

# The Determinants of Audit Quality: South African Evidence

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**Abstract**—The primary research question considered in this paper is whether auditor tenure has any effect on audit quality. This study is motivated by the newly introduced legislation in South Africa regarding mandatory audit firm rotation, which is premised on the belief that lengthy auditor tenure decreases audit quality. Using data from 1 273 auditees listed on South Africa's JSE Limited for the years 2010 to 2020, statistical analysis of the findings revealed that auditor tenure is positively associated with audit quality during the early years of the audit engagement because of a learning effect and auditor tenure is negatively associated with audit quality in the later years of the audit engagement because of an independence threat. Statistical analysis of the data revealed that through a learning effect audit quality increases until the 13th year of the auditee auditor relationship where due to an independence threat audit quality begins to decline.

**Index Terms**—Auditor quality, rotation, tenure, quadratic equation.

## I. INTRODUCTION

The research as documented in this paper examines this assertion made by the Independent Regulatory Board for Auditors (IRBA) (the audit regulator in South Africa) that audit quality deteriorates because of lengthy auditor tenure [1]. This study does not include any comments regarding audit quality in the context of compliance with International Standards on Auditing. Instead, the assertion is made that audit quality is at a high level when auditors constrain managements abnormal or discretionary accounting policy choices [2]. Audit quality is low when auditors cannot constrain managements abnormal or discretionary accounting policy choices. This research is aligned to the Code of Professional Conduct for Auditors in South Africa, which contains the enduring and well-known independence threat; that owing to a lengthy or close relationship with an auditee, an auditor will become too sympathetic to the auditee's interests which results in auditor complacency and an erosion of the auditor's independence because of the auditor's bias toward accepting management's views without developing an independent opinion and challenging management's assumptions and assertions [3].

This paper extends prior research into the market for audit services by presenting a study of the audit quality in the 'New' South Africa, a country not before studied concerning its new social, economic, and regulatory environments.

South Africa has undergone aggressive change across nearly all its social, economic, and political aspects since the

abolition of apartheid in 1994 and the election of the first democratic government. The demise of apartheid and the birth of the 'New' South Africa was one of the most celebrated and defining moments of the twentieth century [4]. Considering the similarities and differences between audit quality in the 'New' South Africa and other nations should extend knowledge of the increasingly interdependent global economy. It is submitted that the results and empirical findings of this research study may be of interest to regulators, investors, corporate executives, and academic researchers not only in the 'New' South Africa but in other regions of the world. The rest of the documented research proceeds as follows: In Section II, prior research is summarised, and hypotheses developed. Section III presents the data and empirical results. Section IV contains the discussion of the results. Section V provides a conclusion on the meaning and significance of the results.

## II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Lengthy auditor tenure negatively affects audit quality, and as a result, earnings quality [5]. Reference [6] discover that lengthy auditor tenure correlates with audit failures. Reference [7] find that that lengthy auditor tenure would almost all probability result in an auditee being subject to a poor-quality audit. Reference [8] and [9] discover the audit failures will occur in the early years of auditor tenure in all probability. Reference [10] found that troubled audits will, in all probability, happen in the audit's initial year and when auditor tenure is extended beyond five years. Reference [2] discovered no correlation between earnings restatements and auditor tenure. Reference [11] assert that lengthy auditor tenure transforms into greater skills and competence as "experienced" auditors make fewer errors than those less experienced auditors. In a similar vein, prior studies have reported that auditees of auditors with short auditor tenure are more likely than not to manage their earnings [12] and [2]. As a result, there is a high probability of fraudulent financial reporting [9], and a high probability of the auditor delivering an unmodified audit opinion before the auditee being placed into insolvency [8]. Reference [13]-[16], and [17], report a non-linear relationship between auditor tenure and audit quality.

These researchers posit that throughout the early years of auditor tenure, the auditor is negatively impacted by the absence of an understanding of the auditee's business. However, owing to the passage of time, the auditor obtains the necessary understanding but will become complacent and to close to the auditee's management and suffer a loss of independence.

