



**Tone management examination in the CEO statements of the top 40 JSE
listed companies**

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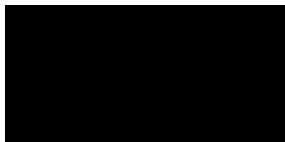
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ABSTRACT

The business sector has recently been rocked by several accounting scandals. Unfortunately, South Africa has not been immune to this trend of fraudulent financial reporting, and investors have suffered financial losses when these businesses eventually fail, this is why particular attention is now on the tactics used by company leaders in the narrative disclosures. This study examined tone management in the Chief Executive Officer (CEO) statements using the JSE's top 40 businesses. The primary objectives were to analyse the impact of financial performance on the normal tone of CEO statements and to investigate the influence of abnormal accruals on the abnormal tone used in CEO statements. The study used quantile regression analysis and a generalised linear regression model to analyse the impact of financial performance on normal tone and to examine the influence of abnormal accruals on abnormal tone. CEO statements from the JSE Top 40 public businesses were examined using content analysis. Findings show a positive impact of financial performance on the normal tone of CEO statements. This indicates that financial performance and normal tone move in the same direction, as financial performance improves, a positive tone in CEO statements also increases. This further means that moderately and extremely profitable companies use a more positive tone. Results also show a negative influence of anomalous accruals on irregular tone. Meaning that anomalous accruals and irregular tone move in different directions, when abnormal accruals increase, abnormal tone decreases. Additionally, this suggests that abnormal accruals and abnormal tone do not co-occur and that companies with abnormal accruals do not conceal them using abnormal tone. It is recommended that annual financial statements users should carefully scrutinise the tone used in CEO statements, to identify whether or not it is aimed at concealing poor performance or motivated by good performance. The amount of flexibility and judgment given to preparers of financial statements should be reduced to lessen the use of earnings management practices. The study contributes to the conversation about the company's financial reporting methods applied by public businesses listed in the JSE as well as the discussions around earnings management practices.

Keywords: Tone management; accrual-based earnings management; CEO statement; integrated annual report; JSE top 40 listed companies; financial performance

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LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| CEO | Chief Executive Officer |
| CFO | Chief Financial Officer |
| QRM | Quantile regression model |
| GLM | Generalised linear regression model |
| IAR | Integrated Annual Report |
| IARs | Integrated Annual Reports |
| JSE | Johannesburg Stock Exchange |
| IFRS | International Financial Reporting Standards |
| SAn | South African |
| SA | South Africa |
| CSR | Corporate Social Responsibility |
| USA | United States of America |
| UK | United Kingdom |
| BTM | Book-To-Market value of equity |
| ASR | Annual Stock Return |
| ABACC | Abnormal Accruals |
| ABTONE | Abnormal Tone |
| EARN | Financial performance |
| SIZE | Company size |

| | |
|------|--|
| TONE | Language tone |
| MVE | Market value of equity |
| CVE | Carrying value of equity |
| ROA | Return on assets |
| IASB | International Accounting Standards Board |
| MND | Minimum Narrative Disclosure |
| FIAT | Fabbrica Italiana Automobili Torino |
| ICD | Intellectual capital disclosure |
| BMD | Business Model Disclosure |
| REIT | Real Estate Investment Trust (REIT) |
| CFFO | Cash flows from operations |
| IT | Information Technology |
| MSCI | Morgan Stanley Capital International |
| CPS | CEO Pay Slice |
| IPO | Initial Public Offerings |
| TBL | Triple Bottom Line |
| EBNI | Earnings before non-recurring items |
| BP | British Petroleum |
| GDP | Gross Domestic Product |
| OLS | Ordinary Least Squares |

| | |
|-----|------------------------|
| AML | Azure Machine Learning |
| TA | Total Assets |
| TL | Total Liabilities |
| MAE | Mean Absolute Error |

CHAPTER 1: INTRODUCTION

1.1 Introduction

This research investigates tone management in the Chief Executive Officer (CEO) statements of the JSE's top 40 publicly traded businesses. The primary goals are to study the impact financial performance on the normal tone of CEO statements, as well as the influence of abnormal accruals on anomalous tone in CEO statements. CEO statements have traditionally been viewed as tools for managing perceptions in management and accounting literature (Hooghiemstra, 2000). Moreover, International Financial Reporting Standards (IFRS) do not require the composition of the CEO statement; hence, the CEO has complete discretion over its content. This chapter presents the background to the study, the problem statement, significance of the study, study objectives, research hypotheses, delimitations of the study, assumptions of the study, limitations of the study, and the dissertation outline.

1.2 Background to the Study

Several financial reporting scandals have rocked the business world in recent years. Regrettably, South Africa (SA) has not been exempt from this trend of dishonest financial reporting, and investors have suffered financial losses when these enterprises inevitably collapse. For this reason, special attention is now given to the perception that company executives convey in their discretionary narrative disclosures. Financial reporting is more than just numbers. Narratives such as the CEO statements are being deployed, and these narratives are growing more sophisticated by the day. Why are these narratives significant? They contribute to the reduction of information asymmetry associated with current accounting standards. However, these statements can be used to manipulate perceptions using tone. For example, CEOs may adopt tone management in their statements to impress stakeholders.

A goal of impression management is "*to control and influence the impression presented to users of accounting information*" in a company's financial reporting context (Davies & Brennan, 2007, p. 3). According to studies (Beattie & Jones, 2000; Brennan & Merkl-Davies, 2013), managing impressions refers to the act of describing facts in predetermined ways to present an unjustified positive impression of the firm, which could be seen as a bias toward

accentuating successful results in reporting. As noted by Davies and Brennan (2007), research into impression management is essential to better understand how managers communicate with shareholders and possibly manage their perceptions. Burlea and Popa (2013) argued that the manner in which stakeholders perceive an organisation is impacted by its legitimacy strategy. As such, impression management and legitimacy theory gives context to this study and shows why it must be conducted.

As stated by Merkl-Davies and Brennan (2007), the quality of financial reports will be compromised if arbitrary textual disclosures are utilised to manipulate impressions instead of providing extra details. Tone management refers to a tone that does not match the fundamentals of the firm (Carlsson & Lamti, 2015; Huang et al., 2014). The authors argue that tone management can be used to influence public opinion of a company, resulting in information asymmetry and that this anomalous tone can also be used unscrupulously to increase comprehension of financial data, as a result, deceive shareholders and other stakeholders by using pleasant terms to mask performance flaws. When descriptions of a company's financial performance are inconsistent with the prevailing business fundamentals, language tone is manipulated (Xu & Qi, 2020). Furthermore, an institutional investor or a market analyst who has experience in investing, might be harmed by language tone distortion even though they have other facts regarding the enterprise's results than less experienced investors do. A drop in the businesses' financial outcomes and tone are also related, as confirmed by Bushee et al. (2018) who argued that organisations that are incurring losses have a more upbeat tone in their narrative disclosures.

Callao and Jarne (2010) assert that creative accounting has become increasingly intense in Europe ever since the introduction of IFRS, as abnormal accruals have escalated in the years after the adoption of IFRS by companies. According to Darmawan et al. (2019), profits distortion using accruals, which is represented by voluntary accruals, has a positive effect on entity value. Accruals could be managed opportunistically to affect users' opinions of a company's fundamentals (Carlsson & Lamti, 2015). Huang et al. (2018) suggests that managers of companies with large anomalous accruals and companies that just reach or are above profit targets prefer to use language that is more upbeat when communicating their results through the media with an aim of exaggerating their subjective financial figures that are later shown through their accounting results. The authors further contend that managers

strategically utilise tone to manipulate investor perceptions in addition to abnormal accruals. Huang et al. (2014) conducted more investigation regarding the influence of anomalous accruals on irregular tone to see if the two strategies work better together or separately to influence shareholder sentiments during results media announcements. Findings revealed that excessive accruals have a significant and positive influence on irregular tone, demonstrating manager's concurrent use of the two practices in results official statements.

The CEO is the highest-level employee in an organisation whose decision-making determines the direction the company takes and is charged with the responsibility of overseeing the daily operations of the business. LaFevre (2021) maintains that as the company's public face, a CEO's personality may have an impact on how the public perceives the organisation, and the CEO's personality influences corporate culture, which has an impact on company performance, as well as corporate social responsibility (CSR) initiatives, which can boost brand equity and customer loyalty. Therefore, the CEO statement is a very crucial communication tool which allows executives to explain to their shareholders their opinions and values (Carlsson & Lamti, 2015; Craig & Tourish, 2010). Clatworthy and Jones (2003) contends that documentation, like the statement of the CEO, has proven susceptible to managers' exploitation and opportunistic behaviours.

In this study, the primary objectives are to assess the impact of financial performance on the normal tone in the statements of CEOs as well as the influence of irregular accruals on anomalous tone in CEO statements. According to Mamaro and Tjano (2019), over 80% of the market capitalisation of JSE-listed businesses comes from the Top 40. Padayachee (2010) suggests that the JSE's top 40 firms are the best of the crop, with a wide range of industries represented. This study is necessary from a South African (SA) context because currently, no study addresses both the impact of financial performance on normal tone and the influence of irregular accruals on anomalous tone in SA. Additionally, majority of studies in this area are devoted to developed countries and are not applicable in SA because the economic, political and social features of developed countries are different from those of developing countries. Even though developed and developing countries may have some things in common, there are still huge differences. More so, studies on tone management focusing in developing countries are limited. SA is among the nations that have experienced the highest number of corporate scandals in recent years, hence the need to conduct this study. Lastly, literature provides

opposing findings regarding the impact of financial performance on normal tone. Scholars (Carlsson & Lamti, 2015; Huang et al., 2014) concluded that profit making firms tend to utilise extra positive language in the disclosure narratives, while studies (Bushee et al., 2018; Cho et al., 2010) reported that loss making companies tend to utilise extra pleasant language in discretionary narratives such as CEO statements. Therefore, it would be interesting what the findings of this study reveal from a SAn context. Furthermore, Carlsson and Lamti (2015) reported a positive influence of abnormal accruals on abnormal tone, while there are no papers known to the researcher that have reported a negative effect of anomalous accruals on irregular tone.

1.3 Problem Statement

The CEO statement is neither mandated nor regulated by IFRS, hence the contents are totally up to the CEO. Clatworthy and Jones (2006) suggest that the most significant aspect is that it also provides a narrative about the entity's operations and performances. Hence, the CEO statement is vulnerable to managerial distortion and opportunism. Hence, the fact that CEO statements are exposed to manipulation and opportunistic use by CEOs, this creates serious doubt regarding the accuracy of the discretionary disclosures made in them (Carlsson & Lamti, 2015).

The use of tone to influence stakeholder attitudes of the company has been researched in the past, notably in advanced nations like the United States of America (USA) and the United Kingdom (UK) (Carlsson & Lamti, 2015; Huang et al., 2018; Huang et al., 2014). Furthermore, studies that discuss the impact of financial results on normal tone and the influence of irregular accruals on anomalous tone are scarce in developing nations. Of particular importance, there has been very little research on CEO statements in SA specifically focusing on normal tone, as well as financial results. Furthermore, according to the researcher's knowledge there is no research explicitly focused on the influence of irregular accruals on anomalous tone among the Top 40 JSE-listed companies in SA. As such, this study investigates from a SAn context, whether the discretionary narrative disclosures in the CEO statements show any symptoms of tone management. This will be achieved through assessing the impact of financial performance on the normal tone of CEO statements, as well as influence of abnormal accruals on abnormal

tone. There is also a lack of accord in literature in the sense that some studies reported that financial performance positively impacts the normal tone, while others reported that financial performance and normal tone are negatively related. This study, therefore, will add clarity to these opposing results from SAn context.

1.4 Objectives of the Study

This study has the following objectives:

- To analyse the impact of company financial performance on the normal tone used in CEO statements.
- To investigate the influence of abnormal accruals on abnormal tone in CEO statements.

1.5 Research Hypotheses

The following are the study's hypotheses:

- *H₁ – Financial performance has a statistically significant and positive impact on the normal tone in the CEO statements of the Top 40 JSE publicly traded companies.*
- *H₂ - Abnormal accruals have a statistically significant and positive influence on abnormal tone in the CEO statements of the top 40 JSE publicly traded companies.*

1.6 Significance of the Study

The outcomes of this study will help existing and potential shareholders determine if the organisations in which they have invested or are considering investing in, use tone management in the narrative disclosures provided in CEO statements. This, in turn, will prevent shareholders from making impulsive economic decisions that could result in financial losses. Additionally, academic institutions will benefit from this research when tackling earnings management as part of their accounting and auditing curricula. Financial institutions and their analysts will use the outcomes of this research to acquire an enhanced comprehension of the impact of company financial results on the normal tone and the influence of abnormal accruals on irregular tone, allowing them to make informed decisions about which entities to associate

with. Creditors are impacted when a company becomes insolvent to the point of collapse and liquidation. Significantly, since creditors are at risk of being unpaid once the company fails, they need to understand how to identify potential earnings manipulation by looking beyond the tone of the CEO statements. Consequently, this study will be beneficial in this regard.

1.7 Delimitations of the Study

For this study, the JSE's top 40 public businesses were sampled, to investigate the influence of aberrant accruals on abnormal tone, and the impact of financial performance on normal tone. Additionally, only the statement of the CEO, the statement of comprehensive income, the cash flow statement and the financial position statement were reviewed in the IARs for 2021 reporting period. Furthermore, features such as the complexity and readability of the CEO statement were not considered.

1.8 Assumptions of the Study

This study presupposes that a business's financial performance has an impact on the normal tone employed in the CEO statement, and that anomalous accruals influence abnormal tone. Additionally, the study assumes that the annual financial records used offer a "fair and truthful assessment" of the financial condition of the businesses. The sample size adopted in this dissertation is viewed to be representative and a fair depiction of the SAn market. In addition, it is assumed that the study findings are a fair representation of developing economies.

1.9 Limitations of the Study

A selection of 40 of the top JSE publicly listed businesses was utilised for this research with a final sample being 34 companies after excluding banks. Additionally, the study only focused on the 2021 financial year; therefore, the results of this study should be cautiously interpreted. However, studies such as (Phesa, 2021) and (Mamaro & Tjano, 2019) argue that these companies have a market valuation that exceeds 80%. As a result, the sample used in this study is adequate for informing the study's conclusions and sufficiently represents all the businesses trading on the JSE.

1.10 Dissertation Outline

A description of the structure of this dissertation is presented.

Chapter 1: Introduction

An overview of this study, background to the study, problem statement, objectives of the study, hypotheses of this research, significance of the study, delimitations of the study, assumptions of the study, limitations of the study, dissertation outline and summary of the chapter is presented.

Chapter 2: Literature Review

This chapter undertakes a review of the current literature, focusing on the study's foundational theories, financial performance and normal tone, abnormal accruals and abnormal tone, the role of the CEO and the CEO statement, and the top 40 JSE-listed businesses.

Chapter 3: Research Methodology

The study's research methodology is presented here highlighting the data gathering methods and models used in the study, ethical considerations, and data validity.

Chapter 4: Data Presentation and Analysis

This chapter focuses on presenting and interpreting outcomes based on data gathered from CEO statements in IARs. The analysis explains the findings and responds to the hypotheses of the study.

Chapter 5: Summary, Conclusion, and Recommendations

The study provides a summary of the findings and concludes the study on the bases of the collected data, as well as the overall findings. Based on the gaps revealed throughout the investigation, the researcher makes recommendations, notes the limitations of the study, and future study suggestions.

1.11 Summary

The use of tone management in CEO statements as an impression management tactic designed to improve legitimacy is highlighted in this chapter as a developing trend in business. This is also brought under spotlight by the numerous financial reporting scandals that have surfaced in recent times worldwide and in SA in particular. This chapter also notes that firm executives sometimes use tone to hide poor financial performance, while other times they use tone to credit their own efforts for positive results. Additionally, it is noted that entities mislead stakeholders about the genuine business outcomes by simultaneously using irregular accruals and abnormal tones. It is also mentioned that this study is a necessity due to the limited tone management literature in evolving nations, in particularly SA. The significance of this research is also mentioned in this chapter that, shareholders, creditors, academics, analysts and other stakeholders will benefit from it, as it exposes the opportunistic use of tone in CEO statements to conceal the true performance of the entity. Lastly, research objectives, hypotheses of this research, research delimitations, research assumptions, research limitations and dissertation outline are all addressed in this chapter.

The following chapter undertakes a review of theoretical and empirical literature, specifically focusing on the impact of financial performance on normal tone, as well as the influence of aberrant accruals on abnormal tone, the CEO, CEO statement and the top 40 JSE listed companies.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This section presents the theoretical literature review and empirical literature review. A review of existing publications is undertaken in order to identify comparable research and identify gaps in the literature. Additionally, we include the most recent books, journals, websites, and dissertation papers, both published and unpublished, in the literature review.

2.2. Theoretical Literature Review

The study is founded on the impression management and legitimacy theories, which state that the employment of impression management tactics is aimed at modifying stakeholder opinions in order to gain legitimacy. The narrative disclosures made by CEOs in their statements have the potential to affect the choices made by those who read these financial statements, particularly when the CEO's statement paints a favourable picture of the company's future. In some cases, this may even cause some of the users to ignore the firm's current results and make decisions that could result in financial losses.

2.2.1 Impression Management Theory

Studies related to management of impressions show how people display themselves to others in hopes of gaining positive feedback (Yasseen et al., 2017). Managing impressions is a key component of financial reporting, which involves controlling and influencing the impressions users receive (Davies & Brennan, 2007, p. 3). Executives as a result, are suspected of using company annual reporting as a way of "*strategically manipulating the views and decisions of stakeholders*" (Yuthas et al., 2002, p. 142). Managers selectively present data in the reports in a way, which favours both businesses plus them, while this may not necessarily be benefiting investors and other interested parties, per the concept of impression management theory (Du Toit & Esterhuysen, 2021). Davies and Brennan (2007) believe that management of impressions succeeds because company narratives are largely uncontrolled and unaudited, and the contents are entirely up to the CEO. According to Moola (2016), financial performance is the key factor driving impression management. Consequently, financial reporting is less useful

to investors when reporting bias and impression management are implemented. As specified in the International Accounting Standards Board's (IASB)'s Conceptual Framework (2018), useful information must represent exactly what it purports to represent. This means it must be neutral and free of bias.

In the view of Chng et al. (2015), it is a significant incentive by manager to control their businesses' public brand. Hence, an essential precursor of their management of impressions is the degree to which the main investors are aware, or more likely to learn, about the businesses' falling financial results. Therefore, it was determined that leaders who experience high publicity due to a performance fall engage in more actions intended to control important stakeholders' perceptions of their companies than leaders who experience low publicity. Furthermore, according to Cen and Cai (2014), impression management is related to both the amount of increase in profit and the complexity of the company as represented by its number of segments. This means that the more profitable and complex the company, the more they use impression management tactics. Moreno et al. (2019) contended that company profitability and the impression management strategy of using of positive or negative references had no strong correlation. In order to see beyond the terms and evaluate the whole meaning of the sentence in a specific context, Bozzolan et al. (2015) manually coded the textual tones of entities in the analyst reports, official statements by those of CEOs, and news stories. The findings suggested that using upward manipulation of communication tools had positively affected local press opinion, indicating the success of their impression management strategy.

