

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Effect of Behavioural Biases on Tactical Asset Allocation in Insurance Companies in Mombasa Town, Kenya

Ogilo Fredrick

Lecturer, School of Business, University of Nairobi, Kenya

Benard Nariga

MBA Student, University of Nairobi, Kenya

Abstract:

This study sought to establish the effect of behavioural biases on tactical asset allocation in insurance companies in Mombasa town, Kenya. Descriptive cross-sectional survey research design was used. The target population of this study was 102 employees of 34 insurance companies in Mombasa town, Kenya. A census survey was conducted. Data was collected using self-administered structured questionnaires. Descriptive statistical tools included frequencies, percentages, means and standard deviations. Inferential statistical tools were correlation and multiple regression analysis. It was found out that increased overconfidence bias, representativeness bias and regret aversion bias are associated with decreased tactical asset allocation while increased self-attribution bias is associated with enhanced tactical asset allocation and vice-versa, though insignificantly. It was concluded that tactical asset allocation decisions in insurance companies are subject to behavioural biases. It was also concluded that that financial regulations does not significantly moderate the relationship between the behavioural biases and tactical asset allocation in insurance companies in Mombasa town, Kenya.

Keywords: Behavioural biases, tactical asset allocation, insurance companies

1. Introduction

Investor psychology and emotions are key determinants of investments in financial markets and the value of financial securities as is widely recognized (Nyamute, Lishenga & Oloko, 2015). An investor is said to be behaviourally biased when the investor makes decisions that are not rational, that is, faulty decisions (Pompian, 2012). Biased investors are subject to given beliefs or attitudes as they make decisions which are said to be irrational (Shefrin, 2007). Singh (2010) stated that investors may make cognitive errors because of faulty reasoning caused by emotions and investor psychology. Tactical asset allocation is an allocation within a portfolio that takes advantage of short-term opportunities which result in an extra return, based on preset asset mix. Tactical asset allocation is considered as a practice that helps to improve returns from the initial long-term asset mix set by the enterprise (Dziwok, 2014). Insurance companies can be said to be practicing tactical asset allocation when they adjust the asset mix in line with forecasts of movements of investment returns in the short term. In tactical asset allocation, the investor considers changes to the initial asset targets for the overall portfolio and within asset classes (Usman, 2018).

Insurance companies modify their portfolios by reallocating funds to various asset classes in the midst of changes in the business environment. An example of such change is interest rate capping in Kenya which had implications for portfolio mix of insurance companies which usually buy bank bonds. The insurance companies are critical in raising funds and risk management, to facilitate financial and economic development (Li, 2019). Interest rate capping in Kenya resulted in generally low interest rates offered by banks. The advent of low interest rates affected the financial connection between banking and insurance sectors as it changes the patterns of funding banks and the strategies of investment in insurance company business (Niedrig, 2015). Efficiently carrying out tactical allocation of funds in insurance companies are key in enhancing the competitiveness of insurance business (Li, 2019).

Behavioral biases are wrongs and potential damaging behaviors caused by an erroneous decision. Psychologists have noted that people are usually overconfident; they usually overrate their abilities to achieve investment targets, that is, performance of investments. One can rarely find a person rating his ability as below average (Byrne & Utkus, 2013). Practically, people usually view the world positively as regards their endeavours and plans. Despite the fact that such world views can help one to forget disappointing experiences, it can result in biased fund allocation decisions. This is because the investor will be tempted to exaggerate their ability to engage in successful investment ventures and have a narrow view of the real factors surrounding the investment decisions that the investor has made. Overconfident investors are usually miscalibrated and are suffer from better-than-average effects, control illusions and too much optimism (Byrne & Utkus, 2013).

