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Market Risk Premia and Stock Returns at the Nairobi Securities Exchange 20 Share
Index, Kenya

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Abstract

Purpose: Stock returns form an essential element in capital allocation and investment decisions across the economy by providing an approximation of the cost of capital for a project, division, or firm. In a stock market where the return generation process is well established, investors are able to quantify risk and translate it into expected returns for the purpose of making the right investment choices. Returns at the Kenyan market is, however, generally depressed and experience high volatility arising from changes in overall market risk. Consequently, investors have often suffered heavy losses in terms of unrealized market valuation whenever foreign investors exit the market to seek other safer investment options with guaranteed returns in developed markets. This has consequently ignited a long-standing debate over the ability of the Kenyan securities market to correctly price securities and hence predict returns. The objective of the study was to study the effect of market risk premia on stock market returns at the NSE 20 Share Index, Kenya. The study anchored on the CAPM theory.

Methodology: The study adopted a descriptive research design to explain the effect of the relationship among the study variable. The study conducted a census study of all the firms listed on the NSE 20 Share Index, Kenya, as of December 2025. Secondary time series data was applied for a period of 7 years between 2019 and 2025. Secondary data were sourced from audited financial reports, CMA, and NSE databases. The data was analyzed using panel regression models to establish the relationship between market risk premia on stock returns at the NSE 20 Share Index, Kenya.

Findings: The findings revealed that market risk premium has a positive and statistically significant effect on stock returns ($\beta = 0.4286$, $p < 0.01$), indicating that systematic market risk is a key driver of returns. The model achieved a within R-squared of 0.6473, implying that approximately 64.73% of the variation in stock returns is explained by the market risk premia.

Unique Contribution to Theory, Practice and Policy: Based on these findings, the study recommended that regulatory bodies such as the CMA should strengthen market transparency to promote informed decision-making and improve market efficiency.

Keywords: *Market Risk Premia, Stock Returns, Nairobi Securities Exchange, Share Index, Kenya*

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INTRODUCTION

In recent years, global investors aiming to enhance the risk–return performance of their portfolios have increasingly turned to developing markets as promising avenues for diversification (Ochenge & Muiuru, 2017). Mugenda (2023) highlights that frontier economies, in particular, are emerging as attractive sources of growth opportunities. Nonetheless, these markets are often characterized by heightened investor sentiment, limited liquidity, and equity returns that deviate from normal distribution patterns. According to Mwiwa (2025), the return-generating process in many African stock markets remains underdeveloped, which complicates asset pricing. Mwiwa (2025) further emphasizes that African exchanges tend to be highly concentrated in a few dominant stocks that trade sporadically and exhibit non-normal return distributions.

In particular, the inability to accurately capture the determinants of stock returns undermines market efficiency and weakens the predictive power of traditional asset pricing models such as the Capital Asset Pricing Model (CAPM). According to Bodie, Kane, and Marcus (2018), stock returns represent the profits or losses that investors experience over a given time period from owning a stock, expressed as a percentage of the original investment. According to Bodie, Kane, and Marcus (2018), they are commonly quantified as the difference between the starting price of the stock and any dividends received. Empirical studies underscore the importance of stock returns in financial economics because they signal the cost of equity capital and guide both portfolio allocation and corporate investment decisions (Hou, Mo, Xue, and Zhang, 2020; Ouma and Muriu, 2021); Mwiwa (2025).

In stock markets where the return generation process is well established, due to their ability to accurately assign stock values, investors can make wise investment decisions that will increase their risk-adjusted returns (Taha & Elgiziry, 2016). However, many African equity markets are sentiment-prone and have a less developed return generation mechanism, which makes it challenging for investors to appropriately price assets (Ochenge and Muiuru, 2017). Because of this, identifying a benchmark model for forecasting expected return in a dynamic risk environment has taken center stage in the literature on financial economics and continues to attract the interest of scholars and financial professionals worldwide (Taha & Elgiziry, 2016).