Merkel-Davies et al. (2011) asserted that management of impressions can be applied to accounting research by drawing insights from social psychology that see it as motivated by societal relationships and typified by expectation of a review of their oversight. Furthermore, the authors contend that management may be motivated to manage impressions in an effort to achieve a more desirable response from shareholders if company narrative documents describe the supervisory performance of the businesses' directors. Moreover, the study found that creating a more truthful, yet favourable, picture of a company as well as its profitability is necessary for creating an impact in company yearly report publications. According to Merkel-Davies et al. (2011), understanding losses, declining sales, and declining business growth relative to competitors may demand more cognitive resources. As a result, this shows up linguistically in much more complicated phrase structures and more causation-heavy terms in

sentences than when describing profits, as well as in positive sales growth and superior firm growth to rivals. Significantly, when the performance of the company - as shown in the yearly reports - is used to gauge management's performance and determine compensation, this gives management a reason to use impression management tactics by shaping the material offered in annual reports, both in terms of content and importance (Goundar, 2009). From an impression management theory context, (Leung et al., 2015) analysed the minimum narrative disclosure (MND) in the IARs and found that companies with subpar current results, as determined by accounting or performance metrics from the markets, tend to conceal optional textual data in the IARs. Moreover, the findings are in line with the MND in the IARs being an intentional tactic of managing impressions utilised to suppress facts as well as justifications concerning consistently bad business outcomes as well as future projections, so as to redirect shareholder focus distant from the businesses' shortcomings or unfavourable updates.

2.2.2 Legitimacy Theory

The tactic of managing impressions employed by executives in their narrative disclosures is aimed at gaining legitimacy, argues Phesa (2021). This view then connects legitimacy to impression management as these two theories go hand-in-hand. Legitimacy refers to the use of right-sounding terms and concepts as well as acts that are designed to gain social acceptance (Drori & Honig, 2013). In a societal framework of conventions, attitudes, assumptions, as well as descriptions, the concept of legitimacy implies that a specific entity's deeds are acceptable, appropriate, or proper (Burlea & Popa, 2013). Furthermore, as a way of fulfilling their societal agreement, enterprises may apply the theory of legitimacy as a vehicle to encourage the implementation as well as development of voluntary social and environmental disclosures. The authors also argue that a new organisational vision can be shaped by analysing how tangible financial resources are correlated with intangible legitimacy resources considering the worldwide meltdown as well as the instability within the capital sector. In order for a firm to maintain legitimacy, the contract between the firm and society must be intact, and if it is not, the company will cease to exist (Bebbington et al., 2008). Moreover, the authors argue that legitimacy theory has, however, been interpreted within social accounting research in a more limited sense, closer to reputational risk management than to the general notion of legitimacy.

According to some studies (Bitektine, 2011; Suddaby & Greenwood, 2005; Zimmerman & Zeitz, 2002), legitimacy can be used to attract extra resources such as great executives, quality employees, capital backing, future technologies, and state aid from outside sources as well as to strengthen an organization's reputation, both publicly and internally. Additionally, those same resources are essential for future venture creation. The theory of legitimacy suggests that entities often try and sway stakeholders into perceiving them as if they operate within boundaries and conventions set by the community they're part of (Deegan, 2009; Fernando & Lawrence, 2014). Li et al. (2016) examined, through a review of literature, whether creative legitimacy could serve as a mediator between company reputation and firm expansion. Findings indicated a strong association involving company reputation as well as business expansion. Drori and Honig (2013) analysed how organizational emergence and evolution are affected by both in-house as well as outside legitimacy. Additionally, by way of examining how various forms of legitimacy are aligned with time by members of organisations, the authors provided a crucial perspective into the process of legitimation. It was discovered that future procedures, patterns, and ideas were constructed on a foundation of institutional legitimacy that was tested and challenged from within and outside of the institution.

Using disclosures from IARs, Deegan et al. (2000) studied how Australian firms responded to major social incidents including oil spills and Moura Mine disasters. Study findings indicated that, following the incidents, companies in impacted sectors increased the amount of data they included in the IARs compared to before occurrences. Moreover, the findings confirmed that the perception of the organisation's operation can be influenced by its annual report, and that organisation's continued existence can be legitimised by its annual report. In a case study of a credibility state that is "debated," Kuruppu et al. (2019) investigated how to sustain long-term organisational legitimacy by proactively addressing the simple realistic legitimacy worries of interested parties. The results revealed that companies manage legitimacy in accordance with the prominence of issues, the importance of stakeholders, and their connectivity. Additionally, the study showed that there was immediate as well as precise steps taken towards maintaining practical legitimacy in response to environmental concerns, but external reporting was not a priority in the immediate endeavours of managing legitimacy. However, direct steps, and reporting externally, were required to manage attitudes among wider stakeholder groups because of very visible difficulties to the public, regulators, as well as the media.

To better comprehend how Corporate Social Responsibility (CSR) directors navigate this cycle of CSR innovation, CSR communication, and CSR mimicry, Pollach (2015) interviewed CSR executives from major technological businesses who have ambitious CSR goals. According to the findings of the above-mentioned study, organisations that aim to achieve a competitive edge by CSR practices encounter a range of the following difficulties: (i) In an attempt to uphold their legitimacy, they must keep updated of the rivals' CSR initiatives; (ii) To create and maintain a CSR reputation, businesses need to consistently improve and publicise their CSR efforts; and (iii) They must guard against imitation by other businesses attempting to retain the legitimacy. Additionally, firms have a typical inclination in business to replicate similar flourishing organizations to be able to earn or retain legitimacy, and that results in homogeneous companies.

There is overwhelming evidence in the literature that suggests that impression management tactics are widely used in narrative disclosures as a way of creating a positive picture, in an attempt to gain the acceptance of interested parties.

2.2.3 Conceptual Framework

The following figure 2.1 is a conceptual framework diagrammatic presentation, which demonstrates how the main variables in this research interact in line with the hypotheses used. Financial performance has a positive impact on normal tone and abnormal accruals have a positive influence on abnormal tone, read (Carlsson & Lamti, 2015; Chng et al., 2015; Huang et al., 2014).

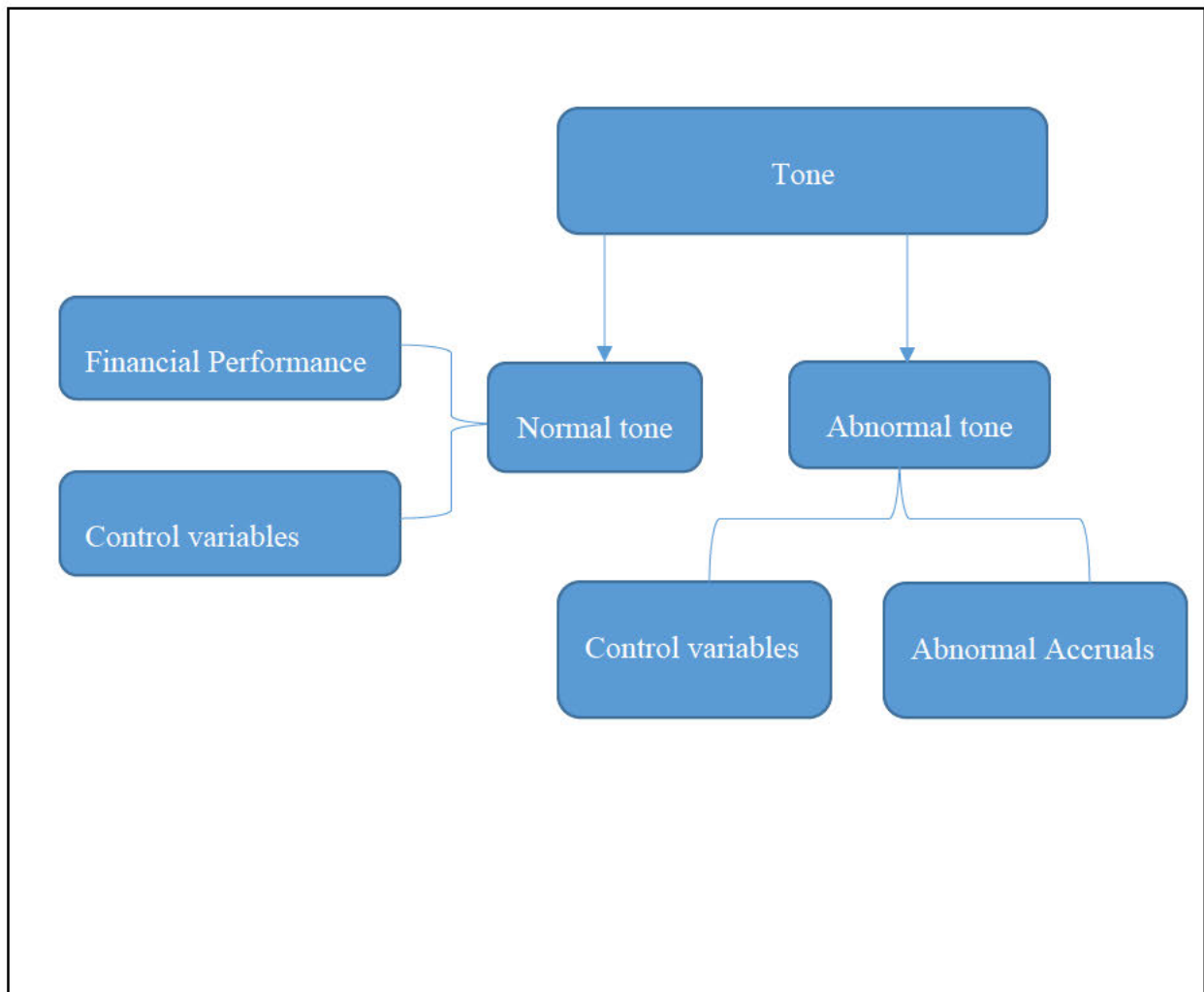


Figure 2.1: Conceptual Framework

Source: Researcher's own formulation

2.3. Empirical Literature

The following section presents the empirical literature relevant to this study.

2.3.1 Financial Performance and Normal Tone

Manipulation of tone is defined by Huang et al. (2014), as a utilisation of a tone level inconsistent with a firm's fundamentals to influence public opinion of a company, resulting in

information asymmetry. In support of this view, Mohseni and Roodposhti (2020) added that the manipulation of language involves selecting a language style threshold in a subjective document that is out of pace with existing numerical evidence. According to Xu and Qi (2020), when descriptions of a company's performance are inconsistent with the prevailing business fundamentals, language tone is manipulated. Furthermore, when evaluations of a company's performance do not match the pressing economic facts, language tone is manipulated. As a result, even experienced financiers, such as major shareholders and industry experts, might be harmed by language tone distortion even though they have more information about a company's performance than less experienced investors do.

According to Luo and Zhou (2020), language is far more malleable therefore subject to manipulation compared to figures, and executives get an even better opportunity to falsify descriptive narratives than numerical financial data because there are no formal regulations governing explanatory financial narratives. It is on these bases that management employs methods such as pleasant tone and chosen words to manage impressions and as such, this language selection is thought to be opportunistic (Du Toit, 2017). Various reasons create diverse tone behavioural patterns according to Yan et al. (2021), and executives seek to perform perception management by accentuating positive information while trivializing negative information. Additionally, manipulation of tone provides further chance for executives to engage in unethical conduct. This anomalous tone can be used unscrupulously to increase comprehension of financial data, as a result, deceive shareholders and other stakeholders by using pleasant terms to mask performance flaws (Huang et al., 2014).

Rahman (2019) affirms that manipulation of tone can also be viewed as a strategy for influencing investors, and it entails making the textual tone disproportionate to the accompanying numeric facts. Moreover, tone is used by managers to improve (harm) stakeholders' perception regarding the company's business results through communicating additional (false) data in the absence of rigid disclosure standards. According to Davis et al. (2012), words significantly affect the way information is viewed and received, and both excellent and poor communication has a significant impact on the way data is interpreted. Moreover, it is commonly known that providing data in a good light generates stronger positive assessments versus giving it in an unfavourable way. Additionally, the authors suggested that the tone of a company has a favourable impact on its performance.

Having examined the connection between both the language used in CEO statements of 415 companies trading in the Stock Exchange of London and overall profitability, Carlsson and Lamti (2015) found a positive linear relationship connecting the tone employed in the statements of CEOs and profitability, which suggests that when profits increase positive tone also increases. Additionally, other researchers (Amernic & Craig, 2007; Henry, 2008; Merkl-Davies & Brennan, 2007) affirmed that as earnings increase, managers employ an upbeat tone, supporting the notion that company's financial performance directly and positively influences the normal tone used by executives. Interestingly, this was confirmed by Aly et al. (2018) who provided evidence that the publication of pleasant information is favourably related to businesses' financial performance utilising 105 Egyptian listed firms as a sample from 2011 to 2013. This suggests that Egyptian companies who publish more good news have greater financial performance. On the other hand, Phesa (2021) investigated the utilisation upbeat language in the chairman statements among the 40 largest JSE trading companies in the 2020 financial year. On this study, results revealed that profitable and extremely positive tend to use sentiment that is more positive in their narrative disclosures than unprofitable companies are. In their study, Lu et al. (2019) looked into whether companies which do well in terms of CSR are linked with even more upbeat announcements of earnings. Their results showed a significant correlation linking CSR outcomes and the reporting tone in the financial statements. This demonstrates that businesses that do well in CSR often employ a relatively upbeat tone in financial reports. Companies exhibiting stronger CSR concerns, conversely, also present their results in an increasingly upbeat manner. All these studies clearly demonstrate that financial performance has a direct impact on the normal tone.

Contrary to the above studies, Cho et al. (2010) investigated the influences in the words and voice inflections employed in company reporting. The findings corroborated the idea that less successful companies utilize words and voice inflections that distort information reported in company financial reporting statements. Furthermore, results discovered that the usage of highly upbeat wording in the announcements of businesses is linked to poorer accounting results. Suggesting that even these statements' vocal, as well as written styles, are heavily focused upon conveying encouraging news plus crediting successful results towards the disclosing organisations' initiatives while sometimes distancing themselves from blame for subpar results. The purpose of the study by Mohseni and Roodposhti (2020) was to determine

if tone manipulation can reveal senior executives' core mission to hide subpar financial outcomes. Results demonstrated a strong inverse relationship between written language in official documents and profitability. As a result, executives utilize pleasant words for tactical reasons as well as to hide subpar results.

An examination of the tone used by companies that make losses (Bushee et al., 2018), found that more loss making businesses employ more pleasant and sophisticated language in the disclosure narratives. They relate such conclusion to executive concealment of mediocre performance. Bozzolan et al. (2015) investigated the utilisation of pleasant language in the long-term analysis of the Fabbrica Italiana Automobili Torino (FIAT) case study. Results showed that the tone used in the disclosure narratives by FIAT was deliberate and influenced by the importance of the intended stakeholder groups. Moreover, the authors concluded that the tone used might in effect comprise exploitative conduct, which is an instrument for managing impressions. Furthermore, the perception management approach used could also be identical to those employed to rationalize away blame resulting from weak performance. Using manual content analysis, Schleicher and Walker (2010) investigated how, when, and whether executives skewed their tone of narratives with an eye toward the future. According to the results, companies with significant expected performance declines have a tendency to adopt an extra upbeat language in their textual disclosures compared to currently loss-making and volatile companies.

To ascertain if businesses utilise Intellectual Capital Disclosure (ICD) to control peoples opinion of business conduct, Melloni (2015) explored the connection between favourable ICD language as well as particular traits which might motivate executives to distort company reporting. Findings supported the usage of ICD as a perception control mechanism by demonstrating that the optimistic tone of ICD is substantially linked to deteriorating company performance. Similarly, in the study of the use tone in the business model disclosure (BMD), Melloni et al. (2016) discovered that businesses are often more inclined to deliver cheerful BMD when their profits are declining.

Since workers frequently demand salary increases from businesses, Arslan-Ayaydin et al. (2021) investigated if companies that have strong worker's unions alter the tone of annual results publications to paint a less rosy view of overall profitability. Results showed that

whenever union membership levels rise, especially during periods of excellent financial results, overall language of results publications becomes noticeably less upbeat. Findings indicate that trade unions directly influence the usage of tone reduction, and that this reduction happens throughout the collective bargaining process. This finding shows a different view that tone can be manipulated either upwards or downwards depending on what company executives are trying to achieve during a specific time period.

Henry (2008) evaluated the effect of tone upon investors in addition to the context, double informing as well as marketing functions of results official statements. The findings confirmed that tone affects shareholders' perceptions, and that when financial results are framed positively, shareholders will interpret the outcomes as improvements compared to benchmarks. Findings also suggested that the publicity strategies used in media statements convey an upbeat tone, so the advocacy suggests a communicator's desire to persuade, therefore tone and the promoting function of results news announcements are generally strongly linked.

In order to determine if storytelling style sheds light regarding executives' discretionary disclosures as well as readers' reactions to such announcements, Allee and DeAngelis (2015) studied tone distribution, or even the extent to which tone keywords are distributed equally throughout a text. According to the findings, word distribution is linked to company predicted and current performance, accounting judgments taken by leaders, as well as rewards and activities taken by management to influence perceptions. Additionally, overall content, which executives communicate throughout company disclosures, is affected by the way tone is distributed within the disclosures. Bloomfield et al. (2015) argued tone scattering depicts how evenly positive or negative information is distributed throughout the disclosure narrative's various portions in order to influence the user's understanding of current company performance.

Tailab and Burak (2018) probed whether managerial authors provide shareholders with accurate data by providing pertinent details about company profitability as part of an effort to comprehend the possible correlation between deflective language used by executives in their assessments of accounting position, operational outcomes, and profitability. Contrary to findings by other researchers, results showed that the language used in explanatory reports has no relationship with profitability. Furthermore, Tailab and Burak (2018) observed that there

was a noticeable use of similar persuasive language by numerous kinds of companies in communicating various interpretations concerning the past results as well as potential performance to accomplish in the future.

The relationship involving business profitability as well as the argumentative tone of CEO shareholder statements was examined by Patelli and Pedrini (2014). Findings indicated that an upbeat language correlates with historical as well as projected business results. The study emphasized that previous performance was the key motivator of the persuasive tone used in CEO statements. Patelli and Pedrini (2015) contended that “action” is really a programmed terminology, which highlights successes as well as communicates egotistical optimism. Particularly, CEO statements' reliance on the word "action" suggests excessive optimism in the organisation's capacity to make improvements as well as produce favourable outcomes.

Henry and Leone (2016) claimed that while financial reporting principles govern overall recording of figures, companies retain significant discretion over the narrative disclosures, they decide the language to use in narratives such as CEO statements, as well as the parts of financial performance they want to highlight. As a result, official statements from two companies with similar financial accounting information may transmit completely distinct overarching sentiments regarding previous results compared to projections and anticipated upcoming outcomes.

D'Augusta and DeAngelis (2020) explored if the connection between management of tone and overall profitability hinges upon how an enterprise performed compared to profits projections. Findings suggested that increased tone was noted within companies where earning potential exceeded forecasts, which suggests that executives adjust overall tone making expected performance criteria simpler to surpass. Furthermore, results showed that the connection was less inverted when executive employment fears or financial reporting concerns were present, which indicates that senior management who are pressured to produce excellent outcomes and directors of companies with stable profits are unenthusiastic when discussing bad results and more positive when discussing good results.

Carstens and Freybote (2019) looked into how real estate investment trusts (REITs) stockholders reacted to such anomalously friendly outlook in REIT accounting records. Analysis revealed that the association between tone and the behaviour of shareholders is

unaffected by the profitability of REIT companies. Furthermore, REIT shareholders can assess the accounting results' unusually optimistic outlook in light of overall perceptions of a REIT together with the state of the property sector.

A study by Blau et al. (2015) explored if knowledgeable speculators understand results teleconferencing language in a different manner compared to other investors generally. The findings showed that companies having concurrent big excess returns and excessively elevated managerial language are the ones, which small investors prioritise. Additionally, a mixture of good profit surprises as well as an exceptionally upbeat language increases overall probability of returns for small investors. This suggests that small investors read management' tone accurately versus uninformed share traders.

