

Nexus Between Earnings Quality and Idiosyncratic Volatility of Security Returns: Panel Data Evidence from Nairobi Securities Exchange, Kenya.

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Abstract: With the break-out of global pandemics such as the covid-19 causing disruptions and near shut down of major global securities markets, security markets disturbances due to advancement in technology, cut throat competition among global corporates, dynamism in the global political environment and both global and local variability in economic growth rates, volatility of security returns at the securities exchanges has become a norm. However, there is no empirical evidence directly linking firm specific risks posed by earnings quality to volatility of security returns. Therefore, the current study sought to examine the nexus between earnings quality and idiosyncratic volatility of security returns amongst NSE quoted firms. The study employed quantitative research paradigm and correlational research design, using secondary data. The study used purposive sampling method where 24 listed firms were sampled yielding 240 firm-year observations from 2010 to 2019. The study used dynamic fixed effects regression model with panel data in data analysis. Results revealed that the relationship between earnings quality, measured by Accruals Quality and idiosyncratic Volatility of security returns, amongst NSE listed firms, is negative ($\beta = -0.013537$, $p = 0.0004$). Therefore, it is concluded that profitability, measured by EPS, PE and ROE, significantly and negatively affect security returns volatility amongst NSE listed companies in Kenya.

Keywords: - *Idiosyncratic risks, Security returns, volatility of security returns, earnings quality, accruals quality*

1. INTRODUCTION.

Globally, scholars have, in the past two decades, paid keen attention to idiosyncratic risks and their effect on security returns volatility since the study of Campbell (2001) which posited a new twist in volatility. The results in the study showed that aggregate idiosyncratic volatility of security returns had increased significantly, while the total market security returns variance remained unchanged over time at the New York Securities Exchange (NYSE). Many such scholars around the globe who have turned their focus on firm specific security returns volatility include Firmansyah, Sihombing, and Kusumastuti (2020), who studied the causes of idiosyncratic security returns volatility in Indonesian banking industries. They indicated that firm size, dividend policy, PER and profitability significantly and negatively relate with firm specific volatility of security returns while company's operating performance and institutional ownership did not show any relationship with idiosyncratic security returns volatility. Hou, Zhang and Li (2019), posited that intangible assets have a negative association with idiosyncratic security returns volatility. Panagiotis, Renatas, Ioannis and Sagitova (2020) demonstrated that environmental disclosure is negatively connected with company specific security returns volatility. Jyoti, Jitendra, and Hiremath (2017) demonstrated that firm size negatively influences idiosyncratic security returns volatility, but liquidity, cash flow to price and book to market ratio all show a negative interconnect with idiosyncratic security returns volatility. Nyarikini, Mule and Ombongi (2023), posited that both capital expenditure and financial gearing have a positive relationship with volatility

of security returns. All these scholars have provided evidence that some idiosyncratic risks influence security returns volatility. However, studies have not assessed whether idiosyncratic risks associated with earnings quality have any effect on security return volatility. Therefore, this study sought to evaluate the effect of idiosyncratic risks associated with earnings quality on volatility of security returns using evidence from Nairobi securities exchange.

Past studies have posited varying results on relationship between earnings quality and security returns volatility. Past studies have also used earnings quality to mediate relationship between security returns and firm performance. The study of Mohamed and Hatem (2018) assessed the relationship between three constructs of firm performance namely; firm specific security return volatility, earnings management, and the corporate governance. The study showed that all the variables were positively related except for the earnings management which was negatively related with earnings quality. The study used earnings quality as a mediator. The study of Nyanine, Josue, Odunayo and Bomi (2022) indicated that firms with a high value of earnings quality and those with more persistent earnings showed a decrease in security return volatility. The study also demonstrated that the earnings smoothness positively influenced the idiosyncratic volatility of security returns. This study did not assess how quality of earnings, measured as the Accruals' Quality, influences the idiosyncratic volatility of security returns. Therefore, the current study sought to assess the influence of earnings quality, measured as Accruals' Quality, on volatility of security returns of firms listed at the Nairobi Securities Exchange, Kenya.