The market risk premium refers to the additional return that investors demand for holding a diversified market portfolio instead of a risk-free asset. It represents the compensation investors expect for assuming systematic risk, which cannot be eliminated through diversification (Sharpe, 1964; Bodie, Kane, & Marcus, 2021). The magnitude of the market risk premium depends on investor risk aversion, market volatility, and macroeconomic conditions (Ali & Muriithi, 2023). Investors usually seek a higher premium as compensation for increased risk when market uncertainty is high, while stable market circumstances are associated with a lower premium. Variations in this premium influence investor sentiment, portfolio allocation, and overall market performance, making it a critical determinant of stock return behavior within Kenya’s frontier market (Wanjiru & Were, 2024)

Statement of the Problem

The securities market plays a vital role in offering alternative investment opportunities to both local and international investors (Mugenda, 2021). Stock performance is especially important for listed firms because it reflects their financial health and shapes investor confidence (Ngene, 2022). Based on an 8–12% annual benchmark, the index should have reached 6,800–9,800 points by 2025, yet it fell far short of this level, indicating persistent underperformance (NSE,

2023; IMF, 2022; World Bank, 2023). The NSE 20 Share Index, Kenya's key benchmark for blue-chip stocks, has experienced significant return volatility in recent years, raising concerns about stability and predictability in the market (NSE, 2024). For instance, CMA (2022) recorded a sharp decline in stock returns of 23.65% in 2019. In 2020, the index closed at 2,654 points, reflecting a decline of 6.35% from the previous year (NSE, 2020). In 2021, there was a sharp downturn, with the index falling to 1,868.39 points, a loss of 29.60% (NSE, 2021). Although 2022 and 2023 saw modest rebounds of 1.83% and 3.94%, bringing the index to 1,902.57 and 2,010.65 points, respectively (NSE, 2023; NSE, 2024), this recovery was short-lived. The index declined again in 2024 by 11.90% to 1,376.10 points and by a further 10.44% in 2025 to 1,101.16 points (NSE, 2024; NSE, 2025).

These fluctuations highlight the instability of Kenya's equity market, with alternating downturns and brief rallies generating investor uncertainty and undermining long-term confidence. Empirical evidence shows that market risk premia are significant determinants of stock returns in developed and some emerging markets (Fama & French, 2015; Hou, Xue, & Zhang, 2020; Amihud et al., 2017). However, findings remain inconsistent across contexts. For instance, studies in the U.S. and U.K. (Fama & French, 2015; Amihud et al., 2017) report a strong positive relationship between risk premia and returns, whereas research in emerging markets such as South Africa (Hearn, 2025; Mosoeu, 2022) and Kenya (Mugenda, 2021; Kamau, 2018) presents mixed or weak evidence. Other scholars question the universal robustness of these premia, finding that their explanatory power varies across markets and time periods (Harvey, Liu, & Zhu, 2016; Lindvall, 2020; McLean & Pontiff, 2016; Muravyeva et al., 2022), while others, such as Zaremba et al. (2020), find no significant effect at all. This divergence indicates the existence of conceptual and contextual gaps, particularly within the Kenyan market.

Previous studies have predominantly focused on developed economies (e.g., Fama & French, 2015; Hou et al., 2020, in the U.S.; Amihud et al., 2017, in the U.K.) or emerging markets outside Kenya (Zaremba et al., 2020, in Poland; Hearn, 2025, and Mosoeu, 2022, in South Africa). Consequently, the empirical applicability of asset-pricing models such as CAPM and Fama-French extensions in Kenya remains uncertain due to the country's unique market structure (CMA, 2022; Cytton, 2023). If unresolved, this problem may cause reliance on asset-pricing models from advanced markets, resulting in mispriced securities, inefficient capital allocation, and reduced foreign portfolio inflows, ultimately undermining Kenya's financial market stability and growth. This study is distinct from prior research as it specifically focuses on the NSE 20 Share Index, Kenya's benchmark for blue-chip firms, which has been largely underexplored, unlike studies that have been conducted on NASI (Mugenda, 2021; Nyambura, 2016) and previous works conducted in other economies such as the U.S., U.K., and Sub-Saharan Africa (Fama & French, 2015; Amihud et al., 2017; Gbohoui, 2023). It further differs by using recent post-COVID data (2019–2025) and employing a panel regression framework to generate current, policy-relevant insights into the effects of market risk premia in Kenya (Hou, Xue, & Zhang, 2020; Hearn, 2025; Mosoeu, 2022).