Kearney and Liu (2014) reviewed research regarding the effects of linguistic tone upon human conduct and performance at personal, organizational, as well as market levels. The study concluded that text sentiments ordinarily have a significant influence on profits, commercial activity and share values. In order to determine whether linguistic characteristics of yearly reports influence business results, Kahveci (2016) undertook a linguistic analysis in the yearly reports of firms that are listed with Borsa Istanbul and part of the Governance Practices Score. The findings showed that, as opposed to production industry companies, overall language of forthcoming yearly reports, as well as governance practices grades, have far more favourable impacts on the profitability of such companies.

Li (2010b) reviewed the literature on linguistic evaluation of company reports, including accounting records, results announcements, as well as recordings of teleconferences. The author mainly employed actual text content in financial statements to conduct studies on the efficacy of share exchange, quality of profits and company's economic practices. The findings showed that expected results are higher once directors use a more enthusiastic tone in the forward-looking pronouncements, indicating that managerial conversations contain interesting information for users. After examining the overall data contained in forward-looking comments found in the manager's evaluation of accounting performance, as well as operating activities part of listed businesses' yearly reports, Li (2010a) found that businesses having superior actual results, not big in size, smaller Price-to-Book ratio, lower rate fluctuations, as well as lengthier tenure generally make higher optimistic forward-looking

pronouncements. Moreover, after adjusting for several other predictors of expected profitability, the overall language of forward-looking expressions was found to be linked to potential profits.

Healy and Palepu (2001) argued that management employ business reports deliberately for concealing subpar performance results because they are afraid of losing their employment, which comes along with abysmal share and profit outcomes. Additionally, the authors contended that directors of businesses exposed to effective governance activities can decide against excessive tone in disclosures during a year of weak profitability if they believe that their decision to give a more positive outlook currently would be utilized to make them extra answerable for future lacklustre results. Kothari et al. (2009) investigated if executives postpone announcing negative reports in comparison to positive information. According to data on how the share prices respond to positive and negative earnings pronouncements, executives typically postpone informing shareholders about disappointing information. Additionally, when negative performance predictions are announced, the markets response in a five-day period is greater than when positive profitability is announced.

Regarding the connection between tone management and firm performance, the studied literature offers contradictory perspectives. Numerous studies demonstrate evidence of an inverse linear connection between entity performance and tone. This suggests that when a company's performance suffers, executives speak in a favourable manner to draw attention away from the underwhelming performance. In contrast, some scholars, based on the findings of their investigations, agreed that a positive linear association exists relating tone and firm results. This infers that when profits improve, positive tone of CEO statements also increases as executives claim the good performance to be due to their own efforts.

2.3.2 Abnormal Accruals and Abnormal Tone

The concept of earnings management is quite broad, has numerous components, and is used for a variety of purposes. At its most basic, the goal may be to achieve or surpass current year performance goals, to outperform competitors and last year's performance, to increase share price, and finally to safeguard the employment of executives whose performance is evaluated based on the entity's earnings.

Mohanram (2003) defined earnings manipulation as the deliberate misrepresentation of results, which culminates in earnings figures that could have appeared differently if there was no manipulation. While, Callao and Jarne (2010) added that the use of accounting techniques by managers to achieve a goal while staying inside the parameters of accounting framework is another definition of earnings manipulation. Furthermore, the authors suggested that earnings manipulation takes place when managers modify accounting records by using their IFRS offered choice in structuring transactions and selection of financial reporting policies. Callao and Jarne (2010) further submitted that managers are often forced to act against company owners' interests to exercise their managerial discretion, such as smoothing earnings and modifying accruals to increase profits.

According to Darmawan et al. (2019), real manipulation of earnings is distinct from manipulation of earnings using accruals because it involves managing profits using the company's actual operating activities, while accrual earnings manipulation involves the use of accounting policies allowed in IFRS in order to meet specific profit expectations that are presented in accounting records. This view was supported by Khanh and Nguyen (2018) who stated that, in order to modify published results, manipulation of profits using accruals entails choosing particular principles of accounting for selected activities. As a result, distortions using accruals do not have an influence on the cash balance coming in and out of a business or even business activities.

This study's main focus is on anomalous accruals which represent earnings manipulation which Darmawan et al. (2019) defined as the purposeful selection of financial reporting policies and abuse of discretion permitted in IFRS by executives when preparing financial reports in an effort to deceive investors about the entity's accounting results and to influence outcomes based on accounting data presented. In addition, Darmawan et al. (2019) contends that when trying to boost executive salaries or to protect their jobs company managers manipulate figures in financial reports to present an incorrect performance. The absence of effective preventive actions, the increasingly flexible standards that permit high degree of judgement and greater inherent bias in the interpretation of requirements give executives more discretion (Jeanjean & Stolowy, 2008). As a result, the more lax the standards, the more probable it is that management

will use the tactics of manipulating earnings with a view to influencing the outcomes in their favour.

In a fiercely competitive environment according to Wu et al. (2016), executives are more likely to misrepresent profitability. As a result, companies may be tempted to publish better results than their competitors may in order to attract investors. Conversely, Caylor et al. (2015) contends that managers control profits to achieve the intended profit, with the sole objective being to deceive the marketplace about the firm's actual performance. Moreover, once the markets fail to discern such management's opportunism, they will presume that perhaps the earnings numbers the directors present are the product of strong performance. Profits serve as a crucial indicator of an organization's growth that can be found in the accounting records (Prayogi et al., 2022). As a result, investors consider profitability data in making a variety of business-related considerations. This reveals why executives continuously use it as a target figure to manipulate in order to mislead investors.

Faissol Janot de Matos and Sancovski (2007) evaluated related studies on earnings manipulation to identify motivations and techniques utilized by executives to manage earnings. Results revealed ample motives, which encouraged executives to disclose steady as well as growing profits to improve the company's valuation. These motives include, increase in executive compensation including employment protection; plus lowering the cost of capital for the company. A related study by Rani et al. (2013) investigated the clauses in the managerial standards and methods of publicly traded businesses that genuinely provide rewards for profits manipulation. Findings showed that managerial salary motivations, financing costs rewards, encouragement to achieve/exceed expectations, as well as drive to maximize legislative advantages constituted prominent motivators for distorting profits within Fiji. The most common inducement for falsifying earnings, though, was discovered to be executive remuneration.

The switch from a “rules-based to a principles-based” system requires managers to frequently use expert assessment to make sure that accounting documents fairly represent the nature and value of the transactions, according to Wüstemann and Kierzek (2005). However, it may be possible to manipulate the figures more effectively if a principles-based model is used, which allows for more flexibility in interpretation. Marai and Pavlović (2013) submitted that earnings

manipulation activities and financial statement fraud share many attributes, including the desire to misinform and the motivation to pursue personal benefit; these commonalities can sometimes make it hard to determine when management behaviour crosses over into overt financial fraud.

Xiong (2006) suggested that for determining the manipulation of earnings, it is necessary to separate accruals into their irregular as well as regular elements. Obligatory expenditures resulting from reporting requirements or business scenarios are referred to as regular accruals, irregular accruals, on the other hand, represent elective expenditure recognised by management in a certain period over the other period. Additionally, discretionary accruals allow managers to modify the earnings figure; as a result, they are frequently utilised like surrogates for managing earnings. Callao and Jarne (2010) compared abnormal accruals of the years before as well as years directly following change in the rules to see if the implementation of IFRS throughout the European Union boosted or lessened the opportunity for creative financial accounting. Findings revealed that the use of creative accounting has become increasingly intense in Europe ever since introduction of IFRS, as anomalous accruals have escalated in the years after the adoption.

Huang et al. (2018) looked into whether the tone used in results publications is influenced by the arbitrary accruals disclosed. The study focused on the relationship involving tone used as well as the proclivity of meeting or exceeding profitability targets using abnormal accruals. The findings demonstrated that executives in companies having excessive anomalous accruals as well as companies, which hardly even meet or exceed profit benchmarks tend to, employ increased pleasant tone throughout profits publications to sensationalize the voluntary financial figures, which they later disclose through accounting records. The results suggested that executives deliberately utilise tone as an addition to profits manipulation to control shareholder views. After investigating the relationship involving the tone and accruals distortion as a complimentary strategy that influences opinions of stakeholders, Huang et al. (2014) observed that, shareholders are successfully misled by language distortion, indicating that this influence is complementary to the distortion of accruals. Carlsson and Lamti (2015) examined the link between abnormal tone in CEO statements and abnormal accruals using 415 companies trading in the London Stock Exchange. Results revealed the existence of a favourable link connecting abnormal language utilised in CEO statements and aberrant accruals. This suggests that

abnormal accruals and abnormal tone co-exist and are often used concurrently to manipulate company stakeholders.

Feldman et al. (2010) carried out an exploratory investigation to determine if the analysis provided by executives in the discussion part of yearly reports contains extra details above accounting measurements like excess accruals. Even after accounting for accruals, research findings showed a substantial connection between the market's responses to annual reports as well as the shift in the tone of the director's discussion part in annual reports. More so, from a different perspective, Hribar and Collins (2002) compared the effects of assessing accruals straight out of the cash flows statement versus evaluating accruals as the movement of subsequent balances from the statement of financial position. Findings showed that measuring the inaccuracy of accruals could possibly taint analyses testing for profits manipulation when using the statement of financial position method. In addition, the findings demonstrated that linear regression analysis results using arbitrary versus compulsory accruals for independent variables could be impacted by prediction mistakes if the statement of financial position accruals were used.

From the above review, the literature reveals that executives utilise unrestricted accruals as a tool to distort profits because the use of abnormal accruals does not affect company cash flows but is able to achieve the same purpose as earnings manipulation based on real operations. In addition, the literature showed that irregular accruals and abnormal tone frequently occur together and are utilized to influence stakeholders' views of business results.

2.3.3 The Role of the CEO and the CEO's Statement

As a leader of the enterprise's executive management, the CEO has a huge influence on the company's culture, which in turn affects how well the entity performs. The CEO is in charge of the company's day-to-day operations and makes daily decisions that influence the company's success or failure. Scholars recognise CEOs' ability in affecting the companies' success using key choices, decisions related to the organizational plan, including management styles, also while recognising restrictions, which prohibit executives in exercising total control over the shapes as well as destinies of the businesses (Quigley & Hambrick, 2015).

With heightened scrutiny and ever-increasing pay packages for CEOs, there is a considerable discussion concerning their total contribution to business outcomes (Quigley et al., 2017). Additionally, the authors argue that in comparison to their contemporaries from decades before, shareholders, possibly parties with the strongest financial interests; increasingly perceive CEOs as essential determinants of corporate results, both pleasant as well as negative. According to Hayes (2022), in a company, the CEO is responsible for overseeing general operations and management of resources, making important company decisions, and conducting information exchange between the company and its shareholders. Additionally, CEOs often represent their companies publicly. Hayes (2022) further suggests that regardless of the type of company, CEOs are often responsible for driving profitability, expanding the company, and improving the share price.

Gao and Li (2015) used a special dataset on CEO yearly remuneration for privately owned and publicly traded companies from 1999 to 2011 to study the structure of CEO contractual agreements. The findings showed that companies with publicly traded stocks pay their CEOs 30 percent more than those with privately held shares. Additionally, the data showed that the CEO pay is favourable and highly connected with the profitability of both publicly listed and privately-owned businesses, with the latter's compensation correlation frequently being lower. Based on their assessment Hill et al. (2016) argue that over the past several years, CEO pay has certainly drawn a great amount of publicity. Opponents say that because business executive compensation is completely dependent on company performance, it is exorbitant. On the other end, proponents say that given the value accumulated by CEOs for shareholders, company executive remuneration is legitimate. Findings support the idea that underlying variations in talent, effort, reward risk premium, and job market tariffs account for disparities in CEO remuneration across test firms and benchmark firms. The results also showed that, contrary to what was previously believed, power, not firm size, determines how much excess CEO compensation is given. Furthermore, there is no proof that the size of the company affects executive pay or that it matters how much is given to the top executives. McGuire et al. (2003) examined the connection between CEO compensation and both high and negative company social performance using Morgan Stanley Capital International (MSCI) 400 social index. In companies with a higher activist control compared to those with low activist

involvement, there is a higher correlation between CEO pay and incentives and subpar social performance.

From a different perspective, Abdul Hameed and Counsell (2012) analysed earlier studies that looked at the CEO and organizational environment factors influencing Information Technology (IT) adoption. Results showed that the influence of a CEO's innovativeness, attitude, IT knowledge, and competitive pressure on an organisation's adoption of IT was only marginally significant. Additionally, development and organizational elements that control the adoption processes in firms have overtaken the influence of the CEO's IT knowledge.

In their paper, Kaplan et al. (2012) analysed the traits and competencies of aspirant CEOs for organizations engaged in takeover and seed capital deals, and these evaluations are related to employment decisions, investment decisions, and business performance. Mainly, two factors emerge from a statistical analysis of these traits: a generic aptitude aspect and a component contrasting relational and collaborative abilities with implementation competencies. The results showed that CEO's competencies and expertise are important because recruiting, investing, and performance are all regularly connected with them. Furthermore, despite having a considerable impact on recruitment as well as resource allocation, collaborative abilities seem unrelated to performance and success. This implies that collaborative talents might, just on edge, be given more weight when making employment choices.

Research by Brown and Sarma (2007) deals with the issue of CEO overconfidence and CEO domination play in a company's choice to make an acquisition. In addition to measuring the degree of overconfidence, the authors contend that it is crucial to take into account the CEO's power to force his or her preferences on the choices made by the company. Findings revealed that CEO overconfidence and CEO domination have an impact on business behaviour as seen in acquisition choices. Furthermore, to determine the likelihood of businesses engaging in financial fraud, Chidambaran et al. (2011) analysed Securities and Exchange Commission (SEC) enforcement actions from 2000 to 2006. According to the findings, non-professional relationships between the board of directors and CEO based on shared academic institutions and extracurricular interests seem to increase the likelihood of fraud, supporting the idea that these relationships impair supervision. The findings also show that fraud is less likely to be

committed by CEOs who are more competent and that CEO ability is merely proxied by professional connections.

Based on the theory that a CEO impacts the performance of the company, LaFevre (2021) investigates the potential relationship between the CEO element and share price changes. Additionally, it considers how the public's impression of a CEO potentially indirectly affects a firm's share price. Due to the numerous news stories about Tesla's founder and CEO, Elon Musk, over the previous 10 years, the primary focus by LaFevre (2021) was on Tesla. Data about Mark Zuckerberg of Facebook and Jeff Bezos, the most recent CEO of Amazon, were used in the research to remove any potential bias resulting from news coverage of just one person. Results indicated that publications about firms rather than their executives appeared to have a greater impact on share prices. Additionally, consumer sentiment is a key factor in determining firm revenues, which also affects the value for shareholders and share price.

An empirical study on 468 UK-listed public companies was conducted by Veprauskaitė and Adams (2013) for a period of six years from 2003 to 2008 to examine the linkage associating the CEOs' decision-making power and their businesses' success. A "power index" that determines how much autonomy the CEO has to take decisions that could affect a company's financial performance was used in the study to gauge CEO influence. The findings indicated that a significant decision-making authority of the CEO adversely affects results of firms even when board and ownership structures are controlled. Additionally, the findings showed that the CEO's decision-making authority which comes from holding dual titles, occupying the job for extended periods, and owning shares have a detrimental effect on the company's results.

Gao and Jain (2011) examined both high- and low-tech CEO-led Initial public offerings (IPOs) in comparison to non-CEO-led IPOs. Results revealed that when compared to non-founder CEOs, the CEOs that were involved in the founding phase of the company are more likely to have fewer agency problems, higher authority and impact inside the company, a stronger emotional bond, and connection with the business, better company abilities, and longer investment goals. Consequently, Mobbs and Raheja (2012) argued that despite the fact that change is more likely to happen, organizations with CEO-incentive promotions are linked to CEO change, which is less reactive to results. This is consistent with the fact that these

companies place a higher emphasis on human resources, making it hard to remove the CEO until a replacement is prepared to take over.

Significantly, the exploratory study by Chiu et al. (2021) in the IT industry in Taiwan, revealed that in contrast to insider CEOs, founders and dual CEOs have an easier time influencing executive boards, which increases the business's efficacy and the effective use of its resources. Furthermore, the outcomes of the other tests suggested that great CEOs and intellectual capital are major contributors to increasing business value. Using information from 240 fatalities in U.S. companies, Quigley et al. (2017) investigated how in the last 50 years, investors' views on the relevance of the CEO have altered. The study shows interesting results that shareholders' perceptions of the CEO's significance evolved over the years. Bebchuk et al. (2011) assessed the linkage associating the value, financial results, and conduct of public enterprises as well as the "CEO Pay Slice" (CPS), which is the CEO's share of the top-five executive team's total compensation. As determined by industry-adjusted Tobin's q , the findings showed that CPS is adversely correlated with firm value. From the above literature, the importance and influence that CEOs have on a company's success, share price, and shareholder value creation is demonstrated. Moreover, studies show that CEOs are highly regarded by stakeholders, indicating that users will read the CEO statements in IARs carefully.

Communication is a crucial tool for CEOs of organisations to exercise management as well as discharge responsibility (Dikolli et al., 2020). Moreover, individual CEOs could shape the story they wish to tell the audience. This is why the CEO statement is a crucial tool used by CEOs to shape the views of company stakeholders. Previous studies (Carlsson & Lamti, 2015; Clatworthy & Jones, 2003) indicate that the CEO statement is by far the most commonly reviewed portion in yearly reports. This is supported by Craig and Tourish (2010), who argue that the CEO statement is a key narrative document that allows management to explain their values and views to the stakeholders. Moreover, as the influence of the CEO increases and financial reporting language becomes more important, the use of pleasant and unpleasant phrases, found in the statements of CEOs has proven to be critical for the firm's perception. Carlsson and Lamti (2015) assert that executives could utilise tone management in CEO statements to disguise manipulation of earnings and therefore deceive people regarding the fundamentals of the company. CEO statements are not audited, and there are no precise

standards for their content or format. Thus, management is free to make any remarks it deems necessary.

Craig and Amernic (2019) investigated the personal narratives contained in the annual report statements of several CEOs in Canada. The study's goal was to demonstrate how CEOs might build their credibility with constituents and develop a persona for their audience through the language they use. Results showed that in a CEO correspondence, a personal anecdote has the power to influence readers' views as well as impressions through argumentative force. Additionally, the authors also argued that CEO shareholder communications are an undervalued kind of communication. Whilst, maintaining that in a prominent, customary annual disclosure that is unrestricted by legal restrictions, regulatory requirements, or accounting principles, the CEO statement creates important reporting advantages.

In order to make it easier to understand the various facets of the link connecting an enterprise's reputation as well as company accountability reporting, the study by Craig and Brennan (2012) examined the CEO statements of 23 US companies with excellent reputations and 23 US companies with poor reputations. The key question of the research was whether the disclosures are motivated by managers seeking to influence shareholders' opinions about the business brand or they are intended to provide shareholders and stakeholders with incremental useful information? The findings revealed that business reputation is positively correlated with the language used in CEO correspondence and that this correlation is positively correlated with both firm size and prominence. However, the authors argue that assumptions concerning the influence on company reputation resulting from the rhetoric used in narrative disclosures in company annual reports should be evaluated with scepticism.

In order to assess the authenticity of CEO statements, Patelli and Pedrini (2014) tested the empirical relationship between an enthusiastic language and financial outcomes in a significant selection of 664 CEO statements written on the aftermath of the worldwide financial downturn. In contrast, the authors concluded that there are little incentives to purposefully slant publicly available information in challenging macroeconomic situations. Instead, businesses usually take proactive steps to communicate with their investors using open disclosure.

