FINANCIAL RESTRUCTURING AND SHAREHOLDERS' WEALTH OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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ABSTRACT

Financial restructuring is essential for maximizing shareholders' wealth. However, financial restructuring may also lead to diluted shareholders' value and increased debt that commits firms to payout future cash flows thus reducing the funds available for investment purposes hence lowering shareholders' wealth. Therefore, this study sought to investigate the effect of financial restructuring on the shareholders' wealth of firms listed at the Nairobi Securities Exchange (NSE). The study was anchored on agency, resource-based view and static trade off theory and a causal research design was adopted. The target population consisted of 64 listed firms at the Nairobi Securities Exchange as at 31st December 2023. However, adequate data for 54 firms was obtained yielding 534 firm-year observations for the period 2014 to 2023. Secondary data was obtained from the individual firms audited annual reports using a data collection sheet for ten years. Descriptive statistics summarized the study data and confirmatory factor analysis ascertained the goodness of fit of the structural equation modelling. Diagnostic tests were undertaken to ensure that the assumptions of the structural equation modelling were met. Inferential statistics including correlations and structural equation modelling were used to test the hypotheses at 5% significance level. The results revealed that financial restructuring exerts a statistically significant positive influence on shareholders wealth of listed firms in Kenya ($\beta = 1.160$, $p = 0.001$). The study expands the existing base of knowledge on financial restructuring and shareholders' wealth by ensuring that strategic use of financial restructuring such as refinancing expensive loans, repurchasing undervalued shares, or issuing new equity should be guided by policies and practice of the listed firms to enhance shareholders' wealth.

Keywords: Financial restructuring, shareholders' wealth, short term debt, long term debt, debt to equity

INTRODUCTION

Financial restructuring, the practice of changing the firm's capital structure to remain financially viable and improve the firms' shareholders' wealth has been a topic of significant interest and debate among scholars (Sabir *et al.,* 2022). The rapidly changing business landscape has disrupted the world economy by unbalancing consumption and production thereby affecting shareholders' wealth (Pourmansouri *et al.,* 2022). As a result of the changing business landscape firms had to undertake financial restructuring to boost their shareholders' wealth.

Financial restructuring involves alteration of the organization's capital structure that is the mix of debt and equity to attain an optimal structure that maximizes the wealth of the firm (Audi *et al.*, 2022). Financial restructuring aims to optimize the company's financial position, lower the cost of capital, increase the earnings per share and hence improve shareholder wealth (Weber *et al*., 2023). On the flip side, financial restructuring may also lead to diluted shareholders' wealth and increased debt that commits firms to payout future cash flows thus reducing the funds available for investment purposes hence lowering shareholders' wealth (Yuniningsih & Sibarani, 2023). Uchumi supermarket Amalgamated Banks of South Africa (ABSA) and Kenya airways have undergone financial restructuring through issuance of debt or/and equity and restructuring their debt with a view of improving their performance.

Uchumi supermarket undertook financial restructuring in the year 2015 but reported a decline of 71.4% in profits (NSE 2017). Amalgamated Banks of South Africa (ABSA) reported an increase in profits of 29% in the year 2020 after it restructured their debts. The mixed outcomes raise the question of whether financial restructuring enhances or diminishes shareholders' wealth.

Financial restructuring has been analyzed as one of the strategies that can assist firms to cope with the financial distress in order to boost shareholders' wealth but the extent to which restructuring affects shareholders' wealth remains a puzzle since various empirical studies conducted have reported inconsistent results (Alles, 2020). Furthermore, there is no universally accepted explanation for company's decrease in shareholders' wealth despite undertaking financial restructuring. While it remained theoretical intuitive that financial restructuring improves shareholders' wealth, there is no shortage of empirical evidence to suggest that this may not necessarily be the case.

