure to reach performance goals might manipulate earnings or falsify financial statements to project a positive financial image. Such actions might be motivated by a desire to draw in investors or keep the trust of stakeholders. As was mentioned in the debate, it is important to be aware of the possible drawbacks of these acts, including harm to one's reputation and a decline in cash flows.

The analysis's regression model (I) uses several independent factors to predict accounting misstatements, including profitability, business size, growth, and managerial overconfidence as determined by the debt-to-equity ratio. The available literature (Abdullah et al., 2010; Azhari et al., 2020) strongly supports this concept by indicating that these characteristics are important drivers of accounting falsification. The correlation analysis's coefficients offer numerical proof of the connections found in the data. For example, the positive coefficient for managerial overconfidence indicates a direct correlation between rising managerial overconfidence and rising accounting misstatement. This is in line with previous research on the topic.

Furthermore, larger companies and those with faster growth rates also have lower rates of accounting falsification, according to the negative coefficients for firm size and growth. This emphasises internal controls and governance frameworks in larger organizations. On the other hand, the positive profitability coefficient implies that more profitable businesses would be more likely to conceal their financial records to preserve or improve their results.

Regression analysis is also used to evaluate the effect of the independent variables on accounting misstatement and estimate their coefficients. Based on the Hausman test, the right regression model is chosen to guarantee the analysis's robustness and enable the discovery of important correlations between the variables. The regression analysis's findings offer quantitative proof of the proposed associations and insightful interpretations of the coefficients. Post-estimation measures, such as the variance inflation factor (VIF) test., are performed to address possible problems like multicollinearity. Regression estimates are reliable if there is no multicollinearity, as shown by VIF values less than 10. Furthermore, heteroscedasticity and autocorrelation problems frequently encountered in panel data analysis are lessened with robust regression techniques like feasible generalized least squares (FGLS).

Overall, the results highlight how intricately managerial behaviour, firm attributes, and financial reporting procedures interact. The study provides useful insights for practitioners and policymakers looking to improve corporate governance and reduce the risks associated with biased financial reporting by exploring these links. Furthermore, the author's analytical insights and firsthand observations enhance the conversation by adding background and implications for further study and practice.

Conclusion

The study's goal is to objectively evaluate the relationship between managerial overconfidence and accounting misstatement, critical to comprehending financial reporting integrity. Restatements are required by Generally Accepted Accounting Principles (GAAP) when accounting errors are considered serious.

Based on aggressive accounting practices that result in skewed decisions and distorted financial projections, the study verifies that managerial overconfidence has a major impact on accounting misstatement. Managers' use of accounting fraud to protect their reputation—especially in the face of failure—escalates this behaviour. Overconfidence encourages financially reported information to be optimistically skewed, with profit management to achieve inflated profit targets masking actual financial health. Financial reporting discretionary areas such as post-retirement benefits, depreciation, expense recognition, revenue recognition, and inventory value are prime targets for manipulations of this kind.

For financial reporting to remain trustworthy and honest, it is imperative from a societal and policy standpoint to address the effects of managerial overconfidence on accounting misstatement. Financial estimates are distorted, and investor trust is weakened when overconfident managers use aggressive accounting techniques to project profitability. Aside from potentially hurting stakeholders' capacity to make wise judgments and causing financial losses, this behaviour erodes the credibility of financial data. To guarantee compliance with ethical norms and accounting standards, regulatory organizations must thus put strict controls in place to oversee and control financial reporting procedures.

Furthermore, minimizing the dangers connected to managerial overconfidence requires strengthening accountability and openness in corporate governance. Policymakers can preserve the credibility of financial markets and protect investor interests by cultivating a culture of integrity and accountability. Furthermore, educating business boards and executives on the repercussions of managerial overconfidence can promote ethical financial reporting practices and responsible decision-making. Maintaining the integrity of financial markets, safeguarding

investors, and advancing financial stability depends on tackling the societal and policy ramifications of managerial overconfidence.