Craig and Amernic (2018) examined 193 statements from CEOs to shareholders, totalling around 368,000 words, and firstly concentrated on 23 of those statements, which were said to be hubristic. The aim was to investigate if the yearly shareholder statements from the CEOs of big businesses' contain defining linguistic signs of a language attitude of overconfidence. In addition to finding that there existed a substantial possibility that the media affairs "handlers" of CEOs purposefully reduce (and even attempt to remove) mendacious language usage, the analysis indicated no remarkably different results pattern for the supposedly hubristic use of language in the CEO statements. Asay et al. (2018) examined the hypodissertation that when the CEO is more visible or dominant in the report, shareholders respond to narrative disclosures more strongly. Results indicated that shareholders do not really respond to personal pronouns and images as adverse markers of arrogance and overconfidence since such would probably anticipate a detrimental primary impact on their investing preferences.

Leading to the Gulf Oil spill accident, British Petroleum (BP's) leadership rhetoric and safety protocols were examined by Amernic and Craig (2017). One of the key responsibilities of the CEO was the conceptual building of critical facets of workplace safety in a sizable, dangerous, multinational firm like BP. The authors analysed Tony Hayward's speech from an interpretive intensive reading viewpoint while also analysing the manuscripts of 18 additional statements Hayward gave prior to the Deepwater Horizon oil spill from a social constructionist standpoint. Results showed that the terminology used in the CEO statements aided an economic efficiency and cost management mindset, which was at odds with long-standing workplace safety practices. Additionally, the authors argued that important insights can be gained from a close reading analysis of the narrative in CEO speeches to understand how an organization's safety culture operates.

In their study, Du Toit and Esterhuyse (2021) investigated the similarity between CEOs at large multinational firms and those at SAn companies. The study also examined the extent SAn CEOs' stockholder statements reflect reputation management strategies based on organizational homogeneity. The findings of the study, which showed both positivism as well as pragmatism as the two-storytelling tenets more frequently in use by SAn CEOs in their stockholder statements, were strikingly comparable with those of other countries' businesses. Additionally, the authors concluded that several storytelling techniques used by CEOs of

consumer goods and services businesses trading in the JSE on the shareholder statements could be taken as evidence of the application of perception influencing techniques.

During a 12-year period from 2002 to 2013, Grantham and Vieira Jr (2018) examined ExxonMobil's messaging regarding social responsibility and responsiveness. This timescale was used to determine whether CSR information employed a pre-emptive, responsive, or a combination of these tactics to meet the "Triple Bottom Line (TBL) framework". As the success of CSR activities depends on management's commitment to CSR concerns and on interactions between the CEO and diverse parties, the CEO statement was the best choice for review. The CEO statements' substance recognized possible environmental hazards, however the manner this was written gave the impression that ExxonMobil understood the environmental risks involved in production while continuing to put personnel' safety and productivity first.

Using 304 CEO statements from major American companies between 1998 and 2007, Shin and You (2020) examined how the CEO's choice of words in stockholder statements affected the board of directors' resolution to terminate the CEOs service. Findings showed that the probability of a CEO being fired is lesser once the CEO frequently utilizes wording, which denotes compliance with the dominant institutional rationale of shareholders wealth creation. However, if CEOs who struggle to improve company results equally occur to regularly employ stakeholder's rhetoric as time passes by, those CEOs may be confronted with increasing dismissal threats, not due to their linguistic choices, but as a result of subpar company outcomes. Similarly, Zaccone et al. (2021) investigated how the CEO's utilisation of words as well as investor activism are related, and whether being a famous CEO modifies this link. The authors' argument was that when a CEO uses words that demonstrate compliance with an organisation's behaviour standard, investors are more likely to view it positively and are less likely to utilize their shareholding authority to demand adjustments. Findings showed that CEO statements to stockholders that emphasize shareholder returns are more likely to be read by investors and less likely to attract the focus of activist investors. Additionally, an examination of correspondence from 213 US CEOs by Zaccone et al. (2021) suggests that CEO popularity reduces the link between activism and rhetoric of shareholders wealth.

Boudt and Thewissen (2019) looked at the tone patterns inside CEO statements to stockholders of Dow Jones Industrial Average (DJIA) supporters from 2000 until 2011. Based on the results, executives aim to leave a favourable impression on readers by adjusting the intertextual emotional recurrence inside the CEO statements and that executives employ reputation management practices to subtly alter shareholders' perceptions of a company's future outcomes by making use of a narrative structure in financial reporting explanations. “Chinese English-version CEO correspondence” and “Western English-version CEO correspondence” within financial services IARs were employed in a contrastive evaluation by Huang and Rose (2018) to analyse the language strategies utilised in publications by English-speaking nations with English-language writings from China. Results showed that the European texts employed a combined participatory and interpersonal metadiscourse more regularly. This shows that Chinese CEO statements are far more cantered on persuasive communication, whereas Western CEO statements seem to employ more reputation as well as emotive appeals.

Based on the review of studies done on CEOs and their statements, the researcher concludes that the CEO's words may influence people, emphasise skills, and even promote composure in catastrophe, therefore communicating effectively is essential for a business leader. Executives devote a lot of their time communicating in both official and private conversations and their statements have the power to change how people view the companies as well as CEOs personally.

2.3.4 Top 40 JSE-listed Companies

The JSE, the SAn stock market, is amongst the twenty largest capital markets worldwide, and among emerging markets, it is the sixth largest, according to Robertson (2018). Moreover, it is Africa's largest equities market including over 400 publicly traded businesses and more than \$900 billion in market capitalisation. Additionally, the JSE's valuation is heavily influenced by international fund flows, since it represents 6% of developing market exposure. Lastly, JSE's 190 percent market capitalisation to Gross Domestic Product (GDP) ratio is the world's third highest, behind Hong Kong (914%) as well as Singapore (224%).

By global standards, SA is a sizable country and the most sophisticated stock market on the African continent (Jefferis & Smith, 2005). Therefore listing in the JSE is a significant milestone, let alone featuring in the top 40 of publicly traded companies. Moloi et al. (2021)

contend that the top 40 Index is intended to give an accurate representation of the success of the SAn securities exchange, while (Kotze, 2017; Mamaro & Tjano, 2019; Mouton & Smith, 2016) argue that it accounts for roughly 80 percent of the combined value of shares, and that may be regarded as a key indicator in the market. Kotze (2017) affirmed that the JSE top 40 Indicator Series intends to reflect the performance of SAn companies by offering shareholders a comprehensive collection of indices to monitor the quality of both the nation's main capitalisation as well as sector categories.

Padayachee (2010) suggested that the 40 largest enterprises in the JSE are the best of the crop, with a wide range of industries represented. In (Mouton & Smith, 2016)'s view, these companies also offer a wide variety of financing options and can adjust the terms of financing fairly easily. The top 40 companies constitute the majority of the biggest businesses on the JSE in terms of market value (nearly 80 percent in overall), and as a result, they should speak for a broad range of stakeholders in SA (Marx, 2010). Because the JSE Top 40 index includes the market capitalisation-weighted Top 40 shares, and membership is determined by price, the JSE Top 40 does not have fixed constituents (Barr et al., 2007). Consequently, every year in March, June, September, and December, the Top 40 Index is evaluated to decide the companies that will be featured in the Index. This means that the top 40 list of companies stays updated and is an accurate reflection of the SA equities exchange's market valuation. Heymans and Santana (2018) are of the view that the majority of fund managers' portfolios include practically all commodities inside the Top 40 indices, which are also closely watched by market experts and have high liquidity relative to the other equities traded on the JSE. Therefore, it makes sense that the top 40 indices would outperform the All-Share indicator.

2.4. Gaps in the Literature

The review of literature clearly demonstrates that the use of tone management in CEO statements to influence stakeholder perceptions of the company has been researched in developed nations like the USA and the UK. Notably, studies regarding the impact of financial results on normal tone are limited in developing nations, with few studies exploring how abnormal accruals influence abnormal tone. There has been very little research on CEO statements in SA in general. Significantly, there are no studies specifically focused on the

impact of financial performance on normal tone and the influence of abnormal accruals on unusual tone in CEO statements among the top 40 JSE-listed companies in SA, to the knowledge of the researcher. Additionally, existing studies on the impact of financial results on normal tone offer mixed conclusions, with some reporting a positive relationship, while others found a negative relationship. At the same time, current literature on the influence of abnormal accruals on abnormal tone found only a positive relationship, while there are no studies that have found a negative relationship. As such, this study investigates from a South African (SAn) context, the impact of financial performance on normal tone and the influence of irregular accruals on anomalous tone.

2.5. Summary

This chapter began with an evaluation of the theoretical literature, which revealed that company executives employ tone as a tactic to manage the perceptions stakeholders have concerning the business and the use of impression management is intended to gain legitimacy. From an empirical literature perspective, the review focused on the impact of financial results on normal tone, the influence of abnormal accruals on abnormal tone, the significance of the CEO and the CEO statement, and the top 40 JSE listed companies. Literature demonstrated varied findings regarding the impact of financial performance on normal tone, with some scholars reporting that when financial performance improves, positive tone also improves. While others found that when financial performance declines, the use of pleasant tone increases in order to cover poor performance. On the influence of aberrant accruals on anomalous tone, literature revealed that aberrant accruals and irregular tone are used concurrently as tactics to manage stakeholder views of the company. While there were no studies that showed that abnormal accruals can be used alone, without being accompanied by abnormal tone. Literature also showed that the CEO is a very important figure who drives the performance within an organisation, and that CEOs tend to use their unregulated statements to manipulate stakeholders using tone. Lastly, reviewed studies showed that the top 40 JSE listed firms are adequately representative of all businesses trading in the JSE, as they constitute more than 80% of the market capitalisation.

The following chapter presents the methodology used to conduct this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This chapter describes the instruments, methods, and processes that are known collectively as research methodology, and are used by a scholar to conduct the research. To attain research goals, numerous research techniques are available for the researcher to choose from (Dube et al., 2021). Therefore, it is crucial to choose the research approach carefully in order for the study to succeed. The sections of this chapter include the introduction, research design, research population, sample determination, data sources and variable selection, model specification and analysis, methods of analysis, analysis and presentation of data, reliability and validity of data, ethical considerations and chapter summary.

3.2. Research Design

The design of research is described by Wilson (2014, p. 132) as a methodical procedure which a scholar adheres to, providing specific stages from the beginning to the end and increasing the likelihood that their study will be completed. This study is quantitative in nature. In a quantitative approach, statistics are utilised to methodically study social concerns (Watson, 2015). Moreover, a quantitative study uses measurements but also makes an assumption that the variables being studied are quantifiable and seeks to examine a dataset to identify patterns and connections while also attempting to validate actual observations. Although the quantitative technique is considered to be an appropriate choice for this research, it has a few drawbacks (Dube et al., 2021). Among its shortcomings is that secondary information may be inadequate or erroneous, which has a negative impact on how the information should be interpreted. Furthermore, some have suggested that this method is excessively inflexible whilst it also prevents the discovery of new information because various statistical procedures typically require the rejection or non-rejection of a preconceived hypothesis (Collins et al., 2012; Dube et al., 2021).

This study uses hypotheses to test the extent of variables and to direct research in line with (Carlsson & Lamti, 2015). Additionally, when it comes to testing hypotheses, quantitative research methods are thought to be the best. As a result, the study is built on a conceptual framework that is consequently examined by verifiable data, hence the adoption of positivism. According to Yee and Khin (2010), positivism in financial reporting hypodissertation can be tested statistically to get results that are applicable to all situations. Yee and Khin (2010) go on to say that positivism operates once there is a reason for a situation, which is referred to as causality, and there also must be independent elements that gives rise to the specific results, that are called outcome variables. Causal studies are aimed at finding a statistical relationship among variables and to eliminate potential other reasons (Glymour et al., 2008). The statistical test results aid in achieving the study goals through analysis.

3.3. Research Population

The study's target population includes all JSE publicly traded companies in 2021, and this includes all SA industries. A study's population is comprised of a mix of all the qualities that the study is attempting to explore (Dube et al., 2021). Furthermore, among the most important aspects of a study is choosing the population to sample from.

3.4. Research Sample

From the population of JSE-listed entities, a selection of the top 40 companies excluding banks is made for the 2021 financial period only. Companies with missing information such as CEO statements and those categorised, as banks, which feature in the top 40 entities trading in the JSE, were excluded from the sample. This is because the accruals of banks are regarded sector-specific and, if included, would distort the accrual calculation as supported by (Carlsson & Lamti, 2015). The study employed a non-probability sampling strategy that includes a pre-determined sample. This is a non-random sampling known as proportional quota sampling (Sedgwick, 2012). According to Kotze (2017), the JSE top 40 Indicator Series intends to reflect the performance of SAn companies by offering shareholders a comprehensive collection of indices to monitor the quality of both the nation's main capitalisation as well as sector categories. Padayachee (2010) suggests that the 40 largest enterprises on the JSE are the best

of the crop, with a wide range of industries represented. The calculation of the final sample is presented in table 3.1 below:

Table 3. 1: Sample

| | |
|----------------------------------|-----------|
| Total initial sample | 40 |
| Companies classified as banks | -6 |
| Companies with missing documents | 0 |
| FINAL SAMPLE | 34 |

3.5. Data Sources and Variable Selection

This segment defines the data sources and the selection of variables.

3.5.1. Data Sources

Consistent with the approach followed by Phesa (2021, p. 40), this work utilised readily obtainable records in the form of CEO statements and the annual financial statements, which form part of the Integrated Annual Reports (IARs). Signed IARs were downloaded from the official websites of the top 40 JSE listed businesses excluding financial institutions. To calculate the variables utilised in this analysis, the CEO statements for the financial year 2021 as well as the statements of financial performance for the 2021 financial period, the statements of financial position at the end of the 2021 financial year, and the statements of cash flows for the 2021 reporting period were all retrieved from the downloaded IARs. The calculation of some of the variables necessitated reference to the 2020 reporting period, even though this study's main focus is the 2021 financial year.

3.5.2. Variable Selection

The term "variable selection" implies the method of selecting the best variables out of a comprehensive wide range of variables while eliminating any unnecessary ones (Chowdhury & Turin, 2020). Moreover, a model performs better and makes better estimates when only the most important variables are included. Careful consideration of the selected variables must be made to ensure reliable results (Dube et al., 2021). The following table, Table 3.2 is an outline of variables utilised in this analysis, how they were measured and what they represent:

Table 3. 2: Variables

| Description | Designation | Variable Type | Represents | Calculation | A Priori Sign (Source) |
|----------------------|------------------|---------------|--------------------------|---|-------------------------------|
| Normal Tone | <i>NTONE</i> | Dependent | Tone level | Pleasant terms- unpleasant terms)/(pleasant terms+unpleasant terms) | |
| Irregular tone | <i>ABTONE</i> | Dependent | Management of tone | Regression residual | |
| Irregular accruals | <i>ABACC</i> | Independent | Manipulation of Earnings | Regression residual | + (Carlsson & Lamti, 2015) |
| Performance | <i>LOSS</i> | Dummy | Financial Performance | 1=EARN<0 0=EARN≥0 | |
| <i>EARN_LOSS</i> | <i>EARN_LOSS</i> | Dummy | Interacting factor | EARN x LOSS | |
| Performance | <i>EARN</i> | Independent | Financial Performance | PAT/total assets | + (Carlsson & Lamti, 2015) |
| Size | <i>SIZE</i> | Control | Public Attention | (Closing MVE- Opening MVE)/Opening MVE | + (Carlsson & Lamti, 2015) |
| Book-to-Market Ratio | <i>BTM</i> | Control | Potential for Growth | Book value of equity/market value of equity | + (Carlsson & Lamti, 2015) |
| Annual Stock Return | <i>ASR</i> | Control | Potential for Growth | $((P_1-P_0)+Div)/P_1$ | + (Carlsson & Lamti, 2015) |

Source: Adapted from Carlsson and Lamti (2015)

Normal Tone calculation

To establish the number of pleasant as well as unpleasant terms used, the CEO statements were textually analysed using the Azure Machine Learning (AML) system in Microsoft Excel in line with (Phesa, 2021). AML has a built-in dictionary that has the ability to calculate the total of both pleasant and negative terms used in a sentence. Once the total sentiment was obtained from AML, the following formula adopted from Carlsson and Lamti (2015) which uses net good (positive) terms or net bad (negative) terms as a percent of overall (total) terms to determine Normal Tone was then used in this study to determine the tone variable:

$$\text{Normal Tone} = (\text{Pleasant terms minus Unpleasant terms}) / (\text{Pleasant terms plus Unpleasant terms}).$$

Abnormal Tone

ABTONE is determined as the regression residual in equation [3] below, and acts as a surrogate for tone management (Carlsson & Lamti, 2015; Huang et al., 2014).

Abnormal Accruals

The process of calculating ABACC started in equation (4) below, where total accruals were measured by subtracting cash flows from operations (CFFO) from earnings before non-recurring items (EBNI). Total accruals were then used in equation (5) where ABACC was calculated as a regression residual consistent with the approach used by (Carlsson & Lamti, 2015; Huang et al., 2014). ABACC was used in equation (6) below, to assess the relationship between ABTONE and ABACC.

Financial Performance, EARN and LOSS

EARN represents financial performance, therefore, the measure of EARN variable which is the Return on Assets (ROA) will be calculated as Profit after tax ÷ total assets, by end the 2021 financial term. LOSS is a random value of 1 when EARN is negative and if EARN is 0 or greater than zero, then LOSS is 0. An direct relationship exists between EARN and LOSS

because the amount of LOSS is reliant on EARN (Carlsson & Lamti, 2015). Therefore, to allow for the interactive effects, equation (6) below, uses EARN_LOSS as an interaction factor. EARN_LOSS, is produced by multiplying EARN by LOSS.

Company Size

Big businesses, according to (Li, 2010a), may be more careful in their use of tone in order to minimize political pressure and legal challenges, whilst (Carlsson & Lamti, 2015) argues that enterprises that receive media attention may have an incentive to influence readers' impressions, therefore based on these reasons, size was included as a control variable. SIZE is calculated using the change in equity market value in 2021 divided by opening equity market value i.e. (closing MVE – opening MVE)/opening MVE. The equity market value (MVE) is determined using the shares issued at the beginning and at the end of the reporting period, multiplied by the opening and closing share price respectively.

Equity Book-to-market Value of (BTM)

BTM indicates growth and investment prospects that can change tone level; therefore, when analyzing tone, BTM is regarded as a suitable control variable and is included in all tone regressions. BTM was accounted for in line with (Carlsson & Lamti, 2015). The calculation of BTM is equity carrying value (CV) (\div) by equity market value (MVE) by 2021 reporting period end, therefore $CV/MVE = BTM$. The carrying value of equity is determined by deducting total liabilities (TL) from total assets (TA), therefore, $TA-TL = CV$. Equity market value was arrived at through multiplying issued shares (IS) by 2021 financial period end with a price of shares (SP) on the last day of 2021 financial period, therefore, $IS \times SP = MVE$.

Annual Stock Return (ASR)

Annual Stock Return (ASR) was used to measure expected performance prospects in line with (Carlsson & Lamti, 2015; Li, 2010a), and was included as a control variable in this study. Furthermore, this ratio incorporates forecasts of future performance in addition to what is communicated in EARN. ASR is determined by taking the 2021 closing share price (P1) minus

2021 opening price of shares (P_0) plus dividend per share (Div) for the 2021 financial year all divided (\div) end of the year share price, therefore, $((P_1 - P_0) + Div) \div P_1 = ASR$.