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It is submitted that jointly this will lead to an improvement in audit quality followed by a decline in audit quality as auditor tenure is extended.

IAS 1 "Presentation of Financial Statements" requires a preparer of financial statements to use the accrual basis of accounting when presenting and preparing financial statements. Under this basis of accounting, the effects of transactions are recognised in the financial statements in the period in which they occur and not as cash is received or paid [18]. Professional judgement, a fundamental characteristic of accounting, is exercised when managers apply accrual accounting [18]. Accruals are measured within the confines of specific financial reporting principles (FRP) known as International Financial Reporting Standards (IFRS). A "normal" accrual is measured within the limitations of these FRP. Accruals offer management "flexibility" in the manipulation of FRP when preparing financial statements [19] and [20].

Several studies have investigated the relationship between numerous measures of accruals and proxies for audit quality. These proxies include litigation, going concern audit opinions, and restatements, with others such as conservatism [14] and [2]. A high magnitude of accruals is positively correlated to auditor litigation [21], modified audit opinions [22] and auditor switches [23], while a lower magnitude of accruals is correlated with auditor conservatism, which is indicative of high audit quality. It is submitted that accruals are a credible descriptor of audit quality. Accruals have been applied in several studies that considered the correlation between accruals as a measure of earnings quality and audit quality. For example, studies applied a change in accruals to measure management discretion [24] and [25]. Studies made use of the Jones model [26]. Owing to the general acceptance in the literature of the Jones model, as the preeminent accruals model; abnormal discretionary accruals became the proxy of choice to measure audit quality. Accruals studies used a modified form of the Jones model [27].

Reference [25] explains that audit quality is the joint probability that an auditor will discover a breach in the auditee's accounting system and report the breach. The chance that a given auditor will discover a breach depends on the auditor's technological capabilities, the audit procedures employed on a given audit, and the extent of sampling [28].

The conditional probability of reporting a discovered breach is a measure of an auditor's independence from a given client [28]. This definition suggests two distinct phases. Phase one depends on the auditor's ability to understand an auditee's industry in which it operates, financial reporting framework, and internal controls. This ability should improve over time, which translates into the principle that the auditor gains knowledge (learning effect) as auditor tenure increases. Phase two is dependent on the auditor's independence to report the breach of the auditees accounting systems. It is in this second phase that the IRBA seem to have a concern with audit quality. The IRBA claims that the auditor's long auditor tenure will create potential threats to independence [1]. The IRBA also state that threats to independence arise when there is a close relationship between the external auditor and the management of an auditee [1]. The following hypotheses are created concerning the correlation between auditor tenure audit quality:

*H1 – Phase 1* = Audit quality (as measured by accounting accruals) increase in the initial stages of auditor tenure + control variables

*H2 – Phase 2* = Audit quality (as measured by accounting accruals) decreases in the later stages of auditor tenure + control variables

*H3* - The turning point of audit quality is at least ten years.

This leads to the joint hypothesis upon which this research study is based: audit quality is expected to increase in the early years of auditor tenure due to a learning effect, and audit quality is expected to decrease in the later years of auditor tenure due to an independence *threat*. To capture this non-linear relationship between audit quality and auditor tenure, a quadratic form was adopted. Such a model can capture when audit quality is likely to decline during auditor tenure. When auditor tenure is taken as one time period, the two phases are combined, as [25] defines audit quality as the joint probability of learning and independence; the result is a parabola. This research study hypothesises that the parabola is a concave or an inverted U shape.

### III. DATA AND EMPIRICAL RESULTS

This research study is based on the hypothesis that relationships do exist between auditor tenure and audit quality. As *such*, the construction of statistical models in the form of multiple regression serves as a vehicle to verify or otherwise refute the presence of relationships between interacting variables.