Different theoretical arguments advance the nexus between financial restructuring and shareholders' wealth. In this line, resource-based view theory championed by Penrose (1959) and advanced by Barney (1991) posits that firms are profit maximizers and uses owned, controlled, inimitable and available resources to gain a competitive advantage through financial restructuring to enhance shareholders' wealth. Modigliani and Miller (1958) static trade off theory dwells on the optimal debt-equity mix that maximizes shareholders' wealth by balancing the costs and benefits of an additional unit of debt. Similarly, Jensen and Meckling (1976) agency theory posits that the agency costs that arise from the conflicts between managerial interests with those of shareholders' and debt holders' can also be minimized by holding an optimal capital structure (debt-equity mix) that maximizes shareholders' wealth.

Nisarg (2022) using multiple regression method concluded that financial restructuring had a positive significant effect on shareholders' wealth of 24 purposive selected Indian listed firms from 2000 to 2018. Gupta (2017) revealed that financial restructuring had no significant relationship with shareholders' wealth of 18 randomly selected Indian listed firms from 2003 to 2015 using panel data regression. However, Oladele & Iyiola (2021) reported a positive relationship between financial restructuring and financial performance of 10 purposively selected Nigerian commercial banks from the period 2007 to 2019 using Generalized Methods of Moment. Duong et al. (2020) indicated a negative relationship between financial restructuring and shareholders' wealth of 226 purposively selected Vietnam listed firms from 2007 to 2014 using panel data regression model. Azzouzi (2022) adopted multi variate regression model and found that a positive relationship between financial restructuring and shareholders' wealth of 48 purposively selected Moroccan listed companies from 2019 to 2021. Further, using multiple linear regression Wanyoike *et al*. (2021) concluded that financial restructuring had a positive significant effect on the financial performance of 39 commercial banks in Kenya for the period spanning from 2009 to 2019 using census approach.

The existing literature presents mixed results about the effect of financial restructuring on shareholders' wealth with some reporting positive effects and others finding non-significant or negative effect. Most of the studies were conducted in developed countries and adopted different data analysis methods. Moreover, gaps also arise from the period of study and operationalization of financial restructuring concept because most studies used single indicators limiting generalizability. Therefore, the need to carry out the research in a different context in Kenya to corroborate the findings about the link between financial restructuring and shareholders' wealth. This study, therefore, examines the effect of financial restructuring on shareholders' wealth among firms listed at the Nairobi Securities Exchange using structural equation modelling.

Methodology

Research Design

The study adopted a causal research design within a balanced panel framework to enable examination of dynamic relationships between financial restructuring and shareholders' wealth.

Population

The population of this study was the 64 firms listed at the NSE for the period of ten years spanning from 2014 to 2023 yielding 640 firm-year observations.

Sampling Procedure and Sample Size

The study adopted census approach where all the 64 listed firms were considered. Census approach was suitable because the population was reckoned as small and hence did not warrant the need for sampling.

Data Collection

Secondary quantitative data was obtained from individual firm's financial statements collected from the NSE handbooks, firms audited annual reports, published book of accounts, individual firms' online websites and the CMA reports for a period of ten years from the period 2014 to 2023.

Data Analysis

Data was analyzed by adopting descriptive and inferential statistics. Inferential statistics involving correlations and structural equation model was used. Diagnostics tests were undertaken to ensure that the assumptions of the structural equation modelling were met.

Operationalization of Variables

Operationalization of variables as guided by review of previous studies was presented in Table 1

Table 1: Operationalization of variables

Variable	Indicators	Measurement	Similar Studies
Financial Restructuring	Long-term debt to total debt Short term to total debt Debt to equity ratio	$\frac{\text{Long term debt}}{\text{Total debt}}$ $\frac{\text{Short term debt}}{\text{Total debt}}$ $\frac{\text{Debt}}{\text{Equity}}$	Yuniningsih and Sibarani (2023), Duong *et al*. (2020) and Nisarg (2022) Yuniningsih and Sibarani (2023), Duong *et al*. (2020) and Nisarg (2022) Gupta *et al*. (2022), Hong *et al* (2021) and Okonkwo *et al*. (2023)
Shareholders' Wealth	Tobin's Q Market value to book value Earnings per share	$\frac{\text{Market capitalization}}{\text{Total Equity}}$ $\frac{\text{Market value per share}}{\textit{Book value per share}}$ $\frac{\text{Profit after tax}}{\text{Number of Ordinary shares}}$	Gupta (2022), Kao *et al*. 2019) and Bhatt (2017) Nisarg (2022) and Azhagaiah and Kumar (2011) Hong *et al*. (2021), Kamal (2022) and Gupta (2017)

