# EFFECT OF INVESTMENT DIVERSIFICATION ON THE FINANCIAL PERFORMANCE OF RETIREMENT BENEFITS SCHEMES IN KENYA

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OF MOMBASA

# **DECLARATION**

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This thesis is my original work and has not been presented for a degree award in any other university.
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#### DEDICATION

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### **ACRONYMS AND ABBREVIATIONS**

**ADFURT:** Augmented Dickey Fuller Unit Root Test

**ANOVA:** Analysis of Variance

**APT:** Arbitrage Pricing Technique

**BOP:** Balance of Payments

**BPT:** Breusch Pagan Test

**CBK:** Central Bank of Kenya

**CMA:** Capital Market Authority

**CPI**: Consumer Price Index

**DBA:** Department of Business Administration

**DV:** Dependent Variable

**DWT:** Durba Watson Test

**EA:** East Africa

**EMH:** Efficient Market Hypothesis

**ERC:** Ethical Review Committee

**EUR:** Europe currency

**FMCG**: First Moving Consumer Goods

**FP**: Financial Performance

**FX:** Foreign Exchange

GCT: Granger Causality Test

**GMM:** Generalized Methods of Moments estimator

 $H_0$ : Hypothesis

**ISE:** Indonesia Stock Exchange

IV: Independent Variable

JPY: Japanese Yen

**KES**: Kenya Shilling

**KMO**: Keiser-Mayor-Oklin test

**KNBS**: Kenya National Bureau of Statistics

**LRM:** Linear Regression Model

M: Million

Max: Maximum

Min: Minimum

MLRM: Multiple Linear Regression Model

MM: Miller and Modigliani

MMR: Moderated Multiple Regression

**MPT**: Modern Portfolio Theory

**MV:** Moderating Variable

**N:** Target Population

**n:** Sample size

NACOSTI: National Commission for Science, Technology and Innovation

**NSE:** Nairobi Securities Exchange

**OLS:** Ordinary Least Squares

**PhD:** Doctor of Philosophy

**P-P:** Probability to probability plot

**PPPT:** Purchasing Power Parity Theory

**PU**: Pwani University

**PURT:** Panel Unit Root Test

**RBA**: Retirement Benefit Authority

**RBS:** Retirement Benefits Schemes

**REITs:** Real Estate Investment Trusts

**ROA**: Return on Assets

**ROCE:** Return on Capital Employed

**ROE**: Return on Equity

**ROI**: Return on Investment

**SD**: Standard Deviation

**SGS:** Short-Term Government Securities

**SLRM:** Simple Linear Regression Model

**SMEs**: Small and Medium Enterprises

**SPSS:** Statistical Package for Social Sciences

**STATA**: Statistical Package

**STG Pound:** Starling Pound

**T-Bills:** Treasury Bills

TL: Tolerance Level

**TUM:** Technical University of Mombasa

**TUM-SERC:** Technical University of Mombasa Scientific and Ethical Review

Committee

**TUM-SGS:** Technical University of Mombasa School of Graduate Studies

**UK:** United Kingdom

**US:** United States

**USD**: United States Dollar

VIF: Variance Inflation Factor

ε: Epsilon term (Error term)

**β**: Beta Coefficient

#### **DEFINITION OF TERMS**

Foreign Exchange rate : It is the conversion rate between two

legal tenders such as the USD/KES

exchange rate.

**Financial Performance** : This is a determinant of the monetary

state of organization through various

indicative ratios such as return on

investments as well as return on assets.

**Investment Diversification in Bonds**: Bonds are fixed-income securities

representing loans advanced by the

surplus spending units to the deficit

spending units of an economy. A

diversified investment portfolio in

bonds may comprise Treasury bonds,

corporate bonds as well as Eurobonds.

companies such as ordinary shares.

**Investment** Diversification in : Refers to investment in varied shares of

**Equities** 

**Investment Diversification in Short-**: Refers to investment in securities whose

term Government Securities n

the 91days 182 days, 364 days as well as

the 2 years treasury bills.

Investment Diversification in Real:

estate

Refers to the investment in varied

maturity period is short term such as

financial instruments such as

residential, commercial and lands

project.

**Investment Diversification** : Refers to the consideration of investing

in diverse assets or assets class in an

attempt to mitigate inherent investment

risks.

### **Retirement Benefits Schemes**

They are entities governed and mandated by the retirement benefits authority to collect and manage employees' contributions for future benefits upon retirement. The retirement benefits schemes constituted the central focus in this thesis where the population of study was constructed from.

# **Retirement Benefits Authority**

: This is a regulatory body which governs the affairs of the retirement benefits schemes in Kenya.

#### ABSTRACT

Prudence investment advocates considering investment diversification so as to mitigate inherent investment risks. This is in the premise that diversified investments can lead into reversing adverse financial performances in entities. The general objective of this study was to investigate the effect of investment diversification on the financial performance of retirement benefits schemes in Kenya. The specific objectives employed in this study comprised of an investigation on the effect of investment diversification in equities, bonds, real estates as well as short-term government securities on the financial performance of the retirement benefits schemes in Kenya. The study further examined the moderating effect of the foreign exchange rate on the relationship between the independent and the dependent variables. The modern portfolio, the liquidity preference, the transaction cost as well as the purchasing power parity theories were used in supporting this study. The study adopted the descriptive research design. The population employed in this study comprised of 87 retirement benefits schemes in Kenya. The stratified random sampling technique used in this study resulted into having 72 units of analysis. Primary as well as secondary quantitative data were employed in this study, and the data was collected through questionnaires and data collection schedules. Data analysis was through the statistical package for social sciences version 20. Pilot study was carried out so as to ascertain the validity and reliability of the research instruments. Test for normality, test for heteroscedasticity, test for linearity, test for outliers, test for autocorrelation, test for multicollinearity, the F-test as well as the R Square tests were conducted on the data prior to running the multiple linear regression model. Descriptive statistics as well as the Pearson's correlation coefficients were generated before running the regression model. The P-value from the regression coefficients were employed in testing the hypothesis and decision made on whether to reject or fail to reject the null hypothesis at 0.05 level of significance. The hypothesis testing for the direct relationship model led to the rejection of  $H_{01}$ ,  $H_{02}$ ,  $H_{03}$  and  $H_{04}$ . This meant that investment diversification in equities, bonds, short-term government securities as well as investment diversification in real estate have a significant positive effect on the financial performance of the retirement benefits schemes in Kenya. The hypothesis testing for the moderated relationship model led to the rejection of  $H_{05}$ . The rejection of  $H_{05}$ meant that foreign exchange rate has a significant inverse moderating effect on the relationship between investment diversification and the financial performance of the retirement benefits schemes in Kenya. The researcher therefore recommends that the retirement benefits schemes should consider diversifying their investments because it affects their financial performance. The researcher also recommends that the schemes should be vigilant on the volatility of the foreign exchange rate because it has a significant inverse effect on the relationship between investment diversification and the financial performance of the retirement benefits schemes in Kenya.