#### A. Sample

The population consists of all auditee years for which necessary data is available on the S&P Capital IQ. Database *and* the IRESS Research Domain database for the period 2010 to 2020. The financial sector (comprised of: life insurance real estate holding & development real estate services industrial & office REITs retail REITs residential REITs diversified REITs speciality REITs, asset managers, consumer finance speciality finance investment services equity investment instruments and non-equity investment instruments) are excluded due to entities in these sectors having different operating characteristics [9] and consequently, have risk and complexity properties that are inimitable from those auditees of other sectors [29]. Auditees which do not comply with the sample criteria are excluded from the sample because of the potential noise and contaminating effect they might pose on the findings [29].

#### B. Measurement of Variables

##### *Modified Jones model – the dependent variable*

This model focuses on the changes in revenues as the main source of change in working capital accruals including accounts receivable, inventory, and accounts payable [30]. It starts by measuring the following regression for the total accruals of the auditees in the estimation period per year-industry:

$$\frac{TAC_{it}}{TA_{it-1}} = \left\{ \alpha_0 + \alpha_1 \frac{1}{TA_{it-1}} + \alpha_2 \frac{\Delta REV_{it} - \Delta AR_{it}}{TA_{it-1}} + \alpha_3 \frac{PPE_{it}}{TA_{it-1}} + \varepsilon_{it} \right\} \quad (1)$$

The coefficients from the previous regression are used to determine the normal (non-discretionary) accruals in the

following regression in the event period:

$$\frac{NDAC_{it}}{TA_{it-1}} = \left\{ \alpha_0 + \alpha_1 \frac{1}{TA_{it-1}} + \alpha_2 \frac{\Delta REV_{it} - \Delta AR_{it}}{TA_{it-1}} + \alpha_3 \frac{PPE_{it}}{TA_{it-1}} + \varepsilon_{it} \right\} \quad (2)$$

The equation, however, adjusts the change in revenues for the change in accounts receivable here to avoid any discretion in credit sales while calculating normal accruals; compared to the first equation where total accruals were measured. Discretionary accruals are calculated as the difference between an auditee's total accruals and normal accruals from the previous equation:

$$DAC_{it} = \frac{TAC_{it}}{TA_{it-1}} - \frac{NDAC_{it}}{TA_{it-1}} \quad (3)$$

Reference [26] examines whether earnings management of a particular direction occurs during a specific period. To facilitate this, discretionary accruals have been negated [31]

As a result, a higher value of audit quality specifies fewer abnormal accruals in an auditees financial statements. In other words, the less negative is abnormal accruals, the higher the audit quality. When the regression model indicates a positive association between the independent variables and audit quality (the dependent variable), it is that independent variable that increases the abnormal component of accruals, translating into decreased audit quality.

Independent variables

### C. Auditor tenure (AFT)

The number of consecutive years (the square of the number of consecutive years) that the firm has retained the auditor since the auditee first appeared in the S&P Capital IQ Database since 1992 [16] and [31]

### D. Control variables

To remove other explanations that might arise whilst examining the association between the variables, control other cross-sectional factors that have been shown previously to contaminate the relationship because of their systematic effect on accruals. Controlling those variables would mitigate their systematic effects and lend the findings greater reliability [29]

### E. Auditor type (AT)

While long auditor-auditee engagements can have adverse effects on audit quality, the audit firm's size is presumed to contribute to the quality of financial statements reported by its auditee. Long auditor-auditee relationships can create closeness between the auditor and the auditee enough to deter the auditor's independence and reduce the audit quality [29] Investigating the quality of audits conducted by the Big Four auditors in South Africa would determine if the Big Four auditors deliver improved audit quality when compared with non-Big Four auditors and would prove whether the length of the auditor-client relationship affects audit quality, therefore, whether a long audit firm-client relationship and the size of the audit firm affect audit quality in South Africa. A dummy variable measures auditor type equals one if the auditor is a Big Four auditor and 0 otherwise. There should be a positive correlation between auditor type and audit quality.