The study adopted Covariance-based Structural Equation Modelling (CB-SEM) for testing hypothesis. Covariance-Based Structural Equation Modelling also handled multiple indicators, both observed and latent variables thereby reducing the measurement errors and increasing the reliability of measurement (Zyphur *et al.,* 2023).

Further, this study applied a Maximum likelihood estimation (MLE) method to estimate the parameters of the probability distribution based on observed data in SEM and estimate non-recursive causal relations in path models. Financial restructuring effect on the shareholders' wealth of firms listed at the Nairobi securities exchange was evaluated by the path analysis model outlined in Figure 1 and model 1.

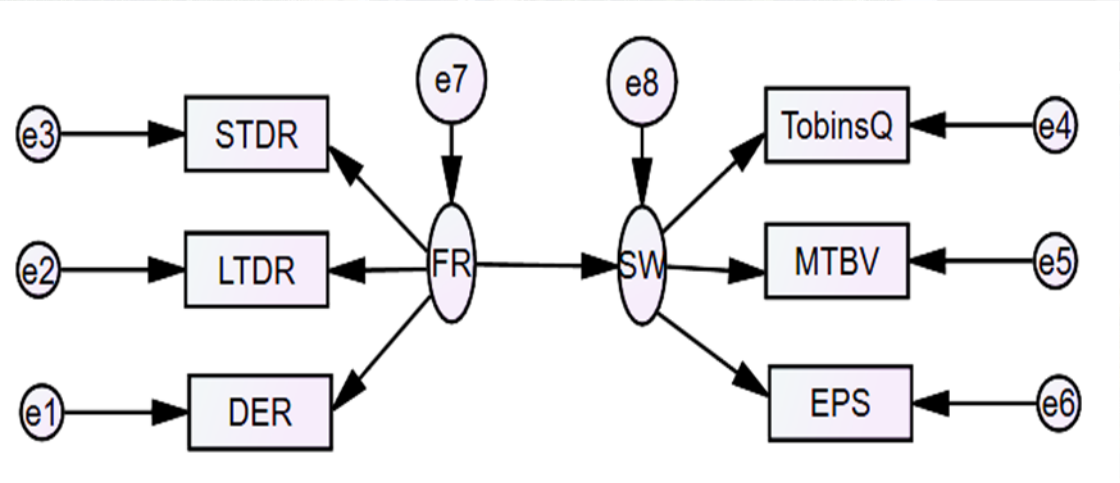

Figure 1: Path Analysis Model of Financial Restructuring and Shareholders' Wealth

where,
DER= Debt to Equity ratio (Observed Variable)
STDR= Short term debt ratio (Observed Variable)
LTDR= Long term debt (Observed Variable)
FR= Financial restructuring (Latent Variable)
SW= Shareholders' wealth (Latent Variable)
EPS= Earnings per share (Observed Variable)
MTBV=Market value to Book value (Observed Variable)
Tobin's Q (Observed Variable)

To test whether the existing indicator variables were valid indicators for measuring the latent construct of shareholders' wealth and financial restructuring, the following measurement models were adopted.
$DER = \lambda_1 FR + \delta_1$
$STDR = \lambda_2 FR + \delta_2$
$LTDR = \lambda_3 FR + \delta_3$
$EPS = \lambda_4 SW + \delta_4$
$Tobin's\ Q = \lambda_5 SW + \delta_5$
$MTBV = \lambda_6 SW + \delta_6$

The following structural equation model was adopted to test the direct effect of financial restructuring on shareholders' wealth.