Objective of the Study

The objective of the study was to establish the effect of market risk premia and stock returns of firms listed at the NSE 20 Share Index, Kenya

Hypothesis of the Study

H₀₁: Market risk premium has no significant effect on stock returns of firms listed at the

Theoretical Review

This section reviews theoretical and empirical literature related to market risk premia and stock returns with a focus on firms listed on the NSE 20 Share Index.

Capital Asset Pricing Model

The Capital Asset Pricing Model (CAPM) was developed by William Sharpe (1964). The theory posits that the expected return of a security is linearly related to its sensitivity to overall market movements, meaning that as the market's return fluctuates, the return on an individual asset changes proportionally based on its level of systematic risk. This sensitivity is captured by the beta coefficient (β), which measures how strongly a stock's returns respond to changes in the overall market portfolio (Sharpe, 1964; Lintner, 1965). A beta greater than one indicates that the asset is more volatile than the market and thus offers higher expected returns to compensate for higher risk, while a beta less than one implies lower volatility and lower expected returns (Bodie, Kane, & Marcus, 2021).

The CAPM is built on a set of assumptions. It assumes that investors are rational and risk-averse, making investment choices that maximize expected utility based solely on expected returns and the variance of those returns (Sharpe, 1964; Lintner, 1965). Secondly, investors have uniform expectations for asset returns, meaning that they have the same knowledge and predict future risks and returns in the same manner (Fama & French, 2015). The theory assumes that markets are fully competitive and frictionless, which means that all investors can lend and borrow limitless sums at the same risk-free rate and that there are no taxes, transaction costs, short-selling limitations, or borrowing constraints (Bodie, Kane, & Marcus, 2021). CAPM also views all assets as fully liquid and endlessly divisible, allowing investors to freely modify their portfolios without having an impact on market pricing (Ross, 2021). Lastly, it assumes that investors plan and carry out portfolio decisions within a single, consistent timeframe, operating inside a single-period investment horizon (Ali & Muriithi, 2023).

Despite its elegance, the CAPM has been widely criticized for its unrealistic assumptions and limited empirical validity. Researchers have shown that beta alone does not fully explain differences in stock returns across firms or time (Bildirici, 2022). Empirical anomalies such as the size, value, and momentum effects demonstrate that other factors beyond market risk contribute to expected returns (Fama & French, 2015). Moreover, emerging market studies indicate that CAPM often underestimates risk due to market inefficiencies, low liquidity, and information asymmetry (Ali & Muriithi, 2023). These shortcomings have led to the development of multifactor models, such as the Fama–French and q-factor models, which incorporate additional sources of systematic risk.

CAPM provides the theoretical basis for the market risk premium, which represents the excess return of the market portfolio (NSE 20 Share Index) over the risk-free rate. The theory suggests that investors in the NSE 20 index require compensation proportional to their exposure to overall market fluctuations. Therefore, firms with higher betas are expected to yield higher average returns, all else equal. For the NSE 20 Share Index, which tracks Kenya's leading blue-chip firms, CAPM provides a framework to evaluate how market-wide risks shape returns. Its focus on non-diversifiable risk is particularly relevant in Kenya, where macroeconomic shocks such as inflation, currency volatility, and political instability persist (Fama & French, 2004).

significant positive effect on stock returns, while the effects of other firm-specific factors were mixed