Also, Anaekenwa, Samuel and Nwaobia (2019) did an empirical analysis of the potency and value relevance of earnings persistence (EPERS) and its impact on firm value and the implications of the analyst accuracy and forecast ability using data from the frontier market of Nigeria. The study indicated a negative and non-significant relationship between earnings persistence (EPERS) and firm performance. Financial Gearing showed a positive and significant relationship whereas firm size indicated a negative relationship with Tobin's Q. The study did not relate earnings persistence to firm specific volatility of security returns. Other metrics for earnings quality such as accruals quality were not considered and their effect on security return volatility was not captured in this study.

According to the International Monetary Fund (IMF report, 2018), frontier markets have seen an increase in foreign investments from investors running away from developed markets experiencing slow growth making them less attractive in terms of expected returns and diversification of portfolio risk. These investors are seeking higher risk-adjusted returns from the emerging markets experiencing superior economic growth as compared to mature and more developed markets. Contrary to this assertion, the opposite is happening at the NSE, which is losing more foreign investors instead of receiving as expected. This can be illustrated by the declining trend depicted by the NSE 20 share index for the past 8 years between the year 2014 and 2022 as shown in the graph below:

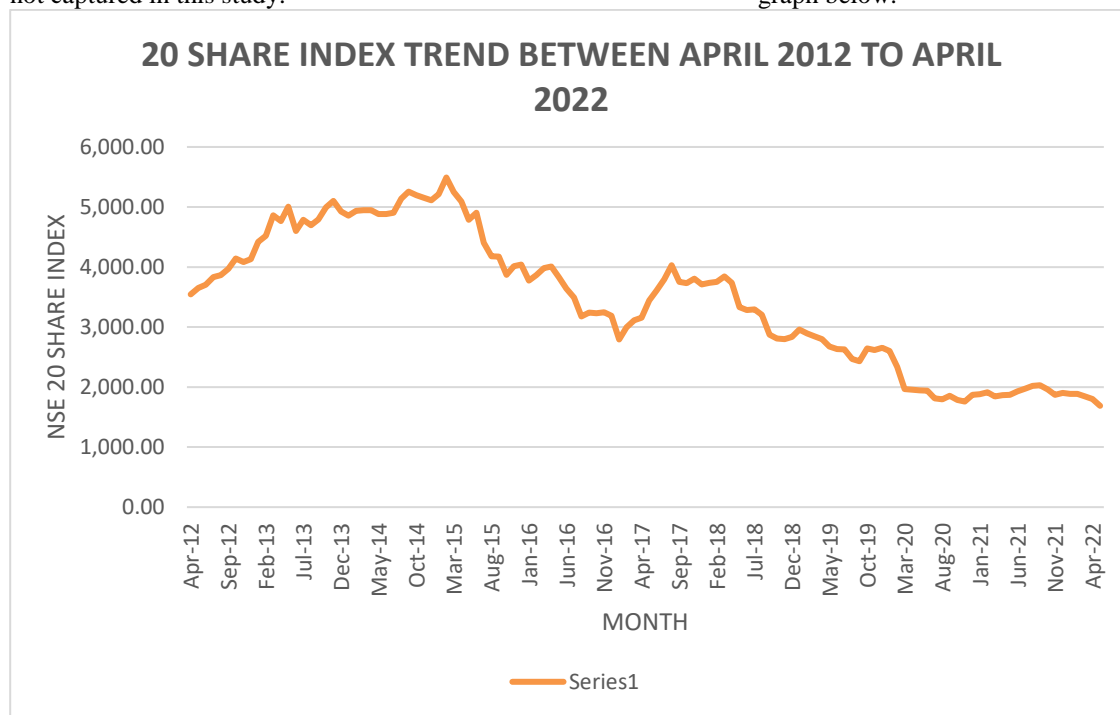


Figure 1: Trend of the NSE 20- Share Index for the Period Jan. 2014- April. 2022
 Source: Data from Nairobi Securities Exchange.