### F. Auditor change (AC)

The question arises as to whether a change in auditor improves audit quality [32]. This question is directly related to MAFR. Reference [33] find that audit quality becomes

poorer at the year of auditor change for the voluntary change.

A dummy variable measures auditor change would equal one if the auditee changed auditors in any year and 0 otherwise. There should be a negative correlation between auditor change and audit quality.

### G. Auditor industry specialisation (AIS)

Reference [34] report that industry specialists lessen the negative effect of the independence threat on audit quality for extended auditor tenure, indicating that the independence threat is less a burden for industry specialists. A dummy variable measures auditor industry specialisation equals one if the auditor is an industry specialist (auditor with the highest annual market share of auditee sales revenue in a particular two-digit SIC industry group) and 0 otherwise. There should be a negative correlation between auditor industry specialisation and audit quality

### H. Auditor independence (AI)

Reference [35] examine the impact of fees non-audit services on audit quality. They discover that that the higher levels of fees of non-audit services negatively affect audit quality. Auditor independence is measured by an auditor's fees received for non-audit services scaled by the total fees received by the auditor (consulting + audit). There should be a positive correlation between auditor independence and audit quality.

### I. Auditee size (AS)

Large auditees have more extensive and more stable accruals than smaller auditees [27] Previous research submits that there is more publicly available information about larger auditees and that their shares are more liquid [36] The more available information about a client and the more liquid the shares are, the lower the firm's perceived risk becomes [13] Auditee size is measured by the natural logarithm of total assets of the auditee. There should be a positive correlation between auditee size and auditee quality.

### J. Auditee complexity (FOR)(COM)

Complexity costs will reflect the nature of the auditee's business, location, the quality of its internal controls and the proportion of unusual transactions [37] The amount of audit effort expended can be expected to increase with the increased complexity of the audit, which in turn is likely to decrease audit quality [37] Auditee complexity is measured by foreign sales scaled by total sales and the ratio of accounting receivable and total inventories scaled by total assets. There should be a negative correlation between foreign sales and audit quality and a positive correlation between receivables and inventories and audit quality.

### K. Auditee risk (AR)

Absolute levels of unexpected accruals might mask those accruals' true source when they are large and negative in value [29]. Many auditees with large negative accruals were found to receive going-concern opinions [29]. His is considered normal given that large negative discretionary accruals might be a caution for financial distress [38]. Auditees suffering a financial distress condition or near-debt constraints might be more motivated to manage earnings [39]. Audit risk is measured by the Altman Z score [40]. There

should be a positive correlation between auditee governance and audit quality.

L. Auditee governance (AG)

The board of directors is the body charged in governance for maintaining the interests of the shareholders [30]. Directors may achieve self-benefits by using their access to private information and, thus, they buy shares if their values are expected to increase in the future while selling those whose values are expected to decrease [41]. Therefore, insider trading is a good tool to predict the direction of earnings' manipulation [42]. The total director's shareholding scales measure auditee governance by total shares issued. There should be a positive correlation between auditee governance and auditee quality.

M. Auditee Cash Flow (ACF)

Reference [43] investigated cash flow management in the Chinese firms, compared his results with some U.S. firms, and concluded a positive relationship between cash flows management and earnings management. Management will implement earnings management practices when cash flow is scarce. Auditees would be able to manage OCF by misreporting earnings. There should be a negative correlation between auditee cash flow and audit quality. Reference [44] confirmed the opposite; there was a direct and positive relationship between earnings management and OCF management. Due to the exploratory nature of this research, no hypothesis is made. Auditee cash flow is measured by an auditees cash flow from operations scaled by total assets. There should be a positive correlation between auditee cash flow and audit quality.

N. Auditee age (AA)

The different stages of an auditee's life cycle are dependent on the auditee's age [45]. Also, older auditees might be viewed as survivors and therefore perceived as less risky [13]. Together, age and size are controlled since more mature auditees are expected to have more sophisticated financial reporting systems [12].