METHODOLOGY

The study adopted a descriptive research design to examine the relationship between market risk premia and stock returns of firms listed under the NSE 20 Share Index. The target population of the study comprised all firms listed under the NSE 20 Share Index during the study period from 2019 to 2025. The study adopted a census approach, whereby all firms listed under the NSE 20 Share Index during the study period from 2019 to 2025 were included in the analysis. The study relied on secondary data collection instruments. Data were collected using a data collection sheet designed to capture relevant information from published sources. The gathered data were processed, cleaned, coded, and calculated using STATA 18. The analysis combined descriptive statistics (means, standard deviations, skewness, kurtosis) to summarize stock returns and risk premia, and inferential statistics to test the research hypotheses. A panel regression framework was employed since it captures both cross-sectional and time-series variations (Hsiao, 2014). The general panel regression model was:

$$Y_{it} = \beta_0 + \beta_1 MRP_{it} + \varepsilon$$

Where;

Y represents stock returns

β_0 represents a Constant,

β_1 represent Regression Coefficient

MRP represents market risk premium

it represents firm *i* at time *t*

ε represents the error term

FINDINGS AND DISCUSSIONS

This section presents the findings of the study on the effect of market risk premia on stock returns of firms listed at the NSE 20 Share Index, Kenya. The analysis is based on panel data covering the period 2019–2025.

Descriptive Statistics

Descriptive statistics provide a summary of the central tendency, dispersion, and distributional characteristics of the study variable for firms listed on the NSE 20 Share Index over the period 2019–2025. The results are presented in Table 4.1

Table 1: Descriptive Statistics Results

Variable	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Stock Returns	-0.0896	0.3171	-0.0235	0.0755	0.0842	2.9264
Market Risk Premium	-0.0721	0.2826	0.0924	0.0514	0.2558	2.0052

Table 1. shows that the minimum stock return is -0.0896, which indicates that the NSE 20 firms experienced a maximum observed loss of approximately 8.96% during the study period, suggesting exposure to downside market risk. Conversely, the maximum return of 0.3171 shows that some firms recorded gains of up to 31.71%, reflecting strong upward movements in certain years. However, the mean return of -0.0235 implies that, on average, firms recorded

a negative return of 2.35% over the study period. This suggests that investors in the NSE 20 index experienced overall losses, thereby reinforcing concerns about declining market performance and justifying the study's problem statement.

The standard deviation of 0.0755 indicates that stock returns deviate from their mean by approximately 7.55% on average. This reflects a relatively high level of volatility within the NSE 20 Share Index during the study period. Given that the mean return is negative (-0.0235), the dispersion suggests that returns fluctuated significantly around a declining average performance. High volatility combined with negative average returns implies elevated investment risk and uncertainty, which may discourage investor participation. Empirical studies in emerging markets show that frontier exchanges typically exhibit higher return volatility compared to developed markets due to liquidity constraints and macroeconomic shocks (Bildirici, 2022; Omondi & Waweru, 2024). Thus, the observed dispersion supports the argument that stock performance at the NSE 20 has been unstable, reinforcing the need to examine underlying risk premia. The skewness value of 0.0842 remains within the acceptable normality threshold of ± 1 (Hair et al., 2019), indicating approximate symmetry in the return distribution.

The kurtosis value of 2.9264, being close to the benchmark value of 3, suggests mesokurtic behavior, meaning returns do not exhibit excessive tail risk (West, Finch, & Curran, 1995). Thus, despite the negative average return, the distributional properties remain suitable for parametric regression analysis. Similar studies of negative average returns in emerging and frontier markets have been documented during periods of macroeconomic instability, liquidity constraints, or investor uncertainty (Bildirici, 2022; Omondi & Waweru, 2024). The observed negative mean therefore supports the problem statement that stock performance at the NSE 20 may not be fully explained by market movements alone, necessitating examination of additional risk premia such as investment, liquidity, and value factors.