1.2. Conceptual framework.

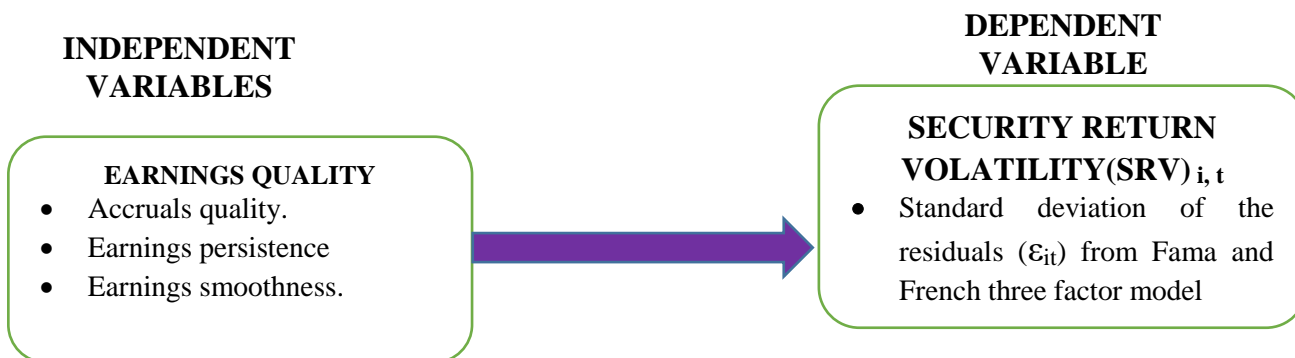


Figure 2: Nexus between Earnings Quality and Volatility of security returns

2. LITERATURE REVIEW.

There is an ongoing debate in the fields of accounting and finance on whether idiosyncratic security return volatility is as a result of idiosyncratic risk or Noise (Ranjan M. 2016). The way and how earnings quality relates to idiosyncratic security returns volatility has been linked to this debate. Claudia & Antonio (2018) did a study to establish how earnings quality influences volatility of security returns. The major objective was to evaluate how performance of accrual-based measures of earnings quality relate with firm specific security returns volatility. In the study the major predictor for firm specific volatility was volatility of discretionary accruals (accruals quality). The study used a sample of LSE listed firms in the UK. The study indicated that the volatility of discretionary accruals significantly relates with idiosyncratic security return volatility. This relationship remained significant when other metrics for earnings quality, such as dispersion in analysts' forecasts and the innate accruals quality, were used. The study found that dispersion in analysts' forecasts positively moderated the influence of discretionary accruals, and the innate accruals on idiosyncratic volatility of security returns. Their results were in line with the noise-based approach of firm specific security returns volatility. The study did not control for other idiosyncratic risks. Also, the study did not account for sensitivity of the portfolio to size and value factors.

The study of Cerquera (2018) independently investigated the association of earnings quality and idiosyncratic security returns volatility for firms sampled from the LSE, UK. The aim was to determine whether accruals quality can be used by capital market investors as a good indicator of earnings quality. Panel regression model was used to established that poor accrual quality significantly causes a higher idiosyncratic security returns volatility. The significance of the relationship held even when other measures of earnings quality like the dispersion in analysts' forecasts, the innate component of accruals quality, which reflects the uncertainty about the nature of the firm's business and the discretionary component of accruals quality, which is related to managerial discretionary choices, were incorporated. Based on the findings of this study the current study uses accruals quality as a measure of earnings quality. The present study also controls for portfolio sensitivity to size and value factors using the Fama and French three factor model.

Brent and Xuan (2020) investigated the effect of security price movement on Real Estate Investment Trusts' earnings management. They collected data for all listed REITs covered in the SNL REIT for a 16-year period (1990-2006). The study evaluated whether managers' decision to engage on earnings management is influenced by information on firm specific volatility of security prices. The study findings were in conformity with EMH, that securities of the firms engaging in earnings-management are not in any way mispriced compared to those which are not. Additionally, when the researchers used firm specific security return volatility to measure private information impounded on security prices, they posited that

negative real earnings management, which makes the REITs able to outwit the compulsory requirement for dividend payment, can be linked to the greater information impounded in REITs security prices. This result suggests that information impounded in security price asynchronicity provides an incentive to REIT managers to more actively get rid of regulatory costs. This study evaluated how earnings quality is influenced by asynchronicity of security prices. The current study has examined how earnings quality influences security returns volatility.