3.6. Model Specification and Analysis

To test the impact of financial performance on normal tone and the influence of abnormal accruals on abnormal tone, this study used both the quantile regression model and generalised linear regression model. Quantile regression model (QRM) tested the effect of predictor variables on outcome variables using unwinsorised values, while the generalised linear regression model (GLM) was applied in examining the effect independent variables on dependent variables using winsorised values. This is because the dataset selected for carrying out this study exhibited the presence of significant outliers. The Grubb's test was used to identify these outliers (minimum or maximum value in a dataset) for the variables. In order to eliminate the effect of outliers, winsorizing was done to the 5th and 95th percentile values. The purpose of using two different regression models was to see which model produces superior results. Therefore, the study chose superior results from the two models. These two models are discussed below.

QRM assists in assessing the impact of the predictor variable on the response variable over every quantile of that dependent variable rather than on the mean value of the dependent variable, according to Hoang et al. (2019). Additionally, QRM resists the influence of outlying observations. QRM allows the comprehension of connections linking variables outside of the mean of the data, which makes it beneficial in understanding response variables that are non-normally distributed and that have nonlinear relationships with predictor variables.

Generalised linear regression model (GLM) uses a series of predictor variables to predict the response variables (BCCVL, 2021). Moreover, the (GLM) is based on the same assumptions as other linear regression models. The underlying premise is that a change in one predictor variable will always affects the response variable. Additionally, GLM is comparatively simple to analyse, but also gives a precise picture of how every independent variable is affecting the dependent variable (Guisan et al., 2002). In addition to the multivariate models, this study also assessed the univariate parameter estimates as a post-hoc analysis to determine the linear

relationship or predictive effect of the independent variables on dependent variables without controlling for other covariates.

3.6.1. The impact of Financial Performance on Normal Tone

In order to evaluate the impact of financial performance on normal tone, the following models were employed in this research:

The following formula adopted from (Carlsson & Lamti, 2015) has been used in this study to determine the tone variable:

$$\text{Normal Tone} = (\text{Pleasant terms minus Unpleasant terms}) / (\text{Pleasant terms plus Unpleasant terms}). \quad [1]$$

The following regression model has been used to assess the impact of financial performance on normal tone and in line with (Carlsson & Lamti, 2015; Huang et al., 2014):

$$NTONE_{\tau} = \beta_0(\tau) + \beta_1(\tau) EARN + \beta_2(\tau) SIZE + \beta_3(\tau) BTM + \beta_4(\tau) ASR + \varepsilon \quad [2]$$

Where:

τ = Quantile;

$\beta_0, \beta_1, \beta_2, \beta_3$ and β_4 = Regression coefficients;

ε = Residuals;

$NTONE$ = Normal tone;

$EARN$ = Financial performance;

$SIZE$ = Company size;

BTM = Book-to-market value of equity

ASR = Annual stock return

3.6.2. The influence of Abnormal Accruals on Abnormal Tone

Irregular tone is a regression residual (ε) and was determined in line with (Carlsson & Lamti, 2015) using the following regression model.

$$\varepsilon = N\text{TONE}_\tau - \beta_0(\tau) + \beta_1(\tau) \text{EARN} + \beta_2(\tau) \text{SIZE} + \beta_3(\tau) \text{BTM} + \beta_4(\tau) \text{ASR} \quad [3]$$

Where:

τ = Quantile;

$\beta_0, \beta_1, \beta_2, \beta_3$ and $\beta_4(\tau)$ = Regression coefficients;

ε = Residuals;

$N\text{TONE}$ = Normal tone;

EARN = Financial performance;

SIZE = Company size;

BTM = Book-to-market value of equity;

ASR = Annual stock return.

In line with (Carlsson & Lamti, 2015; Huang et al., 2014), total accruals calculation was performed first using the following equation proposed by modified Jones model:

$$TA_{jt} = EBNI_{jt} - CFO_{jt} \quad [4]$$

Where:

TA = Total accruals,

EBNI = Earnings before non-recurring transactions,

CFO = Operating cash flows,

j= firm; and

t= year

Abnormal accruals are calculated by applying the modified Jones model below, similar to (Carlsson & Lamti, 2015; Huang et al., 2018):

$$\varepsilon_{jt} = TA - \beta_0 \left(\frac{1}{Assets_{j,t-1}} \right) + \beta_1 (\Delta Revenue_{jt} - \Delta AR_{jt}) + \beta_2 PPE_{jt} \quad [5]$$

Where:

TA = Total accruals

β_0 = Intercept

Assets = Total Assets,

Δ Revenue = Changes in revenue divided by opening total assets,

Δ AR = Changes in trade receivables divided by opening total assets,

$\beta_1; \beta_2$ = Regression co-efficients

PPE = Total property, plant and equipment as a percentage of opening total assets; and

ε = "Regression residual"

j = firm; and

t = year

The influence of abnormal accruals on abnormal tone was assessed using the following regression models to establish the linear relationship that exists between anomalous tone in CEO statements and unusual accruals. (Carlsson & Lamti, 2015).

$$ABTONE_{\tau} = \beta_0(\tau) + \beta_1(\tau) ABACC + \beta_2(\tau) EARN + \beta_3(\tau) Loss + \beta_4(\tau) SIZE + \beta_5(\tau) BTM + \beta_6(\tau) ASR + \beta_7(\tau) Earn_Loss \quad [6]$$

Where:

τ = Quantile;

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and $\beta_7(\tau)$ = Regression coefficients;

ε = Residuals;

ABTONE = Abnormal tone;

ABACC = Abnormal accruals;

EARN = Financial performance;

LOSS = Dummy variable;

SIZE = Company size;

BTM = Book-to-market value of equity;

ASR = Annual stock return;

EARN_LOSS = Dummy variable, Interacting factor.

3.7. Performance Metrics

Following the use of a model to analyse a data set, it is critical to assess the performance of the model itself (Dube et al., 2021). This enables researchers to evaluate how effectively the model fit the data. The following performance measures were used in this study to evaluate the performance of the regression models.

3.7.1. Coefficient of Determination (R^2)

The coefficient of determination, R^2 was used in this study to test the performance of the regression models. To determine R^2 the following formula was used:

$$R^2 = 1 - \frac{RSS}{TSS}$$

Where:

R^2 = coefficient of determination, RSS = stands for the sum of squares of residuals and TSS = is the total sum of squares.

RSS was determined using the following formula:

$$\sum_{i=1}^n (y_i - f(x_i))^2$$

Where: y_i = the i^{th} value of the variable to be predicted; $f(x_i)$ = predicted value of y_i and n = upper limit of summation.

TSS was calculated using the following formula:

$$\sum_{i=1}^n (y_i - \bar{y})^2$$

Where: n = number of observations; y_i = value in a sample; and \bar{y} = mean value of a sample

This study utilized R^2 value, which represents the strength of the correlation seen between predictor variables, control variables, and the outcome variable, to measure the correctness of the regression models used in objectives 1 and 2 and to evaluate how well the models fit the data (Barnes & Forde, 2021; Carlsson & Lamti, 2015). Furthermore, the R^2 value illustrates how well the variables and the equation fit together, and how much the outcome variable is explained by the predictor and control variables.

3.7.2. Mean Absolute Error (MAE)

The MAE is an expression for the averaged absolute errors. MAE is computed using the following formula:

$$MAE = \frac{1}{n} \sum_{i=1}^n |f(x_i) - y_i|$$

Where: MAE = mean absolute error; y_i = is the predicted value; x_i = is the actual value and n = represents the number of data points.

The purpose of MAE is to evaluate the regression models used in this study and to assess their prediction accuracy. MAE is calculated by adding the absolute values of all errors to get the "total error," which is then divided by number of data points to get the average (Willmott & Matsuura, 2005). Additionally, MAE metric is not sensitive to outliers and is a far more accurate and straightforward way to estimate average error.

3.8.Data Validity and Reliability

Quantitative research methods are highly reliable (Carlsson & Lamti, 2015; Collis & Hussey, 2014). The study relies on secondary data gathered from legitimate business web pages; thus the data may be trusted. The audited yearly financial statements that are part of the IARs were used, as were the CEO statements, which were signed by the CEO and included in the signed IARs.

3.9. Ethical considerations

In order to make sure that this study is carried out in an ethical and careful way, the researcher acquired an ethical clearance (Ethical clearance no. 00018252) prior to the information gathering. Additionally, this ensured that neither any individuals or institutions suffered any sort of damage.

3.10. Summary

In this chapter an overview of how the methodology's various parts function in harmony to accomplish the goals of this research was given. Additionally, this chapter covered research design, study population, sample selection method, data sources and variables selection, model specification and analysis, performance metrics used to measure the regression models, data validity and reliability, ethical considerations as well as data presentation and analysis processes.

Empirical results as well as an analysis based on the information gathered are presented in the following chapter. The arrangement is as follows: firstly, the approach followed to detect outliers in the dataset is presented. Thereafter, the presentation of descriptive statistics is presented to provide a statistical overview of the study's variables. This is followed by the Spearman Rho correlation coefficient, which is opted to establish the linear relationships between the variables. Next, the quantile regression model results and the generalised linear regression model findings on the impact of financial performance on normal tone and the

influence of abnormal accruals on abnormal tone are presented. Finally this is followed by a discussion of results and the summary of the chapter.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1. Introduction

Findings from the empirical tests conducted for this study are presented in this chapter, together with associated ramifications for hypothesised relationships. This chapter is organised as follows: first, the approach taken to identify outliers in the data is described, and then descriptive statistics are supplied in an attempt to offer a quantitative overview of the adopted variables. The Spearman Rho correlation coefficients between the variables examined are then presented. This is followed by the presentation of the results of quantile regression analysis and generalised linear regression models on the impact of financial performance on normal tone and the influence of abnormal accruals on abnormal tone. The chapter concludes with a discussion of the results and how it relates to previous literature.

4.2. Preliminary Analysis

4.2.1. Outlier Assessment

Before conducting inferential analysis on the data, it was necessary to conduct statistical tests to assess outliers on the data. The data exhibited significant outliers and in the mean-based models, outliers can change the model equation completely resulting in bad prediction or estimation. Therefore, considering the relatively small sample size, data could not be excluded from analysis solely because of these outliers. As such, all variables that exhibited outliers were winsorized to eliminate all significant outliers. Firstly, graphical methods were utilised to visualise the existence of these outliers (see Appendices Figure A1 to Figure A7). The Grubb's test was then used to identify outliers (minimum or maximum value in a dataset) for the univariate variables. The following table 4.1 presents the Grubb's outlier test for the variables.

Table 4. 1: Grubb's outlier test for variables

| Variable | Right tail detection | | | Left tail detection | | |
|---------------------|----------------------|-------------|---------|---------------------|-------------|---------|
| | Max-value | G-Statistic | p-value | Min-value | G-Statistic | p-value |
| NTONE | | | | | | |
| <i>Unwinsorized</i> | 0.8545 | 1.2741 | 1.0000 | 0.2917 | 1.8136 | 1.0000 |
| ABTONE | | | | | | |
| <i>Unwinsorized</i> | 0.2578 | 1.4433 | 1.0000 | -0.2796 | 1.6589 | 1.0000 |
| EARN | | | | | | |
| <i>Unwinsorized</i> | 0.5332 | 3.3908 | 0.0031* | 0.0030 | 0.9750 | 1.0000 |
| <i>Winsorized</i> | 0.3995 | 2.6931 | 0.0756 | 0.0107 | 0.9083 | 1.0000 |
| SIZE | | | | | | |
| <i>Unwinsorized</i> | 37.0559 | 4.4517 | 0.0001* | 0.0001 | 0.3985 | 1.0000 |
| <i>Winsorized</i> | 10.8734 | 2.4832 | 0.1604 | 0.0006 | 0.4975 | 1.0000 |
| BTM | | | | | | |
| <i>Unwinsorized</i> | 307.6737 | 3.8991 | 0.0001* | 0.5922 | 0.5008 | 1.0000 |
| <i>Winsorized</i> | 98.0111 | 2.2244 | 0.3651 | 0.9130 | 0.6817 | 1.0000 |
| ASR | | | | | | |
| <i>Unwinsorized</i> | 60.8526 | 4.1584 | 0.0001* | -2.3841 | 0.5861 | 1.0000 |
| <i>Winsorized</i> | 9.1746 | 2.2315 | 0.3575 | 0.0014 | 0.6040 | 1.0000 |
| ABACC | | | | | | |
| <i>Unwinsorized</i> | 0.3708 | 3.8205 | 0.0002* | -0.1307 | 1.3469 | 1.0000 |
| <i>Winsorized</i> | 0.1580 | 2.1687 | 0.4298 | -0.1012 | 1.2836 | 1.0000 |

Note: *. Statistically significant at alpha = 0.05

Results in Table 4.1 reveal that when assessing the right tail for NTONE, the p -value is not significant ($G = 0.8545$, $p = 1.0000$), thus, the maximum value 0.8545 is not an outlier. Examining the left tail of NTONE, the Grubb's test revealed that the minimum value 0.2917 is not an outlier ($G = 0.2917$, $p = 1.0000$). According to Grub's test, there is no outlier (minimum value -0.2796) in left tail of ABTONE since the p -value (1.0000) is greater than 0.05. For the right tail of ABTONE, the Grubb's test reveals that there is no statistically significant evidence to reject null hypodissertation (no outlier in the right tail of the data) since p -value (1.0000) is greater than 0.05. Looking at the right tail of the unwinsorized data for EARN, a p -value of 0.0031 shows that the p -value is below the 0.05 level of significance. Therefore, the null hypodissertation of no outliers is rejected indicating that the maximum value 0.5332 in the dataset is an outlier. According to Grub's test, there is no outlier (minimum value 0.0030) in left tail of the unwinsorized data for EARN since the p -value (1.0000) is greater than 0.05. For the right tail of the winsorized data (for EARN), the Grubb's test states that there is no statistically significant evidence to reject null hypodissertation (no outlier in the right tail of the data) since p -value (0.0756) is greater than 0.05. That is, there is no outlier in right tail of the data. This was a similar case with the left tail of the winsorized data for EARN. The Grubb's test revealed that the minimum value 0.0107 is not an outlier ($G = 0.9083$, $p = 1.0000$).

Assessing the right tail for unwinsorized SIZE, the p -value is statistically significant ($G = 4.4517$, $p = 0.0001$), thus, the maximum value 37.0559 is an outlier. Examining the left tail for unwinsorized SIZE, the Grubb's test revealed that the minimum value 0.0001 is not an outlier ($G = 0.3985$, $p = 1.0000$). According to Grub's test, after winsorizing, there is no outlier (minimum value 0.0006) in left tail of SIZE since the p -value (1.0000) is greater than 0.05. For the right tail of the winsorized values of SIZE, the Grubb's test reveals that there is no longer any significant evidence of outliers in the right tail of the data ($G = 2.4832$, $p = 0.1604$). Examining BTM, the right tail of the unwinsorized data shows that the maximum value 307.6737 is a significant outlier ($G = 3.8991$, $p = 0.0001$). According to the Grubb's test, there is no outlier (minimum value 0.5922) in left tail of the unwinsorized data for BTM. After winsorizing, the Grubb's test shows that at the right tail of BTM there is no statistically significant evidence to reject null hypodissertation (no outlier in the right tail of the data) since p -value (0.3651) is greater than 0.05. This was a similar case with the left tail of the winsorized

BTM data. The Grubb's test revealed that the minimum value 0.9130 is not an outlier ($G = 0.6817, p = 1.0000$).

At the right tail of the unwinsorized data for ASR, a p -value of 0.0001 shows that the null hypothesis of no outliers is rejected indicating that the maximum value 60.8526 in the dataset is an outlier. According to Grub's test, there is no outlier (minimum value -2.3841) in left tail of the unwinsorized data for ASR since the p -value (1.0000) is greater than 0.05. For the right tail of the winsorized data for ASR, the Grubb's test reveals that there is no statistically significant evidence to reject null hypothesis (no outlier in the right tail of the data) since p -value (0.3651) is greater than 0.05. Thus, there is no outlier in right tail of the data. This was a similar case with the left tail of the winsorized data for ASR. The Grubb's test revealed that the minimum value 0.0014 is not an outlier ($G = 0.6040, p = 1.0000$). Assessing the right tail for unwinsorized ABACC, the p -value is statistically significant ($G = 3.8205, p = 0.0002$), thus, the maximum value 0.3708 is an outlier. Examining the left tail for unwinsorized ABACC, the Grubb's test revealed that the minimum value -0.1307 is not an outlier ($G = 1.3469, p = 1.0000$). According to Grub's test, after winsorizing, there is no outlier (minimum value -0.1012) in left tail of ABACC since the p -value (1.0000) is greater than 0.05. For the right tail of the winsorized values of ABACC, the Grubb's test reveals that there is no longer any significant evidence of outliers in the right tail of the data ($G = 2.1687, p = 0.4298$).

4.2.2. Descriptive Statistics

After assessing the outliers, a basic descriptive analysis on the study's variables was performed. Table 4.2 presents the descriptive statistics of the variables.

Table 4. 2: Descriptive statistics

| Variable | Mean | SD | Min. | Max. | Q ₁ | Q ₂ | Q ₃ | Sk. | Kurt. |
|---------------------|--------|--------|---------|---------|----------------|----------------|----------------|--------|--------|
| NTONE | | | | | | | | | |
| <i>Unwinsorized</i> | 0.6223 | 0.1823 | 0.2917 | 0.8545 | 0.4473 | 0.6723 | 0.7869 | -0.362 | -1.450 |
| ABTONE | | | | | | | | | |
| <i>Unwinsorized</i> | 0.0078 | 0.1732 | -0.2796 | 0.2578 | -0.1669 | 0.0078 | 0.1611 | -0.226 | -1.505 |
| EARN | | | | | | | | | |
| <i>Unwinsorized</i> | 0.1136 | 0.1237 | 0.0030 | 0.5332 | 0.0379 | 0.0688 | 0.1331 | 2.065 | 4.209 |
| <i>Winsorized</i> | 0.1088 | 0.1079 | 0.0107 | 0.3995 | 0.0379 | 0.0688 | 0.1331 | 1.687 | 2.268 |
| SIZE | | | | | | | | | |
| <i>Unwinsorized</i> | 3.0448 | 7.6399 | 0.0001 | 37.0559 | 0.0046 | 0.0196 | 0.2591 | 3.311 | 12.079 |
| <i>Winsorized</i> | 2.4473 | 5.3482 | 0.0004 | 17.4403 | 0.0046 | 0.0196 | 0.2591 | 2.260 | 3.828 |
| BTM | | | | | | | | | |
| <i>Unwinsorized</i> | 35.515 | 69.799 | 0.5622 | 307.673 | 1.3836 | 4.5373 | 41.632 | 2.917 | 8.711 |
| <i>Winsorized</i> | 29.007 | 47.320 | 0.7744 | 169.473 | 1.3836 | 4.5373 | 41.632 | 2.021 | 3.370 |
| ASR | | | | | | | | | |
| <i>Unwinsorized</i> | 4.8377 | 13.470 | -2.3841 | 60.8526 | 0.0330 | 0.2187 | 2.2340 | 3.591 | 12.612 |
| <i>Winsorized</i> | 3.2644 | 7.1347 | -0.0153 | 27.9842 | 0.0330 | 0.2187 | 2.2340 | 2.816 | 7.572 |
| ABACC | | | | | | | | | |
| <i>Unwinsorized</i> | 0.0000 | 0.0971 | -0.1307 | 0.3708 | -0.0547 | -0.023 | 0.0199 | 1.994 | 5.538 |
| <i>Winsorized</i> | -0.004 | 0.0751 | -0.1013 | 0.1580 | -0.0547 | -0.023 | 0.0199 | 1.074 | 0.382 |

Table 4. 3: Descriptive statistics for LOSS and EARN_LOSS

| Variable | Criteria/Cut off points | Count |
|------------------|-------------------------|-------|
| | 1 = EARN < 0 | 0 |
| LOSS | 0 = EARN ≥ 0 | 34 |
| | Total | 34 |
| | 1 | 0 |
| EARN_LOSS | 0 | 34 |
| | Total | 34 |

The mean of NTONE was 0.6223 (SD = 0.1823). ABTONE had a mean of 0.0078 (SD = 0.1732). The winsorized mean for EARN was 0.1088 (SD = 0.1079). The winsorized mean for SIZE was 2.4473 (SD = 5.3482). Lastly, the winsorized mean values for BTM, ASR and ABACC were 29.007 (SD = 47.320), 3.2644 (SD = 7.1347) and -0.004 (SD = 0.0751) respectively. The two binary variables in the study (i.e., LOSS and EARN_LOSS) were all zeros (see Table 4.3).