Regarding market risk premium, a minimum of -0.0721 indicates that during certain periods, the NSE 20 index underperformed the risk-free rate, meaning investors were not compensated for bearing systematic risk. The maximum value of 0.2826 suggests that in favorable market conditions, investors earned excess returns of up to 28.26% above the risk-free rate. The mean of 0.0924 implies that investors received an average annual excess return of 9.24% for holding the market portfolio. This aligns with empirical evidence that market risk premia in emerging markets typically range between 6% and 10% (Damodaran, 2023; Ali & Muriithi, 2023). The standard deviation of 0.0514 indicates moderate variability in excess market returns over the risk-free rate. This suggests that the compensation investors receive for bearing systematic risk fluctuated across the study period.

A moderate dispersion implies that while market conditions changed, they did not exhibit extreme instability. Such variability is typical in emerging markets, where macroeconomic and political factors can influence excess returns (Damodaran, 2023). The moderate SD indicates that market risk is a significant but not excessively erratic factor influencing stock performance. The skewness of 0.2558 indicates a moderately positive skew, meaning more observations lie slightly below the mean with occasional high positive excess returns. Since it falls within the ± 1 threshold, the distribution is considered approximately normal (Hair et al., 2019). The kurtosis value of 2.0052 is slightly below 3, indicating a mildly platykurtic distribution, meaning fewer extreme values compared to a normal distribution. This suggests relatively stable market excess returns during the study period.

Inferential Analysis

Inferential analysis was conducted to examine the effect of market risk premia on stock returns of firms listed on the NSE 20 Share Index.

Correlation Analysis

Correlation analysis was conducted to examine the strength and direction of the linear relationship between the dependent variable (stock returns) and market risk premium. The results are shown in Table 2

Table 2: Correlation Matrix

Variable		Stock Returns	Market Risk Premium
Stock Returns	Pearson Correlation	1	
	Sig.(2-tailed)		
Market Risk Premium	Pearson Correlation	0.6124***	1
	Sig.(2-tailed)	(0.0000)	
N		140	140

*** $p < 0.01$ ** $p < 0.05$ $p < 0.10$

The correlation between stock returns and market risk premium is 0.6124 ($p < 0.01$), indicating a strong positive and highly significant relationship. This suggests that increases in excess market returns are associated with higher stock returns among NSE 20 firms. The strength and significance of this relationship support the argument that market-wide risk is a key determinant of stock performance.

Model Summary

The model summary provides an overall assessment of the goodness-of-fit and explanatory power of the regression model used to examine the effect of market risk premia on stock returns of firms listed on the Nairobi Securities Exchange (NSE) 20 Share Index.

Table 3: Model Summary (Fixed Effects Model)

Statistic	Multiple R	R-squared (Within)	Adjusted R-squared	F-statistic	Prob (F-statistic)	N	Number of Groups (Firms)
Model	0.8045	0.6473	0.6291	35.8427	0.0000	140	20

The Multiple R value of 0.8045 indicates a strong positive correlation between the observed and predicted values of stock returns. This suggests that the model has a high degree of predictive accuracy as the independent variable has a strong linear association with stock returns. The R-squared (within) value of 0.6473 shows that approximately 64.73% of the variation in stock returns is explained by market risk premia. This indicates strong explanatory power, especially in a frontier market characterized by volatility and market inefficiencies. The adjusted R-squared of 0.6291 confirms that the model remains robust even after adjusting for the number of explanatory variables. The F-statistic of 35.8427 with a probability of 0.0000 indicates that the model is statistically significant at the 1% level. The model summary confirms that the regression model provides a strong and statistically reliable explanation of stock return behavior at the NSE 20 Share Index.

Analysis of Variance (ANOVA)

Analysis of Variance (ANOVA) was conducted to assess the overall significance of the regression model in explaining variations in stock returns among firms listed on the Nairobi Securities Exchange (NSE) 20 Share Index. Specifically, ANOVA tests whether the independent variables jointly have a statistically significant effect on stock returns.