Manish, Asgar and Bhawna (2020) did an investigation on how earnings quality (real earnings management) relate with the cross-sectional security returns for security of listed firms at Bombay security exchange, India. Market risk factors, size risk factors, value risk factor and momentum risk factors moderated the study. A sample of 3,085 listed firms was selected and monthly data for the securities was collected for a period of 20 years, from January 2000 to December 2019. Real earnings management was estimated using constructs established by Roychowdhury (2006), which include excess levels of cash flows from operations, cost of production and discretionary expenditure. The study made use of univariate and bivariate portfolio-level analysis. The empirical results indicated that investors view the downward trend in real earnings management as a component of idiosyncratic risk, thus, securities are priced at a premium to compensate for the risk. The study findings indicated that investors view the upward trend in REM positively, hence, willingness to hold securities even at a lower rate of return. These results have significant applications in management in establishing risks associated with earnings quality and the implications on security returns volatility. This study did not evaluate the implications of earnings quality on security returns volatility in the presence of capital expenditure, financial gearing and profitability.

Prodosh (2021) did a study to establish how accrual mispricing and value-at-risk relate with expected security returns for NYSE listed firms, US. The study investigated the extent to which value-at-risk (VaR) moderates the relationship involving accruals quality and variance of expected security returns. In this study, portfolios were built based on Sloan's total accruals (TA) measure and individual asset-level VaR, which depicts the dynamic behavior of the asset distribution. He documented that VaR is in congruence with portfolio-level accruals and that there is a significant positive relationship between VaR and the cross-section of portfolio returns. Allowing a double-sort involving VaR and TA further suggests that the spread between low- and high-TA portfolios is significantly attenuated after controlling for VaR. He also conducted a firm-level cross-sectional regression analysis and demonstrated that the TA- and VaR-based characteristics are compensated with higher expected returns, and that VaR neither subsumes nor is subsumed by TA. Finally, His cross-sectional decomposition analysis suggested that the firm-level VaR captures at least 7% of the accrual premium even in the presence of size and book-to-market. These findings lend support for the mispricing

explanation of the accrual anomaly. No direct link between earnings quality and security returns volatility was established in the study.

Ranjan (2016) did a study to investigate how earnings quality associate with idiosyncratic equity return volatility using data from Japanese listed firms. A large number of manufacturing firms were sampled, and their data collected for the period 2003-2012. This content analysis research employed idiosyncratic volatility and security returns variance as two equivalent metrics for idiosyncratic volatility of security returns, to assess its link with earnings quality. The study results indicated that using firm specific return volatility and equity return variance as two equivalent proxies for idiosyncratic security return volatility, the author came up with contradicting findings. The author associates this incongruity to the ongoing debate in accounting and finance literature on whether idiosyncratic security return variance is due to idiosyncratic risk or noise. At the beginning, the author obtains contradictory findings due to the market risk. Up on controlling for the systematic risk, the results indicate that increased earnings quality is associated with decreased idiosyncratic equity return volatility. The author went further to break earnings quality into innate accruals component, which is driven by economic factors and discretionary accruals, which is driven by managerial characteristics. The findings indicated that both components significantly related to idiosyncratic equity return volatility though the innate accruals showed a significantly stronger influence compared to discretionary accruals. The study does not answer the question whether earnings quality can moderate the relationship between capital expenditure, gearing and profitability on firm specific security returns volatility. The study also uses a large sample of manufacturing firms begging the question whether the findings can hold for non-manufacturing firms. Tokyo security exchange is highly advanced; thus, these findings may not hold for an emerging or frontier market.

Rohmat and Amrie (2021) analysed the relationship between earnings quality, measured using two metrics - accrual earnings management (AEM) and real earnings management (REM)-with aggregate risk and company specific risks in Indonesia. This research study embraced a quantitative design making use of secondary data obtained from audited accounting statements and equity market prices of garment making firms listed at the Indonesian securities exchange for the period 2015 to 2019. Using purposive sampling, the researchers picked 75 firms. For data analysis, multiple regression analysis involving panel data was employed to test for study hypothesis. The findings of the study indicated that accrual earnings management was statistically significant and negatively related with both total and firm specific risk, but real earnings management was statistically significant and positively related with both total and firm specific risk. The study concluded that AEM, which is undertaken by managers for efficiency purposes, does not constitute idiosyncratic risk. The authors suggested that the Financial regulatory authorities needed to come up with

policies aimed at protection of investors in Indonesia. They also advised investors to make decisions considering information about the firm's operating cash flow generating ability and share price trends in recent years. This study did not relate accruals quality to idiosyncratic volatility of security returns.