Recommendations

The following are the recommendations

Table 9: Research objectives/Hypothesis summary

Sr. No.	Hypothesis	Status
1	H_{A1} = There is a significant impact of managerial overconfidence on the financial misstatement of the firm	Accepted

- Security Exchange Commission of Pakistan and Pakistan Stock Exchange must focus on the quality of financial reporting and must develop some standard of quality of reporting; especially in the case of managerial overconfidence of the company.
- The study's findings demonstrated that, for low-leveraged firms, accounting misstatement rises with corporate leverage. Therefore, CFOs have to keep in mind that managers can implement improved financial reporting when there is less debt in the capital structure.

References

- Abdullah, S. N., Yusof, N. Z. M., & Nor, M. N. M. (2010). Accounting misstatements and corporate governance among Malaysian listed companies. *Managerial Auditing Journal*.
- Ahmed, A. S., & Duellman, S. (2013). Managerial overconfidence and accounting conservatism. *Journal of accounting research*, 51(1), 1-30.
- Aier, J. K., Comprix, J., Gunlock, M. T., & Lee, D. (2005). The financial expertise of CFOs and accounting restatements. *Accounting horizons*, 19(3), 123-135.
- Albring, S. M., Huang, S. X., Pereira, R., & Xu, X. (2013). The effects of accounting restatements on firm growth. *Journal of Accounting and Public Policy*, 32(5), 357-376.
- Amel-Zadeh, A., & Zhang, Y. (2015). The economic consequences of accounting misstatements: Evidence from the market for corporate control. *The Accounting Review*, 90(1), 1-29.
- Aubert, F., Wang, J. J., & Grudnitski, G. (2019). Convergence consensus analyst earnings estimates and option pricing in modeling material accounting misstatements. *Review of Accounting and Finance*.
- Azhari, N. A. N., Hasnan, S., & Sanusi, Z. M. (2020). The relationships between managerial overconfidence, audit committee, CEO duality and audit quality and accounting misstatements. *International Journal of Financial Research*, 11(3), 18-30.
- Chen, E., & Gavius, I. (2015). Does CSR have different value implications for different shareholders?. *Finance Research Letters*, 14, 29-35.
- Collins, D. W., Pungaliya, R. S., & Vihj, A. M. (2017). The effects of Firms growth and model specification choices on tests of earnings management in quarterly settings. *The Accounting Review*, 92(2), 69-100.
- Davidson, R., & MacKinnon, J. G. (1993). *Estimation and inference in econometrics* (Vol. 63): Oxford New York.
- Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting material accounting misstatements. *Contemporary accounting research*, 28(1), 17-82.
- Dufour, D., Luu, P., & Teller, P. (2018). The influence of cash flow on the speed of adjustment to the optimal capital structure. *Research in International Business and Finance*, 45, 62-71.
- Eshagniya, A., & Salehi, M. (2017). The impact of accounting misstatement on auditor changes: Iranian evidence. *Asia Pacific Journal of Innovation and Entrepreneurship*.