4.2.3. Correlation Analysis

Table 4.4 shows the Spearman Rho correlation coefficients between the adopted variables.

Table 4. 4: Correlation matrix

| Variable | NTONE | ABTONE | EARN | SIZE | BTM | ASR | ABACC |
|---------------|----------------------|------------------|------------------|------------------|------------------|------------------|-------|
| NTONE | 1.000 | | | | | | |
| ABTONE | 0.921** | 1.000 | | | | | |
| | (<i><0.001</i>) | | | | | | |
| EARN | 0.108 | -0.040 | 1.000 | | | | |
| | (<i>0.544</i>) | (<i>0.820</i>) | | | | | |
| SIZE | -0.220 | -0.042 | -0.326 | 1.000 | | | |
| | (<i>0.221</i>) | (<i>0.814</i>) | (<i>0.060</i>) | | | | |
| BTM | 0.279 | 0.058 | 0.203 | -0.456** | 1.000 | | |
| | (<i>0.110</i>) | (<i>0.745</i>) | (<i>0.250</i>) | (<i>0.007</i>) | | | |
| ASR | 0.329 | 0.117 | 0.218 | -0.323 | 0.479** | 1.000 | |
| | (<i>0.058</i>) | (<i>0.510</i>) | (<i>0.215</i>) | (<i>0.063</i>) | (<i>0.004</i>) | | |
| ABACC | 0.050 | -0.022 | 0.358** | -0.224 | 0.104 | -0.050 | 1.000 |
| | (<i>0.778</i>) | (<i>0.903</i>) | (<i>0.037</i>) | (<i>0.164</i>) | (<i>0.557</i>) | (<i>0.781</i>) | |

** . Correlation is significant at the 0.01 level (2-tailed).

The Spearman Rho correlation coefficient was opted because it is a rank based coefficient that is not severely affected by outliers as compared to the Pearson’s correlation coefficient (Akoglu, 2018). Furthermore, Pearson’s correlation coefficient is very sensitive to outliers, which can have a very large adverse effect on the line of best fit and can lead to misleading results. In addition, since the data is not consistent to normality, the Spearman Rho correlation coefficient is the ideal non-parametric equivalent to the Pearson’s correlation coefficient (Akoglu, 2018). These results suggest that EARN had no significant correlation with NTONE

($r_s = 0.108$; $p = 0.544$). Similarly, ABTONE had no statistically significant correlation with ABACC ($r_s = -0.022$; $p = 0.903$). On the other hand, NTONE had a strong, positive and significant correlation with ABTONE ($r_s = 0.921$; $p = <0.001$), whilst ABACC had a positive, moderate and significant correlation with EARN ($r_s = 0.358$; $p = 0.037$). The results revealed that BTM had a negative, moderate and significant correlation with SIZE ($r_s = -0.456$; $p = 0.007$), whilst on the other hand, BTM had a positive, moderate and significant correlation with ASR ($r_s = 0.479$; $p = 0.004$).

4.3. The impact of Financial Performance on Normal Tone

Multivariate models were examined first and univariate parameter estimates were later assessed as a post-hoc analysis to determine the linear relationship or predictive effect of the independent variable of interest without controlling for other covariates.

4.3.1. Quantile Regression Model Results

4.3.1.1. Multivariate Quantile Regression Model Results

This sub-section assesses the impact of financial performance on normal tone. In order to estimate the NTONE model, the 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% and 90% quantiles were used (see Table 4.5). This allows for an insight into what factors impact NTONE at the extremes of the distribution, as well as those at quantiles in between the extremes. Table 4.5 shows the results, which reveals both the magnitude and effect of the regression coefficients on the response variables across the quantiles. The results of major interest are the coefficients for EARN. The magnitude of impact that EARN has on NTONE decreases as NTONE moves from the 10% quantile to the 90% quantile. EARN is not statistically significant as from the 40% quantile through to the 90% quantile. Thus, EARN is only statistically significant for the 10%, 20% and 30% quantiles. This suggests that whilst controlling for other covariates, companies in the lowest quantiles of NTONE experience significant and positive effect of financial performance (EARN) on NTONE. MAE shows that, on average, the forecast's distance from the true values is 0.2041, 0.1988 and 0.1771 for the 10%, 20% and 30% quantiles respectively. According to the R-squared values, the models for the 10%, 20% and 30%

quantiles explained 20.6%, 18.7% and 14.5% respectively of the variation in TONE. The established usable models are:

$$NTONE_{0.1} = 0.336 + 0.821*EARN + 0.002*BTM - 0.010*ASR + \varepsilon$$

$$NTONE_{0.2} = 0.356 + 0.705*EARN - 0.006*SIZE + 0.002*BTM - 0.009*ASR + \varepsilon$$

$$NTONE_{0.3} = 0.391 + 0.924*EARN - 0.009*ASR + \varepsilon$$

Table 4. 5: Multivariate statistics and parameter estimates for EARN on NTONE

| Statistic/ Variable | Dependent variable: NTONE | | | | | | | | |
|---|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Q = 0.1 | Q = 0.2 | Q = 0.3 | Q = 0.4 | Q = 0.5 | Q = 0.6 | Q = 0.7 | Q = 0.8 | Q = 0.9 |
| Model Summary | | | | | | | | | |
| <i>R Squared</i> | 0.206 | 0.187 | 0.145 | 0.110 | 0.080 | 0.037 | 0.016 | 0.026 | 0.076 |
| <i>MAE</i> | 0.2041 | 0.1988 | 0.1771 | 0.1611 | 0.1466 | 0.1494 | 0.1762 | 0.1784 | 0.1966 |
| Parameter Estimates by Different Quantiles | | | | | | | | | |
| <i>(Intercept)</i> | 0.336* | 0.356* | 0.391* | 0.438* | 0.512* | 0.636* | 0.778* | 0.781* | 0.826* |
| <i>EARN</i> | 0.821* | 0.705* | 0.924* | 0.801 | 0.580 | 0.277 | -0.049 | -0.027 | -0.099 |
| <i>SIZE</i> | -0.005 | - | -0.004 | 0.004 | 0.004 | 0.002 | 0.001 | 0.000 | 0.000 |
| <i>BTM</i> | 0.002* | 0.002* | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>ASR</i> | - | - | - | -0.007 | 0.005 | 0.003 | 0.000 | 0.000 | -0.001 |

*Significant predictive effect by the predictor/s at alpha = 0.05. MAE is Mean Absolute Error. R Squared is the coefficient of determination..

Predictors: (Constant), EARN, SIZE, BTM and ASR.

4.3.1.2. Univariate Quantile Regression Model Results

A univariate model was examined at different quantiles (10% to 90%) to establish whether without controlling for other covariates does EARN still has the predictive power hence the linear relationship with NTONE. Table 8 shows the results, which reveals that the effect that EARN has on NTONE decreases as NTONE move from the 10% quantile to the 90% quantile. EARN is not statistically significant as from the 30% quantile but only statistically significant for the 10% and 20% quantiles. This suggests that in the absence of other covariates, companies in the lower quantiles (10% and 20%) of NTONE experience significant and positive effect of financial performance (EARN) on NTONE. MAE shows that, on average, the forecast's distance from the true values is 0.2177 and 0.2046 for the 10% and 20% quantiles respectively. According to the R-squared values, the models for the 10% and 20% quantiles explained 12.2% and 11.9% respectively of the variation in NTONE. The established usable models are;

$$NTONE_{0.1} = 0.340 + 0.646*EARN + \varepsilon$$

$$NTONE_{0.2} = 0.366 + 0.597*EARN + \varepsilon$$

Table 4. 6: Univariate statistics and parameter estimates for EARN on NTONE

| Statistic/ Variable | Dependent variable: NTONE | | | | | | | | |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | $Q = 0.1$ | $Q = 0.2$ | $Q = 0.3$ | $Q = 0.4$ | $Q = 0.5$ | $Q = 0.6$ | $Q = 0.7$ | $Q = 0.8$ | $Q = 0.9$ |
| Model Summary | | | | | | | | | |
| <i>R Squared</i> | 0.122 | 0.119 | 0.095 | 0.081 | 0.040 | 0.006 | 0.002 | 0.006 | 0.038 |
| <i>MAE</i> | 0.2177 | 0.2046 | 0.1828 | 0.1571 | 0.1528 | 0.1565 | 0.1778 | 0.1824 | 0.2097 |
| Parameter Estimates by Different Quantiles | | | | | | | | | |
| <i>(Intercept)</i> | 0.340* | 0.366* | 0.428* | 0.509* | 0.636* | 0.678* | 0.787* | 0.799* | 0.848* |
| <i>EARN</i> | 0.646* | 0.597* | 0.481 | 0.614 | 0.278 | 0.167 | -0.012 | -0.039 | -0.151 |

*Significant predictive effect by the predictor/s at alpha = 0.05. MAE is Mean Absolute Error. R Squared is the coefficient of determination..

Predictors: (Constant), EARN.

4.3.2. Generalised Linear Regression Model results

4.3.2.1. Multivariate Generalised Linear Regression Model Results

Multivariate models were examined first and univariate parameter estimates were later assessed as a post-hoc analysis to determine the linear relationship or predictive effect of the independent variable of interest without controlling for other covariates.

Table 4.7 presents the multivariate analysis of the relationship between EARN and NTONE using generalised linear regression model. Whilst controlling other covariates, there was no statistically significant linear relationship between EARN and NTONE for the multivariate GLM ($\beta_1 = 0.326$ with Wald 95% CI [-0.085 – 0.737]; $p = 0.120$).

Table 4. 7: Multivariate GLM for the effect of EARN on NTONE

| Variable/ Statistic | Multivariate Generalized Linear Regression Beta Estimates & Model Significance | | |
|---------------------|--|----------------|-----------------|
| | Beta (SE) | Wald 95% CI | <i>p</i> -value |
| <i>(Intercept)</i> | 0.548 (0.052) | [0.447 0.649] | <0.001* |
| <i>EARN</i> | 0.326 (0.209) | [-0.085 0.737] | 0.120 |
| <i>SIZE</i> | <0.0001 (0.010) | [-0.020 0.021] | 0.965 |
| <i>BTM</i> | 0.001 (0.001) | [-0.001 0.003] | 0.516 |
| <i>ASR</i> | 0.011 (0.009) | [-0.008 0.030] | 0.258 |
| <i>Deviance</i> | Value/df = 0.032 | | |
| <i>Omnibus Test</i> | $p = 0.246$ | | |

*Significant predictive effect by the predictor/s at alpha = 0.05.

Predictors: (Constant), EARN, SIZE, BTM and ASR.

Dependent variable: NTONE.

4.3.2.2. Univariate Generalised Linear Regression Model Results

A univariate model was examined to establish whether EARN will have a significant relationship with NTONE without controlling for other covariates. Examining the univariate regression parameter estimates, EARN had a statistically significant and a positive linear relationship with NTONE ($\beta_1 = 0.433$ with Wald 95% CI [0.081 – 0.784]; $p = 0.016$). For this univariate model, deviance/df = 0.032 indicating an acceptable model fit (see Table 4.8). The usable model is;

$$NTONE = 0.575 + 0.433 * EARN + \varepsilon$$

Table 4. 8: Univariate GLM for the effect of EARN on NTONE

| Variable/ Statistic | Univariate Generalized Linear Regression Beta Estimates & Model Significance | | |
|---------------------|---|---------------|----------|
| | Beta (SE) | Wald 95% CI | p-value |
| <i>(Intercept)</i> | 0.575 (0.045) | [0.487 0.663] | <0.0001* |
| <i>EARN</i> | 0.433 (0.179) | [0.081 0.784] | 0.016* |
| <i>Deviance</i> | Value/df = 0.032 | | |
| <i>Omnibus Test</i> | $p = 0.129$ | | |

*Significant predictive effect by the predictor/s at alpha = 0.05.

Predictors: (Constant), EARN

Dependent variable: NTONE

4.4. The influence of Abnormal Accruals on Abnormal Tone

Multivariate models were examined first and univariate parameter estimates were later assessed as a post-hoc analysis to determine the linear relationship or predictive effect of the independent variable of interest without controlling for other covariates.

4.4.1. Quantile Regression Model Results

4.4.1.1. Multivariate Quantile Regression Model Results

The main objective of this sub-section is to use quantile regression models to establish the linear relationship that exists between anomalous tone in CEO statements and unusual accruals. To establish the usable models, quantiles from 10% to 90% were utilized in order to have a clear insight into what predictors impact ABTONE across the entire range of the distribution. Table 4.9 shows the results, which reveals both the magnitude and effect of the regression coefficients on the response variable across the quantiles. The results of major interest are the coefficients of ABACC. The magnitude of effect that ABACC has on ABTONE decreases as ABTONE move from the 10% quantile to the 90% quantile. ABACC is not statistically significant from the 10% quantile to the 80% quantile. Thus, ABACC is only statistically significant for the 90% quantile. This suggests that whilst controlling for other covariates, companies in the 90% quantile of ABTONE experience significant and negative effect of unusual accruals (ABACC) on ABTONE. MAE shows that, on average, the forecast's distance from the true values is 0.1866 for the 90% quantile model. According to the R-squared value, this model explained 14.7% of the variation in ABTONE. The established usable model is:

$$ABTONE_{0.9} = 0.257 - 0.162*ABACC - 0.421*EARN + 0.0001*BTM - 0.002*ASR + \varepsilon$$

Table 4. 9: Multivariate statistics and parameter estimates for ABACC on ABTONE

| Statistic/ Variable | Dependent variable: ABTONE | | | | | | | | |
|---|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | $Q = 0.1$ | $Q = 0.2$ | $Q = 0.3$ | $Q = 0.4$ | $Q = 0.5$ | $Q = 0.6$ | $Q = 0.7$ | $Q = 0.8$ | $Q = 0.9$ |
| Model Summary | | | | | | | | | |
| <i>R Squared</i> | 0.100 | 0.082 | 0.054 | 0.043 | 0.046 | 0.058 | 0.069 | 0.108 | 0.147 |
| <i>MAE</i> | 0.2097 | 0.2027 | 0.1832 | 0.1564 | 0.1443 | 0.1503 | 0.1593 | 0.1746 | 0.1866 |
| Parameter Estimates by Different Quantiles | | | | | | | | | |
| <i>(Intercept)</i> | -0.264* | -0.232* | -0.180* | -0.070 | 0.057 | 0.143* | 0.159* | 0.220* | 0.257* |
| <i>ABACC</i> | -0.076 | -0.071 | -0.185 | -0.330 | -0.068 | -0.115 | -0.126 | -0.102 | -0.162* |
| <i>EARN</i> | 0.833* | 0.646* | 0.595 | 0.276 | 0.041 | -0.154 | -0.200 | -0.325* | -0.421* |
| <i>SIZE</i> | -0.003 | -0.005 | -0.003 | 0.005 | 0.004 | 0.003 | 0.002 | 0.002 | 0.001 |
| <i>BTM</i> | 0.001* | 0.001* | 0.000 | -0.001 | -0.001 | -0.001 | -5.7e-5 | 0.000 | 0.000* |
| <i>ASR</i> | -0.012* | -0.010* | -0.007 | -0.001 | 0.002 | 0.000 | 0.000 | -0.001 | -0.002* |

*Significant predictive effect by the predictor/s at alpha = 0.05. **MAE** is Mean Absolute Error. **R Squared** is the coefficient of determination..

Predictors: (Constant), ABACC, EARN, SIZE, BTM and ASR.

LOSS and EARN_LOSS were omitted since they were constants.

4.4.1.2. Univariate Quantile Regression Model Results

A univariate model was examined at different quantiles to establish whether ABACC will still have the same impact on ABTONE without controlling for other covariates. Table 4.10 reveals that the effect on ABTONE by ABACC decreases as ABTONE move from the 10% quantile to the 90% quantile. ABACC is not statistically significant up to the 80% quantile but only statistically significant for the 90% quantile. This suggests that in the absence of other covariates, companies in the 90% quantile of ABTONE experience a significant and negative relationship of ABACC and ABTONE. This conclusion is somewhat similar to the one in the multivariate model. This suggests that, whether controlling or not controlling for other covariates, companies in the 90% quantile of ABTONE experience a significant and negative relationship of ABACC and ABTONE. MAE shows that, on average, the forecast's distance

from the true values is 0.2042 for the 90% quantile model. According to the R-squared value, this model explained only 3.3% of the variation in ABTONE. The established usable model is;

$$ABTONE_{0.9} = 0.209 - 0.358*ABACC + \varepsilon$$

Table 4. 10: Univariate statistics and parameter estimates for ABACC on ABTONE

| Statistic/ Variable | Dependent variable: ABTONE | | | | | | | | |
|---|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | <i>Q</i> = 0.1 | <i>Q</i> = 0.2 | <i>Q</i> = 0.3 | <i>Q</i> = 0.4 | <i>Q</i> = 0.5 | <i>Q</i> = 0.6 | <i>Q</i> = 0.7 | <i>Q</i> = 0.8 | <i>Q</i> = 0.9 |
| Model Summary | | | | | | | | | |
| <i>R Squared</i> | 0.007 | 0.003 | 0.001 | 0.005 | 0.002 | 0.006 | 0.003 | 0.020 | 0.033 |
| <i>MAE</i> | 0.2375 | 0.2102 | 0.1885 | 0.1650 | 0.1510 | 0.1595 | 0.1747 | 0.1893 | 0.2042 |
| Parameter Estimates by Different Quantiles | | | | | | | | | |
| <i>(Intercept)</i> | -0.224* | -0.185* | -0.139* | -0.060 | 0.059 | 0.114 | 0.162* | 0.188* | 0.209* |
| <i>ABACC</i> | 0.220 | 0.115 | -0.009 | -0.222 | -0.224 | -0.321 | -0.058 | -0.229 | -0.358* |

*Significant predictive effect by the predictor/s at alpha = 0.05. **MAE** is Mean Absolute Error. **R Squared** is the coefficient of determination..

Predictors: (Constant), ABACC.

4.4.2. Generalised Linear Regression Model Results

Multivariate models were examined first and univariate parameter estimates were later assessed as a post-hoc analysis to determine the linear relationship or predictive effect of the independent variable of interest without controlling for other covariates.

4.4.2.1. Multivariate Generalised Linear Regression Model Results

Table 4.11 presents the multivariate parameter estimates, point estimates, standard error of the estimates. The 95% Wald confidence intervals as well as the *p*-values for the relevant parameters for the analysis of the predictive effect of ABACC on ABTONE using generalized linear regression models. The multivariate GLM reveals that even when controlling for the other covariates, there was no statistically significant predictive effect of ABACC on ABTONE ($\beta_1 = 0.082$ with Wald 95% CI [-0.694 – 0.857]; *p* = 0.836).