The study of Dang and Vu (2020) assessed the influence of Earnings Quality (EQ) on security returns of Vietnamese listed firms. The study covered the period 2010 to 2018. Generalized least squares (GLS) regression analysis was embraced in testing for the study hypothesis. Companies' EQ was comprehensively measured using all possible metric of measurement. The study results indicated that EQ, measured using four metrics; Earnings Management (EM), Earnings Persistence (EP), Earnings Smoothness (ES) and Earnings Volatility (EV), all are statistically significant and have a positive relationship with security returns. On the other hand, EQ, measured as accruals quality (AQ), was found to have a negative influence on security returns. The study also revealed that the scale of operation had a negative but statistically insignificant relationship with security returns. Based on the results of the study, the authors recommended that investors need to take into account the accounting information related to accruals quality of the business as such information has a bearing on security returns. Firms need to make full and timely disclosure of all material facts in accounting statements to enable investors to use the same for investment decisions. Besides, the results indicated that the scale of operation does not significantly influence security returns, thus, the researchers recommended that businesses should direct their focus on improving working capital management and business efficiency rather than pursuing unnecessary expansions activities. This study did not establish the link between the metrics of earnings quality and security returns volatility.

Mahdi, Masomeh and Shayan (2017) studied the influence of financial reporting quality on security returns of Iranian listed firms. The study used earnings quality as a metric for financial reporting quality. The goal of the study was to evaluate the influence of financial reporting quality (measured by earnings quality) and the quality of their financial information disclosure on security returns amongst firms listed at the Tehran Security Exchange (TSE), Iran. To test for the study hypothesis, Panel data regression analysis was employed. A total of 280 firms were sampled, yielding 1680 firm-year observations, from TSE listed firms for the period 2009-2014. The researchers controlled for severe multicollinearity in their ordinary least squares, by conducting the variance inflation factor. They also used the LLC unit root tests to ensure normality of the individual series of the study variables. The study results indicated that a statistically significant and positive association exist between firms' earnings quality and their security returns. Nevertheless, the study findings suggested that earnings management and disclosure quality are not significant predictors of a firms' equity return. The study was limited in that, the researchers did not test the predicting ability of all the idiosyncratic

factors on security returns. Factors such as the idiosyncratic risks and operating environment which could influence security returns were not analysed, thus, the results were not robust enough. Additionally, there are several methods which have been adopted by different scholars for measuring earnings quality and each could give a different result if adopted in the study.

The study of Mohamed and Hatem (2018) evaluated the influence of Earnings Quality on equity performance of securities of firms listed in the Egyptian security market. The study examined the effect of three determinants - idiosyncratic volatility, earnings management and corporate governance - on the firm performance with earnings quality as an intermediate variable. The study sample included the EGX30 share index during the time frame 2010-2017. Descriptive statistics and structure equation modeling techniques were employed in the study. The study examined all the components including, corporate governance, earnings management and the idiosyncratic equity return volatility in relation to the firm's earnings quality. The findings indicated that there is a positive interrelation amongst all the variables, save for earnings management that portrayed a negative relationship with the earnings quality. This study did not account for the confounding influence on the study findings occasioned by the toxic political environment in Egypt over the study period. Hence, the validity of the study findings cannot be ascertained. The study related security return volatility with firm performance with earnings quality as a moderator. The study did not identify the determinants of security return volatility.