Table 4: ANOVA Results

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Statistic	p-value
Regression	1.8426	4	0.4607	35.8427	0.0000
Residual	1.7354	135	0.0129		
Total	3.5780	139			

The ANOVA results indicate that the regression model is statistically significant. The computed F-statistic of 35.8427 with a corresponding p-value of 0.0000 is less than the conventional significance level of 0.05. Therefore, the null hypothesis that regression coefficient is jointly equal to zero is rejected. The regression sum of squares (1.8426) represents the variation in stock returns explained by the model, while the residual sum of squares (1.7354) represents unexplained variation. The fact that the explained variation is substantial relative to the unexplained variation further supports the strength of the model. The ANOVA findings confirm that the regression model has strong explanatory power and is appropriate for analysing the relationship between market risk premia and stock returns. The statistical significance of the model reinforces the earlier results from the model summary and regression analysis, providing further evidence that the selected risk premia is an important determinant of stock returns in the NSE 20 Share Index.

Regression Coefficient Results

The Fixed Effects (FE) model with robust standard errors was estimated to examine the effect of market risk premia on stock returns of firms listed on the Nairobi Securities Exchange (NSE) 20 Share Index.

Table 4.4: Fixed Effects Regression Coefficients

Variable	Coefficient (β)	Std. Error	z-Statistic	p-value	95% Confidence Interval
Market Risk Premium	0.4286	0.1184	3.6201	0.0005	(0.1965, 0.6607)
Constant	-0.0316	0.0142	-2.2253	0.0279	(-0.0594, -0.0038)

Based on the fixed effects model, the estimated regression equation is:

$$Y_{it} = -0.0316 + 0.4286X_{it}$$

Hypotheses Test Results

The decision to reject or fail to reject the null hypothesis is made at the 5% level of significance.

H₀₁: Market Risk Premium has no Significant Effect on Stock Returns of Firms Listed at the NSE 20 Share Index, Kenya

The first null hypothesis (H₀₁) stated that the market risk premium has no significant effect on stock returns at the NSE 20 Share Index. The regression results indicate that market risk premium has a positive and statistically significant effect on stock returns ($\beta = 0.4286$, $p = 0.0005$). Since the p-value is less than 0.05, the null hypothesis is rejected. This implies that

market risk premium significantly influences stock returns, with higher excess market returns leading to increased stock performance.

This finding supports the Capital Asset Pricing Model (CAPM), which posits that investors are compensated for bearing systematic market risk (Sharpe, 1964). The result confirms that market-wide fluctuations remain a dominant determinant of stock returns within the NSE 20 Share Index. Empirically, the finding is consistent with global studies such as Fama and French (2015) and Damodaran (2023), which report a strong positive relationship between market risk and returns. In the African context, similar results have been documented in markets such as Nigeria and South Africa (Eze & Nwogugu, 2022). Locally, the finding aligns with Wanjiru and Were (2024), who established that market risk significantly affects stock returns at the NSE. However, some studies in emerging markets have reported weaker or unstable market effects during periods of macroeconomic volatility (Bildirici, 2022), indicating that the strength of this relationship may vary across economic cycles.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This section presents a summary of the key findings of the study, draws conclusions based on the results, and provides recommendations for policy and practice.

Summary

The study established that the market risk premium has a positive and statistically significant effect on stock returns among firms listed on the NSE 20 Share Index. This finding implies that variations in excess market returns play a critical role in determining firm-level stock performance. Specifically, periods characterized by higher market returns relative to the risk-free rate are associated with increased stock returns, indicating that investors are compensated for bearing systematic risk. This result underscores the continued relevance of the Capital Asset Pricing Model (CAPM) in explaining return dynamics, particularly in emerging and frontier markets where market-wide shocks significantly influence investor behavior. Furthermore, the finding suggests that macroeconomic and market-level conditions such as interest rate movements, inflation, and investor sentiment transmit strongly into firm-level returns within the NSE.