- Gleason, C. A., Jenkins, N. T., & Johnson, W. B. (2008). The contagion effects of accounting restatements. *The Accounting Review*, 83(1), 83-110.
- Greene, W. H. (2003). *Econometric analysis*: Pearson Education India.
- Hasnan, S., Razali, M. H. M., & Hussain, A. R. M. (2020). The effect of corporate governance and Firms-specific characteristics on the incidence of accounting misstatement. *Journal of Financial Crime*.
- Heaton, J. B. (2002). Managerial optimism and corporate finance. *Financial management tampa*, 31(2), 33-46.
- Hennes, K. M., Leone, A. J., & Miller, B. P. (2008). The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. *The Accounting Review*, 83(6), 1487-1519.
- Hilary, G., & Hsu, C. (2011). Endogenous overconfidence in managerial forecasts. *Journal of Accounting and Economics*, 51(3), 300-313.
- Hussain, A., Hasnan, S., Sanusi, Z., & Mahenthiran, S. (2016). Accounting misstatements and monitoring mechanisms: A literature review. *Asia Pacific Journal of Accounting and Finance*, 3(1), 32-44.
- Indracahya, E., & Faisol, D. A. (2017). The Effect of Good Corporate Governance Elements, Leverage, Firms Age, Company Size and Profitability On Earning Management. *Profita*, 10(2), 203-227.
- International federation of accountants, (n/a). handbook of international standards of auditing and quality control 2009 edition. <https://www.irba.co.za/upload/2009-Handbook-of-International%20Standards.pdf>
- Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The cost to Firms of cooking the books. *Journal of financial and quantitative analysis*, 43(3), 581-611.
- Kinney, W. (2000). Discussant comments on research on nature, characteristics and causes of accounting errors: The need for a multi-method approach. *Journal of Accounting Literature*, 19, 93.
- Lau, C. K., & Ooi, K. W. (2016). A case study on fraudulent financial reporting: evidence from Malaysia. *Accounting Research Journal*.
- Maddala, G., & Lahiri, K. (2006). *Introduction to econometrics* (Vol. 67): New York, NY: Wiley.
- Malmendier, U., & Tate, G. (2005). CEO overconfidence and corporate investment. *The journal of finance*, 60(6), 2661-2700.
- Mitra, S., Jaggi, B., & Al-Hayale, T. (2019). Managerial overconfidence, ability, Firms-governance and audit fees. *Review of Quantitative Finance and Accounting*, 52(3), 841-870.
- Presley, T. J., & Abbott, L. J. (2013). AIA submission: CEO overconfidence and the incidence of financial restatement. *Advances in accounting*, 29(1), 74-84.
- Rahmah, E. D. D., & Iskandar, Y. (2021). The Effect of Profitability and Financial Risk on Earning Management of Mobile Telecommunication Operators That Registered in Indonesia Stock Exchange Period 2015-2018. *Nusantara Science and Technology Proceedings*, 362-368.
- Ramos Montesdeoca, M., Sanchez Medina, A. J., & Blazquez Santana, F. (2019). Research topics in accounting fraud in the 21st century: A state of the art. *Sustainability*, 11(6), 1570.
- Rashid, M. A., Al-Mamun, A., Roudaki, H., & Yasser, Q. R. (2022). An Overview of Corporate Fraud and its Prevention Approach. *Australasian Accounting Business & Finance Journal*, 16(1), 101-118.

- Rathnayake, R. M. S. S., Rajapakse, R. P. G. S. N., & Lasantha, S. A. R. (2021). The impact of financial reporting quality on firm performance. *Journal of Business and Technology*, 5(0), 53-67.
- Rockwell, R. C. (1975). Assessment of multicollinearity: The Haitovsky test of the determinant. *Sociological Methods & Research*, 3(3), 308-320.
- Saari, S., Suffian, M. T. M., Abd Ghafar, M. S., & Azhari, M. I. M. (2020).
- Schrand, C. M., & Zechman, S. L. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and economics*, 53(1-2), 311-329.
- Shekarkhah, J., Nikraves, M., & Adlzadeh, M. (2019). Managerial overconfidence and financial restatement. *International Journal of Economic Research*, 16(2), 349-358.
- Sheytanova, T. (2015). The accuracy of the Hausman Test in panel data: A Monte Carlo study.
- Torres-Reyna, O. (2007). *Panel data analysis fixed and random effects using Stata* (v. 4.2). Data & Statistical Services, Princeton University, 112.
- Verschoor, C. C. (2014). Fraud continues to cause significant losses. *Strategic Finance*, 96(2), 11-14.
- US government accountability office, (2013). *2013 Annual Report*, <https://www.gao.gov/products/gao-13-279sp>
- Wahab, E. A. A., Gist, W. E., & Majid, W. Z. N. A. (2014). Characteristics of non-audit services and financial restatements in Malaysia. *Journal of Contemporary Accounting & Economics*, 10(3), 225-247.