Nyanine, Josue, Odunayo and Bomi (2022) studied the link between Earnings quality metrics and equity return volatility using data from the firms listed at JSE for 10 years between 2009 and 2018. Earnings quality was operationalised as accrual quality (AQ), conservatism, earnings persistence (EP), earnings predictability (EP) and earnings smoothness (ES). Idiosyncratic volatility was estimated as variance of residuals of the CAPM. Hypothesis testing was done using hierarchical linear regression model. The findings indicated that accrual quality and idiosyncratic security returns volatility are significantly and negatively related. The relationship remained unchanged even when earnings persistence was used as a metric for earnings quality. Companies having high value accruals quality and those firms which have more persistent earnings presented decreased idiosyncratic security returns volatility. The result also indicated that the earnings smoothness significantly and positively influenced firm specific security return volatility, implying that companies with less smooth earnings showed increased idiosyncratic equity return volatility. However, other metrics like the conservatism and earnings predictability did not significantly influence equity return variance. The contradictory findings of this study supported the noise and information perspective to explain the security return variance amongst JSE-listed companies. This study only accounted for the market risks by making use of the residuals of the CAPM but did not account for size and value risk factors.

In Kenya, Oluoch, Namusonge, and Onyango, (2015) evaluated the influence of accruals quality on security returns amongst NSE listed firms in Kenya. The study adopted both qualitative and quantitative research designs in determining the pricing influence of accruals quality amongst listed firms in Kenya. Purposive sampling was used in the study to select 39 firms from among all the 60 NSE listed firms in Kenya. The study covered a 20-year period between January 1993 to December 2013. Relevant secondary data on accrual quality was obtained from audited annual financial statements of each firm while NSE hand book provided monthly equity market security prices. Panel data regression was used to test the study hypothesis. Accruals-based portfolio decile premiums were regressed together with the Fama and French (1993) market factors on excess returns to test the statistical significance and ascertain whether and how accruals quality is priced in the security prices of equities of NSE listed firms. The results indicated that amongst NSE listed firms, much of the accruals quality consists of innate accruals with the level discretionary accruals being largely and statistically insignificant. The study further showed that because of the existence of accruals quality risk in the NSE market, there is a market return premium to compensate investors for bearing the risk. The findings also indicate that the security market returns are inversely proportional with the market returns. The study concludes that accruals quality is an idiosyncratic information risk factor in the Kenyan capital market. However, the study did not statistically estimate the quantitative impact of accruals quality on security returns volatility.

Paulo (2019) examined the relationship between Corporate Governance, Earnings Quality and Idiosyncratic Crash Risk during the 2007-2008 Financial Crisis. The study explored the time-varying nature of the association between financial disclosure quality, corporate governance, and crash risk. Their empirical design took advantage of the 2008 financial crisis as a sudden and negative exogenous shock that affected overall trust in capital markets. This near-natural experiment enabled the examination of the influence of accounting quality and corporate governance on abnormal crash risk arising during distress periods, using a sample of 1,361 firms from developed countries. While pre-crisis accounting opacity fueled the abnormal component of crash risk associated with the crisis, corporate governance practices had virtually no effect. Their findings are consistent with the notion that pre-crisis accounting quality has predictive power over the abnormal component of crash risk. They concluded that perceived integrity compounded by firms by way of financial disclosure quality bolsters investor confidence in the firms' financial information during a crisis, thereby attenuating crash risk.

Anaekenwa, Samuel and Nwaobia (2019) evaluated the potency and value relevance of earnings persistence (EPERS) and its influence on firm performance and the implications of the analysts' accurate forecast ability from the Nigerian capital Market. The study employed the expo facto research design and sampled 51 companies listed on the

Nigerian Security Exchange using stratified random sampling techniques from all the sectors for the period 2000-2016. Descriptive and Panel data regression analysis were used in the analysis of the effect of earnings persistence on firm performance. The findings showed that earnings persistence (EPERS) had a negative and non-significant effect on firm performance (Tobin's Q). Gearing exhibited a positive relationship whereas firm size revealed a negative relationship with Tobin's Q. Also based on findings, a weak growth trend was established between EPERS and Tobin's Q. Earnings persistence resulting from discretionary and opportunistic earnings could give inaccurate forecasting ability. Consequently, the study recommended that analysts should be watchful of the stable occurrence of earnings when