$SW = \alpha_1 + \gamma_1 FR + \zeta$……...Model 1

where:
γ = Parameters representing relationships from independent latent constructs to dependent latent variable
ζ = Error term for a latent dependent variable
λ = Factor loadings which represent how strongly each indicator is related to the latent variable
α = Constant term
δ = Measurement errors that represents the error term for each observed variable, capturing the variance not explained by the latent variable.

RESULTS AND DISCUSSIONS

Data Capture Rate

Data analysis covered all the 64 firms listed at the NSE. However, firms whose accounting information was unavailable, incomplete and have been delisted during the sampled period were excluded. Thus, only the 54 firms that met the specification selection criteria were included in the sample that yielded 534 firm year observations.

Descriptive statistics

Descriptive statistics were based on the minimum, maximum, mean, standard deviation, skewness and kurtosis. Descriptive statistics results are presented in Table 2.

Table 2: Descriptive statistics of shareholders' wealth and financial restructuring

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Tobin's Q	534	0.87	0.96	0.902	0.023	0.573	-0.329
MTBV	534	0.85	0.97	0.905	0.031	0.246	-0.414
EPS	534	0.87	0.99	0.914	0.032	0.534	-0.501
STDR	534	0.67	0.75	0.693	0.023	0.683	-0.077
LTDR	534	0.67	0.77	0.703	0.026	0.714	-0.023
DER	534	0.67	0.75	0.705	0.022	0.060	-0.678

The results presented in Table 1 show that the mean value for Tobin's Q was 0.902 which means that the market capitalization was less than total equity. This implies undervaluation which presents an opportunity for the investor to purchase the shares of the firms at a discount. The standard deviation was 0.023, indicating low dispersion. The minimum and maximum values for Tobin's Q were 0.87 and 0.96 respectively revealing a slight variation in valuation among the listed firms. The skewness value of 0.573 suggests a moderate positive skew indicating that the data from the firms was closely clustered around the mean with a few higher values pulling the distribution to the right. The negative kurtosis value (-0.329) indicates that the data from the sampled were closely clustered.

Market-to-Book Value (MTBV) had a mean of 0.905, implying that the firms are undervalued by the market thus, investors can purchase the shares of the firms at a discount. The standard deviation was 0.031, indicating low dispersion. The MTBV varies from 0.85 to 0.97. The skewness of 0.246 suggests a slight positive skew, indicating that few firms had higher MTBV while the kurtosis of -0.414 confirms a flat distribution with light tails. This indicates that most firms were valued close to their book value with limited extreme valuations.

Earnings per Share (EPS) recorded a mean of 0.914, this indicates that for every I outstanding common share held, the company generated 0.914 of the net profit. The standard deviation was 0.032 indicates low dispersion and thus homogeneity across firms. Earnings per share values varies from 0.87 to 0.99. The skewness value of 0.534 indicates a moderate positive skew implying that most of the firms had average earnings per share. The kurtosis value of -0.501 reflects a flat distribution revealing that few listed firms had higher earnings per share. The mean value of STDR was 0.693, indicating that on average 69.3% of the firm's operations are financed by short term debt. The standard deviation of 0.023 indicates low dispersion and thus, homogeneity across firms. The minimum and maximum values ranged from 0.67 to 0.75 with a skewness of 0.683 pointing to a moderately positively skewed distribution, implying that most firms had relatively lower short-term debt ratios. The kurtosis value of -0.077 suggests a normal distribution.

Long term debt ratio (LTDR) value varies from 0.67 to 0.77 with a mean value of 0.703, implying that 70.3% of the firm's operations are financed by long-term debt. The standard deviation of 0.026 suggests low dispersion. The positive skewness of 0.714 indicates that fewer firms had higher long term debt ratios. The negative kurtosis value of -0.023 reflects a distribution that is flatter than the normal curve indicating that some firms have higher long-term debt ratios. Debt to equity ratio (DER) values range from 0.67 to 0.75 with a mean value of 0.705, indicating that the firms use 70.5% of debt to finance its operations relative to the value of its shareholders equity. The standard deviation of 0.022 suggests that the firm's leverage has been consistent overtime with little volatility in its debt-to-equity ratio. Debt to equity ratio skewness of 0.060 is close to zero and thus an indication that the distribution is symmetrical. However, the kurtosis value of -0.678 indicates a flatter distribution of debt-to-equity values. In conclusion, the descriptive statistics suggest that most listed firms exhibit stable leverage structures and moderate profitability, consistent with the financing behavior of publicly traded firms.