Conclusion

The study concludes that market risk premium is a dominant and significant driver of stock returns within the NSE 20 Share Index. The positive and statistically significant relationship indicates that variations in overall market performance strongly influence firm-level returns. This suggests that stock returns in the NSE are highly sensitive to broader market conditions, including macroeconomic trends and investor sentiment. The conclusion further implies that the performance of individual firms cannot be fully understood in isolation from market-wide dynamics. As such, periods of market expansion or contraction have a direct and substantial impact on investment outcomes, reinforcing the importance of monitoring aggregate market movements in portfolio decision-making.

Recommendations

Given the strong and significant influence of market risk premium on stock returns, it is recommended that investors adopt dynamic portfolio allocation strategies that respond to changing market conditions. Rather than maintaining static portfolios, investors should actively adjust their exposure based on prevailing macroeconomic indicators such as interest rates, inflation trends, and overall market performance. Additionally, institutional investors should

incorporate market timing and risk forecasting models into their investment strategies to better anticipate shifts in market-wide risk. Firms, on the other hand, should strengthen their market risk disclosure practices, enabling investors to better assess their sensitivity to broader economic conditions.

Areas for Further Research

First, future studies may extend the scope of analysis beyond the NSE 20 Share Index to include a broader cross-section of listed firms at the NSE. This would enable comparison across firm sizes and sectors, particularly to examine whether the effects of risk premia differ between large-cap, mid-cap, and small-cap firms. Second, subsequent research could incorporate additional asset pricing factors, such as profitability and momentum, to determine whether an expanded multifactor framework enhances the explanatory power of stock return models. Including such variables would help capture additional dimensions of risk and investor behavior that may not have been fully accounted for in the current study.

Third, comparative research across other African stock markets may be undertaken to assess whether the relationships observed in this study are consistent across different institutional and market environments.

Finally, future research should focus on improving the explanatory power of asset pricing models, as reflected by the R-squared statistic. This study reported a within R-squared of 0.6473, indicating that approximately 64.73% of the variation in stock returns is explained by the selected risk premia. However, this also implies that about 35.27% of the variation remains unexplained, suggesting the presence of other influential factors not captured in the current model. Subsequent studies should therefore investigate this unexplained variation by incorporating additional explanatory variables.

REFERENCES

- Acaravci, K.S., & Karaomer, Y. (2017). Fama-French five factor model: Evidence from Turkey. *International Journal of Economics and Financial Issues*, 7(6): 130-137.
- Afego, P. N., & Biktimirov, E. N. (2024). Market reactions of African and non-African firms to changes in the S&P Africa 40 index. *Journal of Asset Management*. Advance online publication.
- Basiewicz, P. G., & Auret, C. J. (2022). Assessing the role of investor sentiment in predicting asset pricing in emerging markets: Evidence from Kenya. *International Research Journal of Accounting, Finance and Banking (IRJAFB)*, 13(7), 28-41
- Bekaert, G., & Harvey, C. R. (2017). Emerging equity markets in a globalizing world. *Annual Review of Financial Economics*, 9(1), 1–41.
- Berk, J. B., & Van, J. H. (2016). Assessing asset pricing models using revealed preference. *Journal of Financial Economics*, 1-23.
- Bildirici, M. (2022). Asset pricing, risk premia and macroeconomic uncertainty in emerging markets. *Journal of Emerging Market Finance*, 21(1), 25–47.
- Bodie, Z., Kane, A., & Marcus, A. J. (2021). *Investments* (12th ed.). McGraw-Hill Education
- Chen, J., & Yang, C. (2016). Why do some asset pricing models perform poorly? Evidence from irrationality, transaction costs, and missing factors. *Seoul Journal of Business*, 22(1), 1-64.
- Fama, E. F., & French, K. R. (1996). Multi-factor explanations of asset pricing anomalies. *The journal of finance*, 51(1), 55-84.
- Fama, E. F., & French, K. R. (2006). The capital asset pricing model: Theory and evidence. *Journal of Economic Perspectives*, 18(3), 25-46. 518.
- Fama, E. F., & French, K. R. (2015). A five-factor asset pricing model. *Journal of Financial Economics*, 15(1), 1-22.
- Fama, E. F., & French, K.R. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 383-41
- Harvey, C. R., Liu, Y., & Zhu, H. (2016). ...and the cross-section of expected returns. *Review of Financial Studies*, 29(1), 5–68.
- Hearn, B. (2024). Stock market development and firm-level value premia in frontier African markets. *Emerging Markets Review*, 58, 101012.
- Hou, K., Xue, C., & Zhang, L. (2015). Digesting anomalies: An investment approach. *Review of Financial Studies*, 28(3), 650–705
- Kandie, K., Macheru, J., & Osoro, C. (2023). Systematic Risk and Investment Portfolio Performance of Pension Schemes in Kenya. *International Journal of Finance and Accounting*, 8(2), 51-70.
- Kamau, K. M., Oluoch, D., & Bichanga, J. (2021). Financial indicators and stock market performance of listed non-financial companies in Kenya. *International Research Journal of Economics and Finance*, 5(2), 45–58
- Liu, J., Stambaugh, R.F. & Yuan, Y. (2019). Size and value in China. *Journal of Financial Economics*, 134 (1), 48-69.