Auditee age is measured by the number of years since the auditee was founded. There should be a positive correlation between auditee age and audit quality.

O. Audit Fee (AFE)

Higher audit fees are represented in higher costs stemming from high audit quality [46]. Reference [47] posited the view that "higher audit fees imply higher audit quality, ceteris paribus because the higher audit fees are imposed because of either greater effort or more specialised auditors". Reference [48] found that audit fees are correlated with higher audit quality levels, resulting in a higher reputation of the auditors. The natural logarithm of audit fees measures the audit fee. There should be a negative correlation between audit fee and audit quality.

P. Statistical Analysis

To test  $H_1$ , an OLS pooled regression is run on the following model per industry per year and per year:

$$DACC_t = \beta_0 + \beta_1 T + \beta_2 T^2 + \beta_3 AT + \beta_4 AC + \beta_5 AIS + \beta_6 AI + \beta_7 AS + \beta_8 FOR + \beta_9 COM + \beta_{10} AR + \beta_{11} AG + \beta_{12} ACF + \beta_{13} AA + \beta_{14} AFE + \varepsilon$$

Q. Turning Point

After the amount of the coefficients for tenure and tenure<sup>2</sup> are established; the subsequent phase will be to work out the turning point, i.e., the vertex of the parabola. The following form can estimate the overall association between auditor tenure and audit quality:  $\beta_0 + \beta_1 T + \beta_2 T^2 =$  audit quality. In order calculate the turning point (TP), the vertex of the parabola (the point where the parabola crosses its axis of symmetry) representing the relationship between AFT and AFQ is calculated using the equation: turning point:  $TP = -(\frac{\theta_1}{2\theta_2})$ . The TP should not be less than ten and not significantly greater than 10 for the IRBA's determination of 10 consecutive years to be fair and reasonable.

R. Results

TABLE I: MODEL STATISTICS

R Square	Adjusted R Square	F Change	Sig, F Change	Standard error the estimate
0.254	0.246	7,468	0,000	0,032
Model	Sum of Squares	df	F (14,1258)	Prob > F
Regression	393.011	14	30.640	0,000
Residual	1152.412	1258		

It can be observed in Table I – ANOVA that the multiple R-value of 0,254 was associated with an F-value of 7,468. The F-value was statistically significant,  $p < .001$ . The ANOVA in Table I, the p-value (significance) for the regression model F test is 0.000. The model is highly significant, and it can be concluded that the nine independent variables together predict audit quality as measured by an auditee discretionary accruals.

TABLE II: REGRESSION STATISTICS

VARIABLE	DACC	VIF
AIS	0.247***	1.29
T	0.0475**	21.77
$T^2$	-0.00176***	19.71
AA	-0.0227	1.52
AFE	0.119**	4.31
AG	-0.00194	1.05
FOR	-0.209***	1.32
COM	0.534***	1.19
AI	0.963***	1.12
AS	-0.126***	4.27
ACF	-0.126***	1.47
AR	0.0361**	1.52
AC	-0.146	1.46
AT	-0.134	1.51
INTERCEPT	0.385	
TURNING POINT	13.49	

t statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

TABLE III: TURNING POINT

Variable	$\theta_1$	$\theta_2$	$2\theta_2$	$-(\frac{\theta_1}{2\theta_2})$
$AFT_{it}$	0.0475			
$AFT^2$		-0.00176	-0,00352	
Turning point				13.49

There cannot be any multicollinearity between the variables that are used in the regression model. The VIF and

tolerance statistics were used to test this assumption; for the assumption to be met, the VIF statistic must fall well below 10. Reference [49] explains that multicollinearity must be ignored when it relates to tenure and tenure squared as it impacts the regression when one variable is a square of another variable.