Table 4. 11: Multivariate GLM for the effect of ABACC on ABTONE

| Variable/ Statistic | Multivariate Generalized Linear Regression Beta Estimates & Model Significance | | |
|---------------------|--|----------------|-----------------|
| | Beta (SE) | Wald 95% CI | <i>p</i> -value |
| <i>(Intercept)</i> | 0.002 (0.056) | [-0.108 0.111] | 0.976 |
| <i>ABACC</i> | 0.082 (0.395) | [-0.694 0.857] | 0.836 |
| <i>EARN</i> | -0.030 (0.267) | [-0.553 0.493] | 0.911 |
| <i>SIZE</i> | <0.001 (0.011) | [-0.021 0.021] | 0.989 |
| <i>BTM</i> | <0.001 (0.001) | [-0.002 0.002] | 0.897 |
| <i>ASR</i> | 0.007 (0.010) | [-0.013 0.026] | 0.499 |
| <i>LOSS</i> | 0 ^a | - | - |
| <i>EARN LOSS</i> | 0 ^a | - | - |
| <i>Deviance</i> | Value/df = 0.035 | | |
| <i>Omnibus Test</i> | <i>p</i> = 0.996 | | |

*Significant predictive effect by the predictor/s at alpha = 0.05.

Predictors: (Constant), ABACC, EARN, SIZE, BTM, ASR, LOSS and EARN_LOSS.

Dependent variable: ABTONE.

4.4.2.2. Univariate Generalised Linear Regression Model Results

A univariate model was examined to establish whether ABACC will have a significant relationship with ABTONE without controlling for other covariates. Table 4.12 presents the univariate estimates for the relevant parameters for the analysis of the relationship between ABACC and ABTONE using generalized linear regression model. The results suggests that ABACC had no significant relationship between ABACC and ABTONE ($\beta_1 = 0.035$ with Wald 95% CI [-0.642 – 0.712]; $p = 0.920$).

Table 4. 12: Univariate GLM for the effect of ABACC on ABTONE

| Variable/ Statistic | Univariate Generalized Linear Regression Beta Estimates & Model Significance | | |
|---------------------|---|----------------|-----------------|
| | Beta (SE) | Wald 95% CI | <i>p</i> -value |
| <i>(Intercept)</i> | 0.008 (0.029) | [-0.049 0.065] | 0.784 |
| <i>ABACC</i> | 0.035 (0.345) | [-0.642 0.712] | 0.920 |
| <i>Deviance</i> | Value/df = 0.031 | | |
| <i>Omnibus Test</i> | <i>p</i> = 0.930 | | |

*Significant predictive effect by the predictor/s at alpha = 0.05.

Predictors: (Constant), ABACC.

Dependent variable: ABTONE.

4.5. Discussion

Throughout the study, the aim was to analyse the impact of financial performance on the normal tone of CEO statements and, to examine the influence of abnormal accruals on the abnormal tone in CEO statements. The research findings show mixed results as detailed below.

4.5.1. The impact of Financial Performance on Normal Tone

The results of the Spearman Rho correlation coefficient suggest that financial performance had no significant correlation with normal tone ($r_s = 0.108$; $p = 0.544$). The multivariate quantile regression coefficients as expected showed a positive impact of EARN on NTONE, after adjusting for SIZE, BTM and ASR. The impact of EARN on NTONE at quantiles 10%, 20% and 30% is positive and statistically significant at the 5% threshold. The impact of EARN on NTONE from quantiles 40% to 90% is still positive even though statistically insignificant. In quantiles 10%, 20% and 30% SIZE has an inverse association with NTONE and a positive association from quantiles 40%, 50%, 60%, 70%, 80% and 90%. The relationship between company SIZE and NTONE is statistically insignificant in all quantiles from 10% to 90%, except in the 20% quantile. ASR on the other hand showed both a positive and statistically

significant impact on NTONE in quantiles 10%, 20% and 30%, while companies in quantiles 40%, 50%, 60%, 70%, 80% and 90% revealed a negative and insignificant relationship between ASR and NTONE. Lastly, BTM showed a positive effect on NTONE in all quantiles from 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% and 90%. Only quantiles 10% and 20% showed a statistically significant relationship between BTM and NTONE.

The univariate QRM results revealed that the effect that EARN has on NTONE decreases as NTONE moves from the 10% quantile to the 90% quantile. Only in quantiles, 10% and 20% is the impact of NTONE on EARN statistically significant. The impact of EARN on NTONE is positive from quantiles 10% to 60% and negative from quantiles 70% to 90%. This shows that only businesses in the lower quantiles (10% and 20%) are seeing a statistically significant and positive impact of EARN on NTONE in the absence of other covariates.

Using the multivariate GLM, results revealed that whilst controlling for SIZE, BTM and ASR, there was no statistically significant impact of EARN on NTONE ($\beta_1 = 0.326$ with Wald 95% CI [-0.085 – 0.737]; $p = 0.120$).

The univariate GLM findings indicated that EARN had a statistically significant and a positive impact on NTONE ($\beta_1 = 0.433$ with Wald 95% CI [0.081 – 0.784]; $p = 0.016$).

A positive linear relationship indicates that financial performance and normal tone are moving in the same direction, in other words when financial performance improves (increases), positive tone also increases and when financial performance declines (decreases), the utilisation of pleasant tone also decreases in narrative disclosures.

A common trait shared by all the companies in all quantiles, including those in quantiles 10%, 20%, and 30%, was that they are profitable. None of them reported a loss in the year under review, which is 2021, according to an analysis of the distinctive characteristics of the companies in different quantiles. Each quantile contains a mix of businesses that are both moderately and extremely profitable. All companies in the sample were found to be using positive tone in their CEO statements, which is similar to the results by Aly et al. (2018) who found that companies in the developing countries have a tendency of utilising more positive tone in narrative statements.

An overwhelming majority of studies in literature showed that financial performance has a positive impact on the normal tone. These results further indicate that profitable companies tend to use more pleasant tone in their CEO statements, and this is consistent with the findings by (Phesa, 2021, p. 54) who discovered that profitable as well as exceptionally profitable businesses tended to employ extra upbeat language in the narrative disclosures compared to unprofitable as well as highly unprofitable businesses. The findings are also supported by several studies (Amernic & Craig, 2007; Carlsson & Lamti, 2015, p. 25; Henry, 2008; Merkl-Davies & Brennan, 2007) who all observed that when a company is profitable, executives employ a positive tone and tend to credit their management's efforts for the businesses' success. These findings contradict those reported by Cho et al. (2010) who concluded that companies with a declining financial performance and those that are incurring losses have a more upbeat tone in their narrative disclosures to cover or to hide their poor performance.

Consistent with Carlsson and Lamti (2015), findings further revealed a positive impact of business size on the normal tone used in CEO statements, even though this association is statistically insignificant. Due to the statistical insignificance of the connection, the impact of firm size on normal tone cannot be proven. On the other hand, in line with Li (2010a) findings indicated that there is a positive and statistically significant impact of ASR on normal tone in some quantiles. This indicates that the normal tone used in CEO statements moves in the same direction with annual stock returns i.e. as annual stock returns increase, normal tone increases. Contrary to Carlsson and Lamti (2015), findings confirmed a positive and statistically significant impact of BTM on normal tone. This suggests that as growth and investment potential increases, positive tone also increases in the CEO statements.

According to the multivariate models, MAE shows that, on average, the difference between the predicted value and the actual values is 0.2041, 0.1988 and 0.1771 for the 10%, 20% and 30% quantiles respectively. This average error is considered small, suggesting that the quantile regression model is the best fit for the dataset. In contrast, the R-squared values for the 10%, 20% and 30% quantiles explained 20.6%, 18.7% and 14.5% respectively of the variation in TONE. In the univariate models, MAE shows that, on average, the difference between the predicted values and the actual values is 0.2177 and 0.2046 for the 10% and 20% quantiles respectively. According to the R-squared values, the models for the 10% and 20% quantiles explained 12.2% and 11.9% respectively of the variation in TONE.

Since H_{11} is supported by the empirical findings of this research, H_{10} is hence invalidated.

4.5.2. The influence of Abnormal Accruals on Abnormal Tone

Similarly, the Spearman Rho correlation coefficient results reveal that ABACC had no statistically significant correlation with ABTONE ($r_s = -0.022$; $p = 0.903$). The results of the multivariate QRM showed that ABACC has a negative influence on ABTONE in all quantiles 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% and 90%. Additionally, the linear relationship between ABACC and ABTONE is statistically insignificant from quantiles 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% and only statistically significant at quantile 90%. In quantiles 10%, 20%, 30%, 40%, and 50%, EARN has a positive effect on ABTONE, and a negative impact from quantiles 60%, 70%, 80% and 90%. The linear relationship is statistically significant in quantiles 10%, 20%, 80% and 90%. On the other hand, SIZE shows a negative effect on ABTONE in quantiles 10%, 20%, 30%, and a positive effect from quantiles 40%, 50%, 60%, 70%, 80% and 90%. The linear relationship between company SIZE and ABTONE is statistically insignificant in all quantiles. BTM has a positive impact on ABTONE in quantiles 10%, 20%, 30%, 80% and 90%, and a negative impact in quantiles 40%, 50%, 60%, and 70%. The linear relationship between BTM and ABTONE is statistically significant in quantiles 10%, 20%, and 90%, with a statistically insignificant relationship in quantiles 30%, 40%, 50%, 60%, 70% and 80%. Lastly, ASR has a negative influence on ABTONE in quantiles 10%, 20%, 30%, 40%, 80% and 90%, with a positive influence in quantiles 50%, 60% and 70%. The linear relationship between ASR and ABTONE is statistically significant in quantiles 10%, 20%, and 90%, with a statistically insignificant relationship in quantiles 30%, 40%, 50%, 60%, 70% and 80%.

The univariate QRM results showed that the effect on ABTONE by ABACC decreases as ABTONE moves from the 10% quantile to the 90% quantile. ABACC is not statistically significant up to the 80% quantile but only statistically significant for the 90% quantile. This suggests that in the absence of other covariates, companies in the 90% quantile of ABTONE experience a statistically significant and negative influence of ABACC on ABTONE. This conclusion is somewhat similar to the one in the multivariate model. This suggests that, whether controlling or not controlling for other covariates, companies in the 90% quantile of ABTONE experience a statistically significant and negative effect of ABACC on ABTONE.

The multivariate GLM reveals that even when controlling for the other covariates, there was no statistically significant predictive effect of ABACC on ABTONE ($\beta_1 = 0.082$ with Wald 95% CI [-0.694 – 0.857]; $p = 0.836$).

On the other hand, the univariate GLM findings showed that ABACC had no statistically significant influence of ABACC on ABTONE ($\beta_1 = 0.035$ with Wald 95% CI [-0.642 – 0.712]; $p = 0.920$).

According to the results of this study, ABACC has a statistically significant and negative influence on abnormal tone. A negative linear relationship indicates that ABACC and ABTONE move in different directions i.e. a rise in ABACC is ensued by a decrease in ABTONE. All companies in the sample were found to have abnormal accruals; however, these companies do not cover their abnormal accruals by using of abnormal tone in CEO statements. The use of abnormal accruals in the compilation of annual financial statements is a form of earnings management. According to the results of this research, there is no support for the hypothesis that companies with abnormal accruals use abnormal tone to conceal their abnormal accruals.

There are plenty of studies in literature that reported a positive and a statistically significant influence of ABACC on ABTONE. However, the findings of this study are contrary to the findings of scholars such as (Carlsson & Lamti, 2015; Huang et al., 2014) who found that abnormal accruals have a positive influence on abnormal tone in CEO statements. Huang et al. (2018) argued that executives in companies having excessive anomalous accruals as well as companies, which exceeded profit benchmarks tended to employ increased pleasant language throughout results publications to sensationalize the voluntary financial figures, which they later disclose through accounting records, however our findings suggest that this is not the case. According to the knowledge of the researcher. There are no studies in the body of literature that is currently available that have documented a negative influence of abnormal accruals on abnormal tone, according to the researcher's knowledge.

Findings showed a negative and statistically insignificant effect of company SIZE on ABTONE. This implies that the effect of size on abnormal tone cannot be proven. Additionally, findings showed a positive and a statistically significant impact of BTM on ABTONE. This indicates that as growth and investment prospects increase, abnormal tone in

CEO statements also increases, and when growth and investment prospects decrease, abnormal tone in CEO statements also declines. Results found that the influence of ASR on ABTONE is positive and statistically significant. Which implies that as annual stock returns increase, the use of abnormal tone also increases, and when stock return decrease, the use of abnormal tone also declines. Findings also showed a statistically significant and positive effect of EARN on ABTONE. This suggests that as financial performance increases, the use of abnormal tone also increases in the CEO statements, and when financial performance declines, the use of abnormal tone also decreases. Lastly, the two binary variables LOSS and EARN_LOSS did not have an effect on ABTONE because they were all zeros.

In the multivariate models, MAE shows that, on average, the difference between the predicted values and the actual values is 0.1866 for the 90% quantile model. The error is considered small and indicates that the quantile regression model is a suitable model for the data set. According to the R-squared value, this model explained 14.7% of the variation in ABTONE. On the univariate model on the other hand, MAE showed that, on average, the difference between the predicted values and the actual values is 0.2042 for the 90% quantile model. According to the R-squared value, this model explained only 3.3% of the variation in ABTONE.

According to the findings of this study **H2₁** is rejected, and **H2₀** is thus accepted.

4.6. Summary

In this chapter empirical results and an analysis based on the information gathered were presented. Firstly, a preliminary analysis, which began by detailing the approach followed to detect outliers in the dataset, was presented. The presentation of descriptive statistics then followed to give a statistical overview of the study's variables. This was followed by the Spearman Rho correlation coefficient, which was used to determine the linear relationships between the variables chosen for this study. The main results on the impact of financial performance on normal tone and the influence of anomalous accruals on irregular tone were presented in the following format: The results from both the multivariate QRM and the univariate QRM were presented. Then the presentation of the results of both the multivariate

GLM and univariate GLM was made. The last part of this chapter focused on the discussion of the results linking them to previous studies.

The results revealed that financial performance has a positive and a statistically significant impact on normal tone. This indicates that as financial performance increases positive tone also increases and when financial performance declines, positive tone declines. Findings also indicated that abnormal accruals have a negative and statistically insignificant influence on abnormal tone. Which means that abnormal accruals and abnormal tone do not co-exist. When abnormal accruals increase, abnormal tone decreases. This tells us that companies involved in accrual-based earnings management do not cover this practice by using abnormal tone in their CEO statements.

The hypotheses employed in this work is summarised in table 4.13 below, along with information on whether or not it was supported by the data.

Table 4. 13: Summary of hypodissertation tests

| | |
|---|----------------------|
| <p>H1₁: Financial performance has a statistically significant and positive impact on the normal tone in the CEO statements of the Top 40 JSE publicly traded companies.</p> | <p>Supported</p> |
| <p>H2₁: Abnormal accruals have a statistically significant and positive influence on abnormal tone in the CEO statements of the top 40 JSE publicly traded companies.</p> | <p>Not supported</p> |

The following chapter will provide a summary and conclusion of the study, recommendations of this study, and suggestions for future study.

CHAPTER 5: SUMMARY, CONCLUSIONS AND, RECOMMENDATIONS

5.1. Introduction

A number of financial reporting scandals have recently rocked the business sector. Regrettably, SA has not been immune to this pattern of deceptive financial reporting, and investors have lost money when these businesses inevitably fail. Due to this, the impression that firm management communicates in the discretionary narrative disclosures is now given serious consideration. Communication tools like the CEO statements are frequently used, and they are getting more intricate every day because of the language used to construct them. It is possible to sway stakeholders' opinions by distorting the tone of these statements. The purpose of this study was therefore, to analyse the impact of financial performance on the normal tone used in CEO statements and the influence of abnormal accruals on abnormal tone.

Section 5.2 provides a summary of the study highlighting both the theoretical and empirical literature, and provides conclusions based on the results of this study. In section 5.3 recommendations are provided based on the conclusions made in this study. Lastly, section 5.4 suggests areas of future study.

5.2. Summary and Conclusions

In order to have a deeper understanding of tone management the researcher conducted a literature review focusing on both theoretical and empirical literature, as presented in Chapter 2. The theoretical literature review revealed that managing impressions is a key component of financial reporting, which involves controlling and influencing the impressions users receive (Davies & Brennan, 2007, p. 3). On the other hand, managers are suspected of using company annual reporting as a way of "*strategically manipulating the views and decisions of stakeholders*" (Yuthas et al., 2002, p. 142). It was also revealed that managers selectively present data in the reports in a way, which favours both businesses plus them, while this may not necessarily be benefiting investors and other interested parties, per the concept of impression management theory (Du Toit & Esterhuysen, 2021). Utilisation of pleasant tone

was found to be one of the impression management tactics used by management in their narrative disclosures with the aim of gaining legitimacy (Phesa, 2021).

Prior to performing an inferential analysis on the data during the execution phase, it was necessary to run statistical tests on the data to identify any outliers. Significant outliers were present in the data, and in mean-based models, outliers can radically alter the model equation, leading to inaccurate prediction or estimation. As a result, given the limited sample size, data could not be eliminated from analysis due to these outliers alone. As a result, all variables with outliers were winsorized to get rid of all notable outliers. To analyse the impact of company financial performance on the normal tone of CEO statements and the influence of abnormal accruals on abnormal tone, this study used both multivariate and univariate quantile regression models on unwinsorised values. The multivariate and univariate generalised linear regression models were used on winsorised values of the same dataset.

The results of this study showed that financial performance has a positive and statistically significant impact on normal tone. This implies that when financial performance improves, the use of positive tone in CEO statements also increases and when financial performance declines, the use of positive tone in CEO statements likewise decreases. All companies in the sample used positive tone in their CEO statements and all these companies were profitable or had a positive financial performance. These results were consistent with those of scholars (Carlsson & Lamti, 2015; Huang et al., 2014) who found a statistically significant and positive impact of financial performance on normal tone. Consistent with the findings of the studies (Carlsson & Lamti, 2015; Huang et al., 2014), the results of this study further found that profit making companies use more pleasant language in the narrative disclosures. This was in agreement with the findings by Phesa (2021) who found that amongst the top 40 JSE trading businesses, profitable and extremely profitable utilised more upbeat sentiments in their discretionary narrative disclosures. These findings were however, inconsistent with studies (Bushee et al., 2018; Cho et al., 2010), who reported that loss-making companies tend to use a more pleasant tone in their discretionary disclosures such as CEO statements. This is a notable lack of accord in the empirical literature on the impact of company financial performance on normal tone used in the statements of CEOs.

Since **H1₁** is supported by the empirical findings of this research, **H1₀** is hence invalidated in favour of **H1₁**.

Findings of this study showed that abnormal accruals have a negative and statistically significant influence on abnormal tone. This suggests that abnormal accruals and abnormal tone do co-exist. Implying that when abnormal accruals increase, abnormal tone decreases. All companies in the sample were found to have abnormal accruals in their annual financial statements; however, there is no evidence to suggest that these companies use abnormal tone to cover their abnormal accruals. These findings are not consistent with the studies (Carlsson & Lamti, 2015; Huang et al., 2014) who found a positive influence of abnormal accruals on abnormal tone in CEO statements. In addition, the results of this study are not consistent with those of Huang et al. (2018) who argued that executives in companies having excessive anomalous accruals and companies, which exceeded profit benchmarks tended to employ increased pleasant language throughout results publications to sensationalize the voluntary financial figures, which they later disclose through accounting records. The researcher is unaware of any studies that have shown a negative influence of abnormal accruals on abnormal tone in the body of existing literature.

According to the findings of this study **H2₁**, is rejected, and **H2₀** is thus accepted.

5.3.Recommendations

To avoid making impulsive economic decisions that could result in financial losses, users of annual financial statements are advised to carefully scrutinise the tone used in CEO statements, to identify whether or not it is aimed at concealing poor performance or motivated by good performance.