- McLean, R. D., & Pontiff, J. (2016). Does academic research destroy stock return predictability? *Journal of Finance*, 71(1), 5–32.
- Moodley, F., Ferreira-Schenk, S., & Matlhaku, K. (2025). Determinants of South African asset market co-movement: Evidence from investor sentiment and changing market conditions. *Risks*, 13(1), 14.
- Mosoeru, S., & Kodongo, O. (2017). Testing the Fama-French five-factor model in selected emerging and developed markets. *Emerging Markets Review*, 18(1), 133-155.
- Mugenda, A. (2023). Frontier markets and investment opportunities: A case of Sub-Saharan Africa. *Journal of African Financial Markets*, 14(2), 55–70.
- Muir, T. (2017). Financial crises and risk premia. *The Quarterly Journal of Economics*, 132(2), 765-809.
- Mumo, M. (2017). The determinants of stock returns in the emerging market of Kenya: Empirical evidence. *International Journal of Economics and Finance*, 9(8), 64–76.
- Mwiwa, J. (2025). Asset pricing anomalies and stock return behavior in African frontier markets. *African Journal of Finance and Economics*, 12(1), 45–63.
- Namazi, M., & Namazi, N., (2016). Conceptual analysis of moderator and mediator variables in business research. *Journal of Business Research*, 36 (2016), 540- 554.
- Ngene, G. (2022). Market risk and stock return predictability in the Nairobi Securities Exchange. *Journal of African Financial Studies*, 9(2), 77–93.
- Nguyen, N., Ulku, N., & Zhang, J. (2015). The Fama-French five factor model: Evidence from Vietnam. *New Zealand Finance Colloquium*, 1-29.
- Njeri, K. K. (2017). Estimating risk premia for corporate governance risk in the Kenyan equity market.
- Nyangara, D., Nyangara, M., & Moyo, C. (2020). Asset pricing models and stock return predictability in frontier markets: Evidence from Zimbabwe. *African Finance Journal*, 22(1), 67–89.
- Omondi, S., & Muturi, W. (2021). Macroeconomic factors and stock market performance in Kenya: An empirical investigation. *International Journal of Finance and Accounting*, 6(2), 34–49.
- Qiao, F. (2024). Variance risk premiums in emerging markets. *Journal of Banking & Finance*, 167, 107259.
- Shibanda, G., Olweny, T., & Nasieku, T. (2024). Profitability, investment factors and trading volume adjustment on equity risk premium: Empirical evidence from the Nairobi Stock Exchange. *Journal of Accounting and Finance in Emerging Economies*, 10(3), 449–466.