#### IV. DISCUSSION

At this juncture in the research description, the reader of this paper must be reminded that a higher value (less negative) of discretionary accruals suggests higher audit quality levels. In simpler terms, the more negative discretionary accruals become, the lower the audit quality. A negative independent variable will result in discretionary accruals becoming more negative and translates into diminished audit quality. For example, in Table II, the AS variable is negatively correlated to audit quality. This must be interpreted as follows: as the size of an auditee decreases, the expectation is that discretionary accruals will become more negative, which translates into deteriorated audit quality. The implication is that the smaller the auditee, the more chance that auditee has engaged in earnings management, and the auditor has been unable to constrain managements abnormal discretionary accounting policy choices. A positive independent variable will result in discretionary accruals becoming less negative and translates into increased audit quality. For example, in Table II, the AI variable is positively correlated to audit quality. This must be interpreted as follows: as the auditor's independence increases, discretionary accruals will become less negative, which translates into higher audit quality. The implication is that as the auditor improves and becomes more independent concerning his or her auditee – the auditors quality increases. Such a finding supports the generally accepted belief that the auditor's independence is a significant determining factor in audit quality.

With the above discussion in mind, it is crucial to determine the effect that auditor tenure has on audit quality. In Table II, the T variable is positively correlated to discretionary accruals, the proxy for audit quality. This means that as auditor tenure is increasing, discretionary accruals are becoming less negative. The auditor has constrained managements abnormal discretionary accounting policy choices by reducing the magnitude of discretionary accruals. This translates into high audit quality. This is where the turning point becomes relevant. Table III presents the turning point at 13.49 years.

It is at this point that audit quality begins to decrease. This decrease is reflected in the  $T^2$  variable in Table II, which is negatively associated to discretionary accruals, the proxy for audit quality. This means that as auditor tenure is decreasing, discretionary accruals are becoming more negative. The auditor has not constrained managements abnormal discretionary accounting policy choices as discretionary accruals are becoming larger. This translates into low audit quality. The effect of auditor tenure on audit quality in a South African context is non-linear. A non-linear relationship implies one bend in the regression line of best fit (see figure 1). The vertex of the concave parabola is 13.49 years.

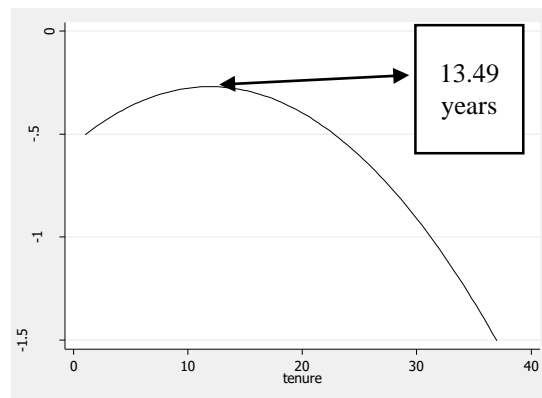


Fig. 1. South Africa's Turning Point at which about Quality Begins to Decline

A surprising statistical result is that audit firm size (AT) is not significantly correlated to audit quality. The majority of prior research has asserted that audit firm size is a proxy for audit quality [50]. The argument is that the Big Four have access to higher quality staff and use higher quality procedures, and so are more likely to detect errors and omissions and that because of their size, they are better able to withstand pressure from auditee management and so are therefore likely to act independently [4]

The impact of a non-significant finding is that audit quality will improve in the initial stages of auditor tenure and will decline in the later years of auditor tenure no matter the size of the audit firm. In other words, the size of the audit firm does not lessen the negative effect of lengthy auditor tenure on audit quality. The variable AFE in Table 2 is positively correlated to discretionary accruals, the proxy for audit quality. The implication of such a statistical finding confirms prior research that higher audit fees imply higher audit quality [47] and [48]. The variable AIS in Table 2 is positively correlated to discretionary accruals, the proxy for audit quality. This must be interpreted as follows: as the auditor becomes more specialised in auditing a specific industry, the expectation is that discretionary accruals will become less negative, which translates into higher audit quality. The implication is that as the auditor specialises and attains a high level of skills – the auditors quality increases.