It is also suggested that academic institutions pay particular attention to the findings of this research when tackling earnings management practices as part of their accounting and auditing curricula. It would also be ideal for the standard setting bodies to consider reducing the flexibility and the amount of judgement given to preparers of financial statements in order to prevent earnings management practices. Additionally, investors and financial analysts should be lookout for earnings management practices when selecting companies to invest in.

5.4.Future Research Suggestions

This study limited itself to studying tone management. Future studies should consider using a bigger sample by studying the tone of all listed companies, instead of only focusing on the top 40 companies as this study has done. It is also suggested that the readability, the use of personal references, use of graphs and the use of photographs in the CEO statements of SA JSE listed companies be studied as this could be another tactic of impression management. Lastly, another study can consider using a different method of determining the tone used in CEO statements as this study only limited itself to using Azure Machine Learning to quantify the tone of CEO statements. Research objective 2 results revealed a negative and statistically significant influence of abnormal accruals on abnormal tone. This is however, inconsistent with findings of previous scholars such as (Carlsson & Lamti, 2015; Huang et al., 2014). It is suggested that this relationship be studied further from a SAn context using an increased sample size, to ensure that this inconsistency is normal and not due to the nature and size of the sample.

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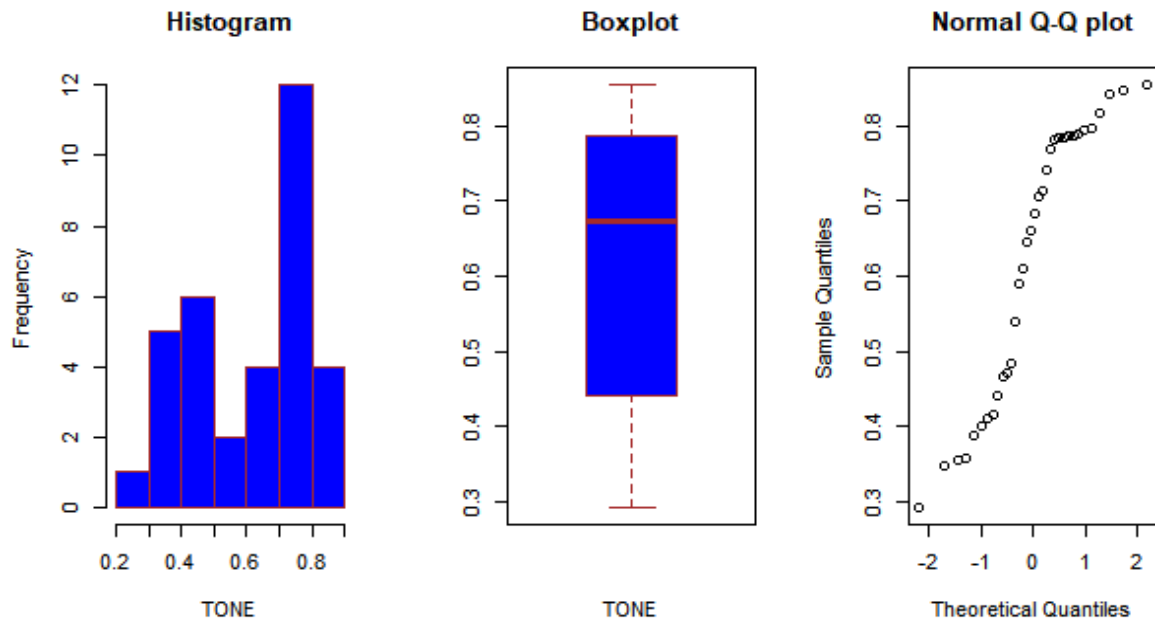
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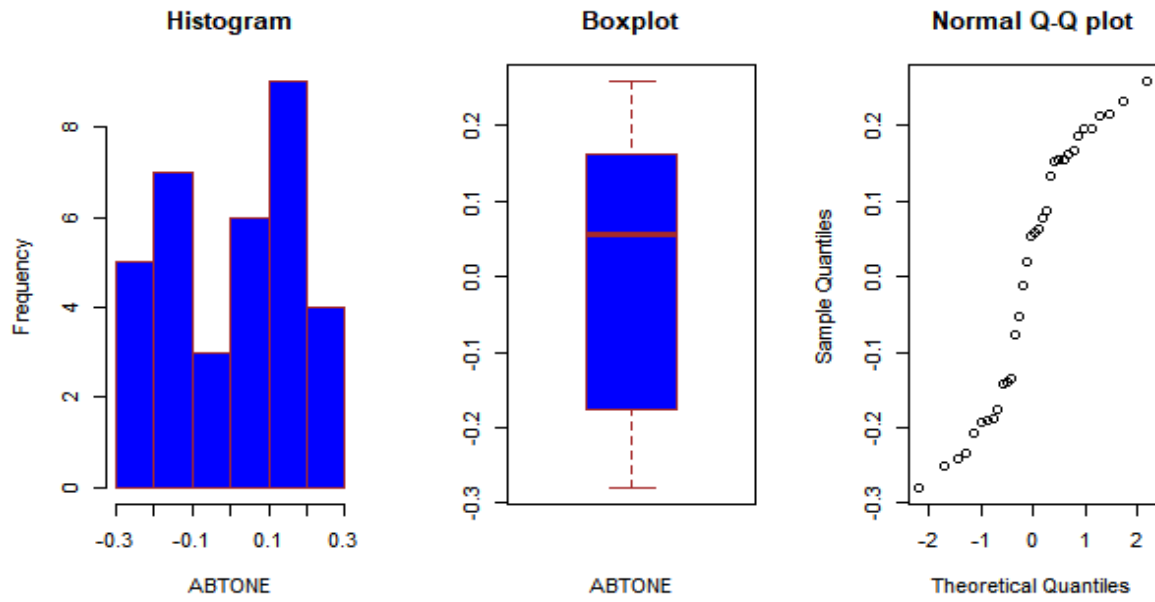
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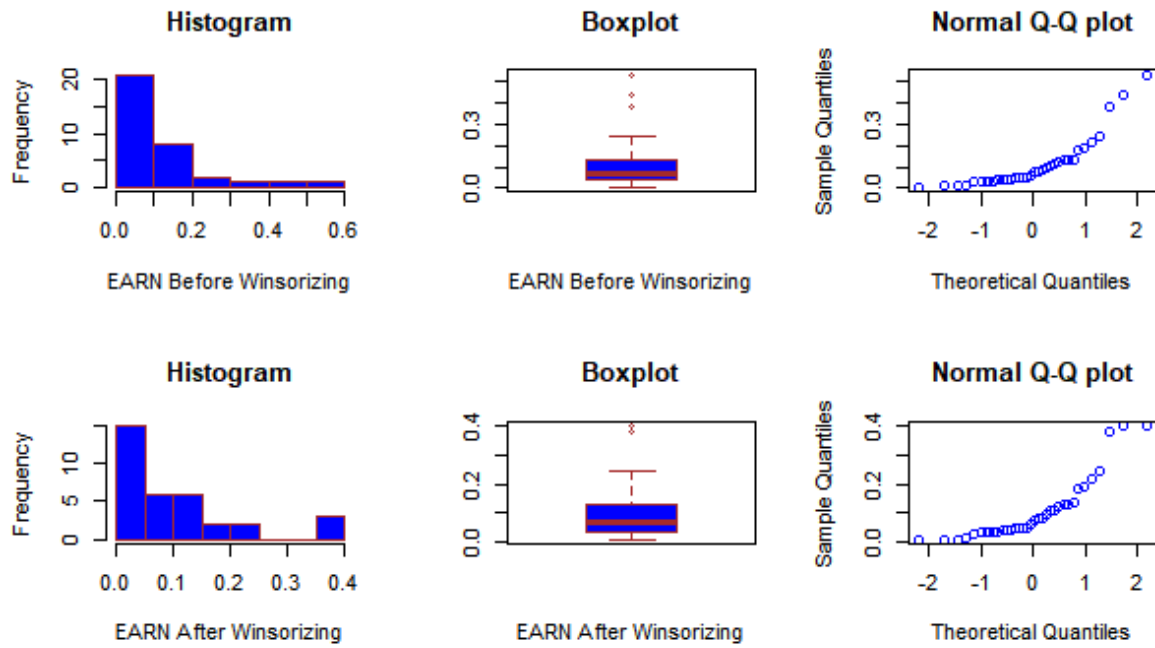
APPENDIX A1: OUTLIER DETECTION PLOTS FOR NTONE.



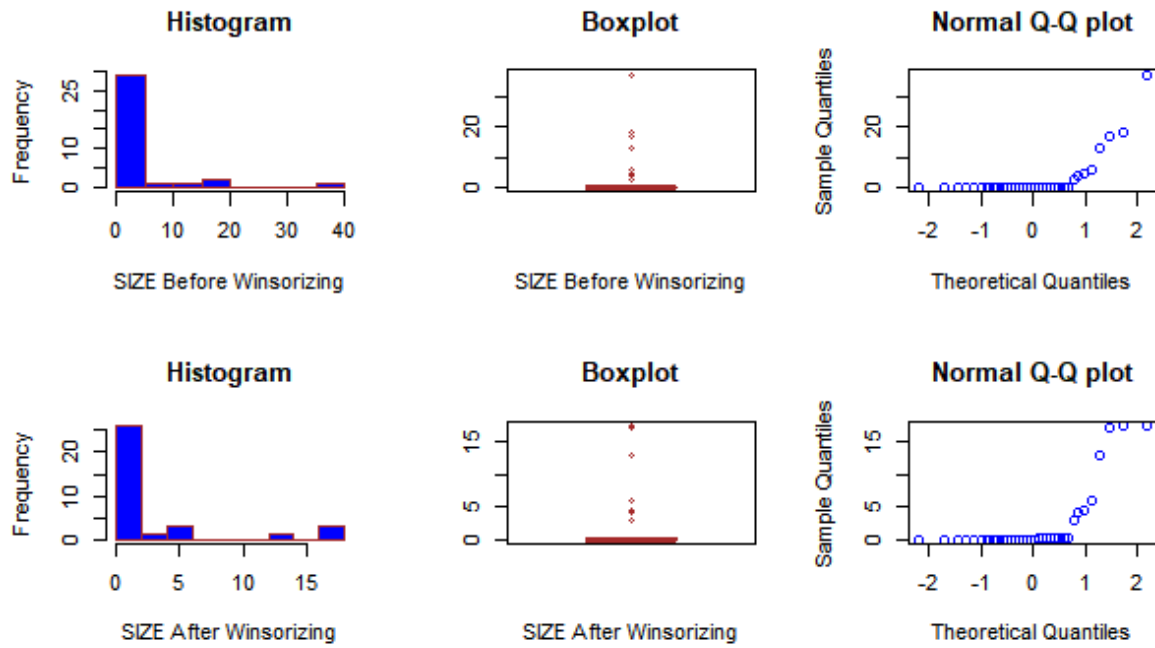
APPENDIX A2: OUTLIER DETECTION PLOTS FOR ABTONE.



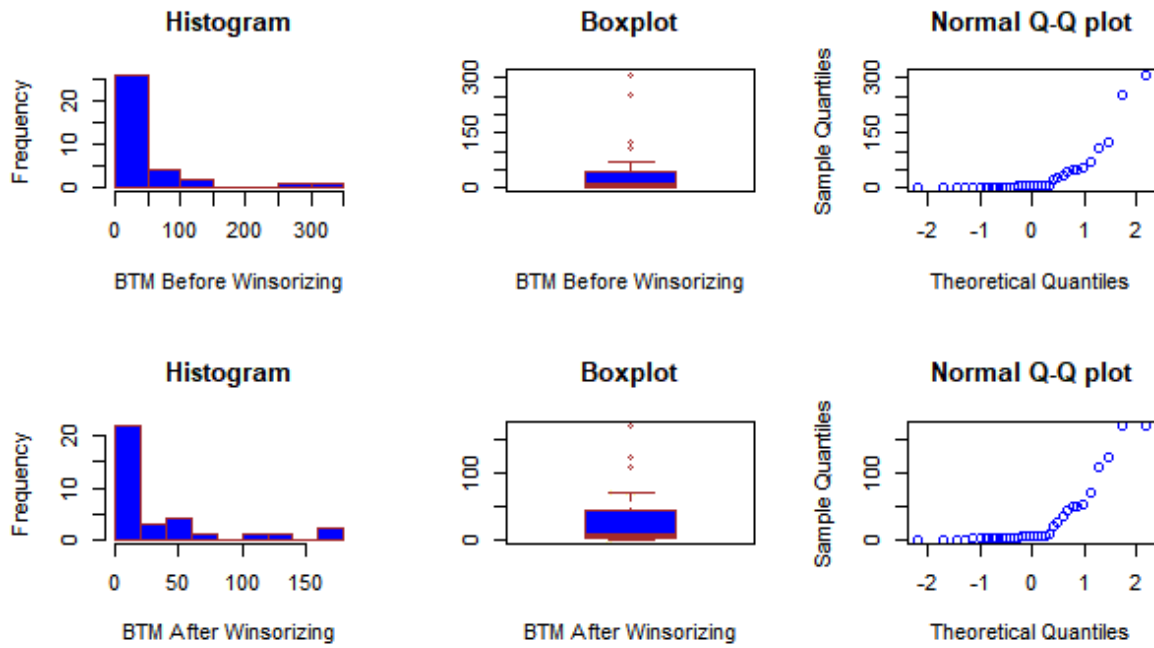
APPENDIX A3: OUTLIER DETECTION PLOTS FOR EARN



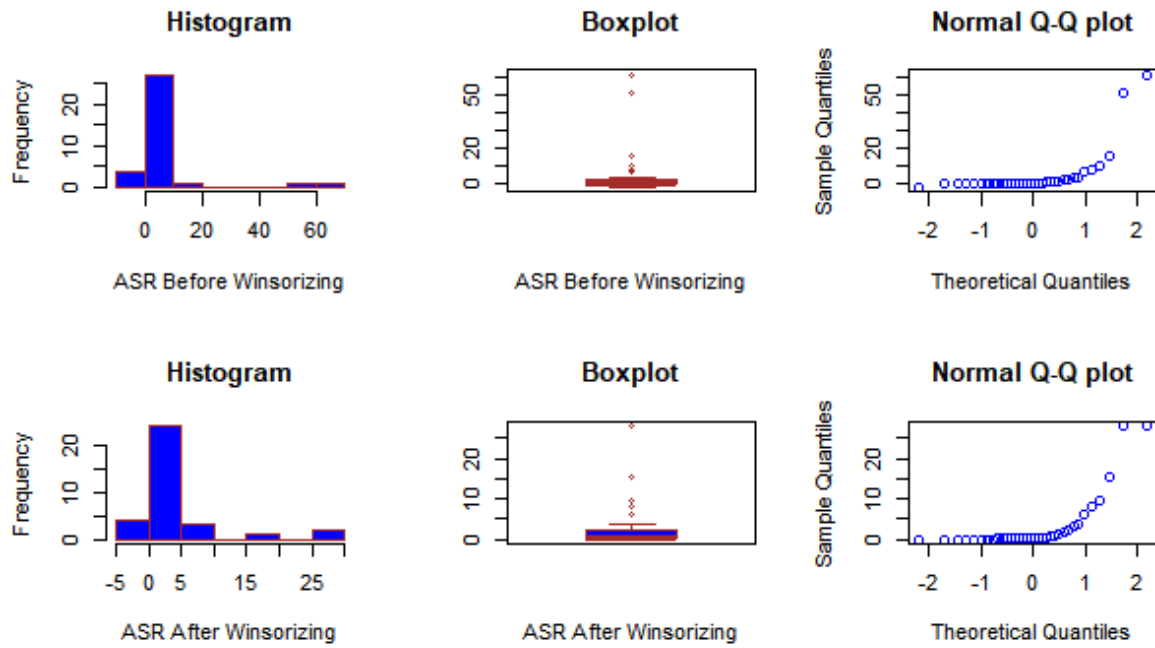
APPENDIX A4: OUTLIER DETECTION PLOTS FOR SIZE



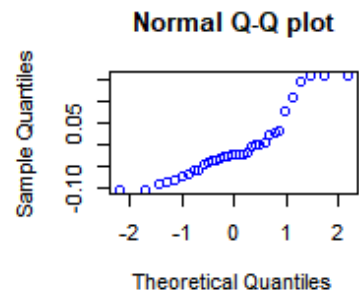
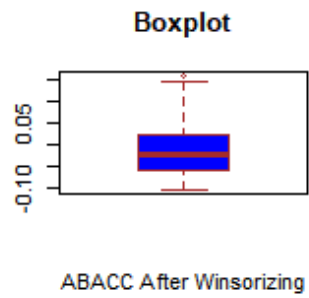
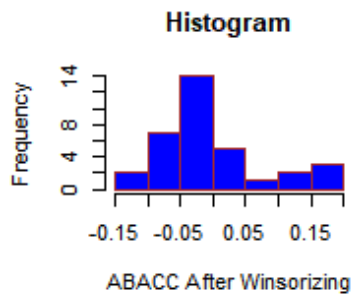
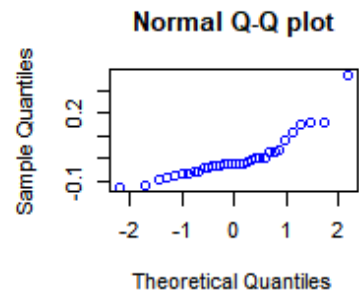
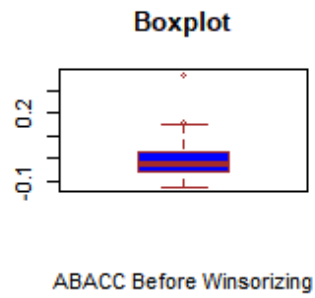
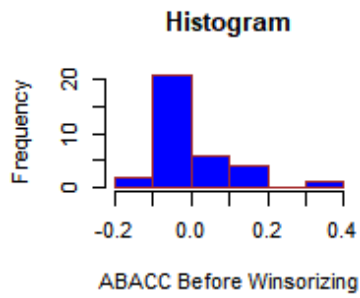
APPENDIX A5: OUTLIER DETECTION PLOTS FOR BTM



APPENDIX A6: OUTLIER DETECTION PLOTS FOR ASR



APPENDIX A7: OUTLIER DETECTION PLOTS FOR ABACC



TURNITIN REPORT

Lonwabo Mlawu – Final Dissertation – 2022

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EDITOR'S LETTER OF CERTIFICATE

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Copy editing & Proof-reading (WITS Language School)

EDITING CERTIFICATE LETTER

Date: 07 December 2022

Re: Lonwabo Mlawu

University of KwaZulu-Natal

Student No: 204519187

Master of Accountancy: Tone management examination in the CEO statements of the JSE Top 40 publicly traded companies

I confirm that I have proof-read, language edited and lay-out edited the above-mentioned work by the masters candidate Mr. Lonwabo Mlawu.

The work was returned to the candidate with evidence of track changes and implementations to be undertaken. The correct implementation of the changes in the text and references is the responsibility of the student. The final edited version was returned to the student on 07 December 2022 via email.

I am satisfied that the editing and proof-reading of the above-mentioned work meets the post-graduate guidelines as set-out.

Sincerely,



Dr. R. M Thakur

Editor

ETHICAL CLEARANCE



22 August 2022

Mr. Lonwabo Mlawu
(204519187) School Of Acc
Economics&Fin Westville

Dear Mr. Lonwabo Mlawu,

Original application number 00018252
Project title Tone management examination in the CEO statements of the top 40 JSE listed companies

Exemption from Ethics Review

In response to your application received on 15 August 2022, your school has indicated that the protocol has been granted EXEMPTION FROM ETHICS REVIEW.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

PLEASE NOTE

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,



Le Mbonigaba
Academic Leader Research
School Of Acc Economics&Fin

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