3. METHODS

3.1. Research Design

Research design is a none action process mostly equated to conceptualization and planning phases in project management. However, according to Kothari (2004) and Coopers and Schindler (2014) research design is a blue print which is geared towards achieving research objectives and answering research questions. While (Vibha & Walsh, 2019) opines that research design is a glue that holds various research components together, Philips (1987); Creswell (1994) postulates that research design may follow either quantitative paradigm or qualitative paradigm. With the increased research in this area of research design, a different perspective has been going around with the idea that the most important aspect of research is the reliability and validity of the study and not the design. Therefore, triangulation, mixed methods and pragmatism genres of research design has gained momentum among scholars in the recent past (Creswell & Clark, 2011, Tashakkori & Teddie 1998, Goles & Hirschheim, 2000, Maxcy, 2003). It is evidenced that irrespective of different definitions of research design, all the definitions points to the importance of research design in achieving valid and viable research output which can be generalized and practically be applied. Therefore, this study employed a quantitative research philosophy where secondary data was used in the study. The design used in this study is hence correlational research design. To help achieve reliable and valid results, various diagnostic tests and data transformation were performed.

3.2. Study Area

This research was carried out in Nairobi Securities Exchange; the burse is the securities exchange in Kenya. The Securities Exchange is based in Nairobi which is the head quarter of

evaluating reported financial statements, without which, predictions made from them could have negative and misleading implications. The study did not relate earnings persistence to firm specific volatility of security returns. Other measures of earnings quality such as accruals quality were also not considered in the study.

The empirical studies reviewed are inconclusive on how earnings quality will affect security return volatility but have rather linked earnings quality to security returns. Empirical studies have also not examined how quality of financial statements, measured by earnings quality, influences the relationship between capital expenditure, financial gearing and profitability on volatility of security returns.

Kenya. According to the 2019 population census by the government of Kenya, the city had a population of 4,397,073.

3.3. Target Population

The target population of this study comprised the 25 firms used for coming up with NSE 25 Share Index for the period ranging 1st January 2010 to 31st December 2019. These firms were targeted because they constitute 80% of the NSE'S total capitalization especially during the period under investigation. The study targeted the listed firms because they are required by law to avail their financial statements through publications. The annual financial statements were therefore available to the public and collection of data using them was made easy.

3.4. Model Specification

The following model was specified to analyze the relationship between earnings quality and volatility of security returns amongst NSE listed firms;

Relationship between Earnings Quality and Volatility of Security Returns

The basic model is specified as follows:

$$Y_{i,t} = \beta_{40} + \beta_{41}AQ_{i,t} + \beta_{42}Y_{i,(t-2)} + \varepsilon_{i,t} \dots \dots \dots (3.19)$$

Where;

$Y_{i,t}$ = security return volatility for firm i during period t;
 $AQ_{i,t}$ = Accruals Quality (measure of earnings quality) for firm i during time t;

β_{40} = constant term

β_{41} = Regression coefficient for Earnings Quality.

β_{42} = Regression coefficient for one period lag.

i = NSE listed companies ranging from 1 to 24;

t = Time in Years covering the period from 2010 to 2019;

$\varepsilon_{i,t}$ = Residual term of firm i, during time t.

4. RESULTS.

Table 1: Correlation Analysis of Earnings Quality and Volatility of Security Returns

Correlation Probability	SRV	AQ
SRV	1.000000	-----
AQ	-0.388210 (0.0000)	1.000000 -----

**Source:
Research**

Data, 2023.

P- values in parentheses

Key: SRV-security returns volatility and AQ accrual's quality

The correlation results indicates that accruals quality, a measure of earnings quality, is negatively correlated with idiosyncratic volatility of security returns at the NSE (AQ: r = -0.388210, p = 0.0000).

To actualize the study objective, a null hypothesis, assuming that Earnings Quality does not significantly affect security returns volatility amongst NSE listed firms, was formulated. Hypothesis testing was done using the dynamic, fixed effects regression analysis and the results are presented in **Table 2** below.

Table 2: Effect of Earnings Quality on Volatility of security returns Amongst firms listed at the NSE.