Another statistical finding presented in Table 2 is that financial distress is positively correlated to discretionary accruals, the proxy for audit quality. The expectation would be that as financial distress gets worse; the more likely management will engage in earnings management by aggressively manipulating their discretionary accruals. The reasons are straight forward to hide away losses and poor financial performance. In other words, financial distress should be negatively correlated to discretionary accruals. However, contrary to expectations, this paper reports that as financial distress worsens, discretionary accruals become less negative – audit quality improves. It appears from that statistical findings that auditees with higher Altman Z-score seem to have lower levels of financial distress and engage in earnings management.

Reference [51] explain that managers of auditees with a lower level of financial distress may engage in earnings management if the auditees financial distress is only for a brief period of time to safeguard their bonuses, reputation, and positions. These two researchers found that if an auditees

financial distress is high, managers prefer to disclose their true financial distress to obtain better terms and conditions from their creditors. Such an explanation is aligned with research conducted by [52].

The variable FOR in Table II is negatively correlated to discretionary accruals, the proxy for audit quality. This must be interpreted as follows: as the complexity of an auditee decreases, discretionary accruals will become more negative, which translates into deteriorated audit quality. This seems counter-intuitive as complexity increases; audit quality should decrease.

It appears that the less complex a financial statement variable, the more likely management have the skills to manipulate the variable. The variable ACF in Table II is negatively correlated to discretionary accruals, the proxy for audit quality. This must be interpreted as follows: as the cash flow of an auditee decreases, discretionary accruals will become more negative, which translates into deteriorated audit quality. The variable COM in Table II is positively correlated to discretionary accruals, the proxy for audit quality. This must be interpreted as follows: as the complexity of an auditee increases, discretionary accruals will become less negative, which translates into higher audit quality. This seems counter-intuitive as complexity increases; audit quality should decrease. It appears that the more complex a financial statement variable, the less likely management have the skills to manipulate the variable. A crucial non-significant finding in Table II is that a change in auditor (AC) would not improve audit quality. MAFR is based on the premise of "auditor change", and such a finding may indicate that MAFR is not the tool to deal with independence threat in South Africa.

## V. CONCLUSION

This research has limitations. First, to ensure the simplification of the empirical testing, the research has adopted a quadratic form to capture the effect of auditor tenure on audit quality. Future research must improve this simple approach. Second, this research study relied on earnings quality which was dependent on the level of accruals. Whether the results of this research study apply to perceived audit requires consideration. Third, the audit committee has the responsibility of ensuring financial reporting quality by appointing and observing auditors. Therefore, future research must explore the audit committee's role in the correlation of auditor tenure and audit quality.

This study enhances the literature by providing a rationale for choosing a quadratic model to study the relationship between auditor tenure and auditor quality. This research paper contributes to the extant literature by providing the first statistical-based evidence on the impact between auditor tenure and auditor quality.

The idea behind this study was to analyse the effect of the length of the audit firm-client relationship on audit quality. To test the propositions, use is made of a quadratic regression model. The population of this study encompassed all firms in which stock is publicly traded on the JSE Limited. Statistical analysis of data showed that auditor tenure affects audit quality adversely.

Audit quality deteriorates when auditor tenure is extended

due to the growth in the magnitude of abnormal accruals. Consistent with prior research, it was found that the relationship between auditor tenure and audit quality is non-linear. The paper provided statistical evidence from a developing country about audit quality. This study identified that auditor tenure is a key determinant of audit quality.

## CONFLICT OF INTERESTS

This submitted work was carried out with a conflict of interest.

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This paper is dedicated to one of the greatest finance professors - Professor Dr Colin Firer who passed away long before his time.

## AUTHOR CONTRIBUTIONS

The author contributed 100 percent. The author created the hypotheses. The author spent the time researching this project for 2 years. The author developed the research question and ideas. The author spent 2 years everyday researching for this paper.

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