Correlation between Financial Restructuring and Shareholders' Wealth

The relationship between shareholders' wealth measured by EPS, Tobin's Q and MTBV and indicators of financial restructuring of DER, STDR and LTDR was determined based on Pearson product moment correlation. An aggregate index for financial restructuring (FR) and shareholders' wealth (SW) was also used. The aggregate index of FR and SW was obtained by averaging the three indicators of FR and SW. The results of the correlation between financial restructuring and shareholders' wealth are presented in Table 3.

Table 3: Correlation between Financial Restructuring and Shareholders' Wealth

		FR	SW
FR	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	534	
SW	Pearson Correlation	0.784**	1
	Sig. (2-tailed)	0.000	
	N	534	534

The correlation results presented in Table 3 revealed a positive and statistically significant relationship between financial restructuring (FR) and shareholders' wealth (SW) with a Pearson correlation coefficient of 0.784 ($p < 0.01$). This implies that firms that maintain a prudent balance of short-term and long-term debt relative to equity tend to realize better market valuation and returns to shareholders.

Effect of Financial Restructuring on Shareholders' Wealth

The hypothesis tested in this study examined the effect of financial restructuring on shareholders' wealth. The analysis began with structural equation modeling (SEM) diagnostics, assessment of model fit, and evaluation of the measurement models. Preliminary diagnostic tests confirmed that the data met the assumptions required for SEM, including normality (Jarque-Bera, $p > 0.05$), homoskedasticity (Breusch-Pagan, $p = 0.462$), absence of multicollinearity (VIF < 5), and no evidence of serial correlation (Wooldridge, $p = 0.151$).

Subsequently, several model fit indices were evaluated to determine whether the overall model adequately represented the observed data and whether the hypothesized pathways in the path diagram were statistically significant. The results of the model fit tests are summarized in Table 4.

Table 4: Model fit indices

Model	CMIN	CMIN/DF	P value	GFI	TLI	IFI	CFI	NFI	RMSEA
Modified Model	25.312	2.531	0.061	0.943	0.931	0.965	0.961	0.921	0.045
Threshold		< 3.0	> 0.05	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	< 0.08

Source: Author, (2025)

The model fit indices test result in Table 4 provides a chi-square statistic (CMIN) of 25.312 with a CMIN/DF of 2.531 which is less than 3. The P-value is 0.061 which was greater than 0.05 implying that the model did not significantly deviate from the observed data suggesting a good model fit. Goodness-of-Fit Index (GFI), Tucker Lewis Index (TLI), Incremental Fit Index (IFI), Comparative Fit Index (CFI) and Normed Fit Index (NFI) were above 0.9. Furthermore, the RMSEA value was 0.045 which was below 0.08. Altogether, these indices indicated a good model fit.

Further, measurement model was adopted to determine how well STDR, LTDR and DER measures financial restructuring and also how well shareholders' wealth was represented by Tobin's Q, MTBV and EPS. The results of the measurement model of financial restructuring and shareholders' wealth are shown in Figure 2.