Dependent Variable: SRV

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.135514	0.024861	-5.450795	0.0000
LNAQ	-0.013537	0.003792	-3.569904	0.0004
SRV(-2)	0.596466	0.050755	11.75198	0.0000
R-squared	0.465194	Mean dependent var		0.221339
Adjusted R-squared	0.460643	S.D. dependent var		0.120656
S.E. of regression	0.088608	Akaike info criterion		-1.996665
Sum squared resid	1.845073	Schwarz criterion		-1.952896
Log likelihood	240.6031	Hannan-Quinn criter.		-1.979025
F-statistic	102.2059	Durbin-Watson stat		1.319806
Prob(F-statistic)	0.000000			

Source: Research Data, 2023

Key: SRV-security returns volatility, LNAQ- natural logarithm of accrual's quality

The resulting **model 1** is as follows:

$$SRV = -0.135514 - 0.013537 AQ + 0.596466 SRV_{t-2} + \varepsilon_{i,t} \dots \dots (1)$$

Model 1 above indicates that all other factors held constant, 1 % increase in earnings quality causes a decline in volatility by 1.3537%. This could be associated with the fact that when more earnings are converted to cash, firms are able make good their obligations when they fall due. In this regard, firms are able to reduce their financial distress risks, attaining financial stability. Investors tend to hold onto securities of firms exhibiting financial stability and this creates stability in security prices, reducing variance in security returns.

The results presented in **Table 2** above and the resulting **model 1** shows that earnings quality significantly and

negatively predict security return volatility at the NSE ($\beta = -0.013537$, $p = 0.0004$). This conforms with the findings of Mitra (2016); Claudia and Antonio (2018) and Nyanine et al (2022) which found that earnings quality significantly and negatively relates with Idiosyncratic security returns volatility. These studies used Earnings persistence and Earnings smoothness as metrics for earnings quality. In the current study, Earnings Quality has been operationalised as Accrual's Quality.

The recorded R^2 (coefficient of determination) of 0.460643 indicates that Earnings Quality, measured as

Accruals quality, together with two periods lags volatility, will predict 46.0643% of idiosyncratic volatility of security returns. Factors outside this model could predict the remaining 53.9357%. The strong R^2 is an indicator that the model is robust and a good predictor of firm specific security returns volatility with earnings quality as the independent variable.

Hypothesis testing was done with the criterion for acceptance or rejection being a probability value 0.05. The null hypothesis is rejected if the p-value is below 0.05 but if the p-value is greater than 0.05, the null hypothesis is accepted. Table 4.2 indicates that Accrual's Quality relates significantly and positively with idiosyncratic volatility of security Returns amongst NSE listed firms in Kenya ($\beta = -0.013537$, $p = 0.0004$). The computed t-statistic of 3.569904 supports this finding, since it is greater than the critical t-statistic of 1.96. Based on these findings, the formulated null hypothesis, that Earnings Quality does not significantly affect security returns volatility amongst NSE quoted companies in Kenya is rejected. Therefore, it can be resolved that Earnings Quality has a negative and statistically significant effect on idiosyncratic volatility of security returns amongst NSE quoted companies in Kenya.

5. Conclusions.

The study sought to establish how earnings quality and security returns volatility relate amongst NSE quoted companies. The regression results indicates that earnings quality significantly and negatively predict security return volatility at the NSE ($\beta = -0.013537$, $p = 0.0004$). Therefore, it can be resolved that Earnings Quality has a negative and statistically significant effect on security returns volatility amongst NSE quoted companies in Kenya. This means that quality of earnings determine how stable security returns are at the NSE. This implies that firms which have a lower rate of conversion of accruals to real cash experience increased levels of volatility of security returns. It can be concluded that firms experiencing a decline in earnings quality in a particular period will have cut down their capital expenditures for that period in order to lower volatility of stock returns. It can also be concluded that a firm with low earnings quality, trying to finance a new project will experience working capital challenges which may force it to resort to expensive sources of finance to raise the necessary funds. This will increase the insolvency risk which may spook investors in the capital market. Volatility of stock returns of such a firm will remain high. Lastly, firms with low earnings quality may remain profitable but these profits may be eroded by the huge debts these firms have to write off as bad debts. This may have an effect on the future returns expected by the investors causing uncertainty, thus, resulting in an increase in volatility of stock return. The study recommends that managers should employ prudent and robust debt recovery strategies to ensure that all earnings are converted to cash and the cash conversion cycle is kept short. Measures should be put in place to reduce bad debts written off from the firm's financial records.

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