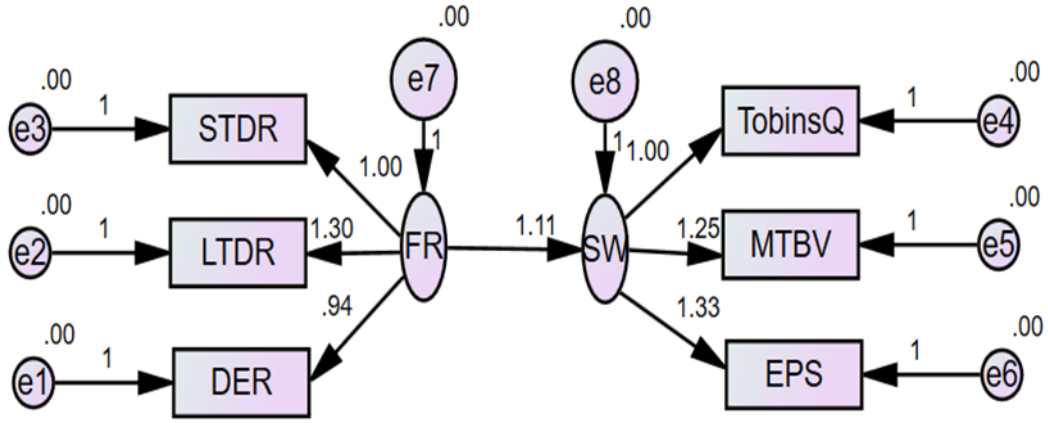

Figure 2: Financial Restructuring and Shareholders' Wealth

The results presented in Figure 2 showed the measurement model that focused on two latent variables, Financial Restructuring (FR) and Shareholders' Wealth (SW) each measured using three observed indicators. All the factor loadings of the observed variables of FR and SW were above 0.5 and thus no observed variable was dropped. A bootstrap was performed using 1000 samples to obtain robust estimates. The relationship between the two latent variables FR and SW was positive as indicated by the path coefficient ($\beta = 1.11$), implying that financial restructuring enhances shareholders' wealth. The significant positive path between financial restructuring and shareholders' wealth supports the agency theory premise that well managed financial restructuring aligns managerial incentives with shareholder interest.

Table 5 presents the findings of the effect of financial restructuring on shareholders' wealth of firms listed at the NSE.

Table 5: Effect of Financial Restructuring on Shareholders' Wealth

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	0.095	0.028	3.398	0.001
	FR	1.160	0.040	29.141	0.000

The results presented in Table 5 show the effect of financial restructuring on shareholders' wealth of firms listed at the NSE. Financial restructuring (FR) was measured as the composite index of DER, STDR and LTDR while shareholders' wealth (SW) was represented as the aggregate index of Tobin's Q, MTBV and EPS. The results showed that the intercept regression coefficient was positive and significant ($\beta = 0.095, p = 0.001$). This implies that SW was 0.095 when all other predictors of the model were zero. Financial restructuring had a statistically significant positive effect on shareholders' wealth ($\beta = 1.160, p = 0.000$). This indicates that a unit increase in FR result in 1.160 increase in SW. The findings led to the rejection of the null hypothesis that financial restructuring has no statistically significant relationship with shareholders' wealth. The finding that financial restructuring is positively related with the firms' shareholders' wealth is similar to the study findings by (Yuniningsih & Sibarani, 2023; Nisarg, 2022; Oladele & Iyiola, 2020) and others finding no or negative effects (Gupta, 2017; Duong et al., 2020, Okonkwo *et al.* (2023).

The equation for the relationship between financial restructuring and shareholders' wealth was represented by the following model.

$$SW = 0.095 + 1.160FR$$

Conclusion

The study concluded that financial restructuring had a positive statistically significant effect on shareholders' wealth thus, the null hypothesis was rejected. This indicates that firms that engaged in optimizing their capital structures through actions such as adjusting debt levels, issuing or repurchasing equity, or refinancing existing liabilities recorded improvements in key indicators of shareholder wealth such as Tobin's Q, earnings per share and market-to-book value ratios.

Recommendations

The existence of a positive significant effect of financial restructuring on shareholders' wealth of firms listed at the NSE supports agency and static trade off theory. It is therefore recommended that managers of listed firms should optimize their capital structure to strike a balance between debt and equity that maximizes shareholder wealth. Additionally, regulators should encourage financial restructuring to improve shareholders' wealth.

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