Regret aversion describes how the anticipation of a negative feeling can substantially affect the outcome of the decision-making process (Cruciani, 2017). Different from other heuristics, whose nature and implications have mainly been treated descriptively, the implications of regret aversion have been formally described in a model, initially proposed

as one of the alternatives to the expected utility model by Loomes and Sugden (1982). Individuals evaluate the possible regret or rejoice arising from the realization of each one of the possible occurrences compared to what could have been. In other words, individuals are able to anticipate negative and positive feelings arising from a given choice and translate them into increases or decreases in utility (Cruciani, 2017).

1.1. Research Objective

To determine the effect of behavioural biases on tactical asset allocation in insurance companies in Mombasa town, Kenya.

2. Methods

The researcher adopted descriptive research design. The target population was 102 employees of 34 insurance companies in Mombasa town, Kenya. A census survey was adopted since the number 102 employees were manageable. The study used self-administered structured questionnaires to collect data. Multiple regression analysis and Pearson product moment correlation comprised the inferential statistics for the study. The results of statistical analysis were presented in tables and graphs. The multiple regression model that was adopted is depicted in below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y represents portfolio diversification in insurance companies in Mombasa town, Kenya

β_0 represents the y-intercept

$\beta_1, \beta_2, \beta_3$ and β_4 represent coefficients of OCB, representativeness bias, SAB and RAB respectively

X_1, X_2, X_3 and X_4 represent the OCB, representativeness bias, SAB and RAB respectively

ε represent error term

The researcher also adopted the multiple regression model shown in Equation 3.4 for moderated regression analysis.

$$Y = \beta_0 + \beta_1 X_1 * Z + \beta_2 X_2 * Z + \beta_3 X_3 * Z + \beta_4 X_4 * Z + \varepsilon \dots \text{Equation 3.2}$$

Where;

Y represents portfolio diversification in insurance companies in Mombasa town, Kenya

β_0 represents the y-intercept

Z represents the moderating variable-financial regulations

$\beta_1, \beta_2, \beta_3$ and β_4 represent coefficients of overconfidence bias, representativeness bias, SAB and RAB respectively

X_1, X_2, X_3 and X_4 represent over confidence bias, representativeness bias, SAB and RAB respectively

ε represent error term

3. Results and Discussion

The results of Pearson correlation (PC) analysis was depicted in Table 1.

Tactical Asset Allocation in Insurance Companies in Mombasa Town, Kenya		
Overconfidence bias	PC	.448**
	Significance level (SL)	.000
Representativeness bias	PC	.155
	SL	.129
Self-attribution bias	Pearson Correlation	.397**
	SL	.000
Regret aversion bias	Pearson Correlation	.386**
	SL	.000

Table 1: Correlation Analysis Results

It was found out that there is a weak positive and significant relationship between overconfidence bias and tactical asset allocation in insurance companies in Mombasa town, Kenya ($r = 0.448$; $p < 0.05$). Therefore, increased overconfidence bias associated with enhanced tactical asset allocation in insurance companies in Mombasa town, Kenya and vice-versa. It was also found out that there is a weak positive and insignificant relationship between representativeness bias and tactical asset allocation in insurance companies in Mombasa town, Kenya ($r = 0.155$; $p > 0.05$). It is implied that increased representativeness bias is associated with increased tactical asset allocation in insurance companies in Mombasa town, Kenya and vice-versa, though insignificantly.

The study found out that there is a weak positive and significant relationship between self-attribution bias and tactical asset allocation in insurance companies in Mombasa town, Kenya ($r = 0.397$; $p > 0.05$). The implication is that increased self-attribution bias is associated with enhanced tactical asset allocation in insurance companies in Mombasa town, Kenya and vice-versa. It was found out that there is a weak positive and significant relationship between regret aversion bias and tactical asset allocation in insurance companies in Mombasa town, Kenya ($r = 0.386$; $p < 0.05$). This has the implication that increased regret aversion bias is associated with enhanced tactical asset allocation in insurance companies in Mombasa town, Kenya and vice-versa.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	STDV. Error	Beta		
(Constant)	1.646	.464		3.549	.001
Overconfidence bias	.347	.100	.333	3.470	.001
Representativeness bias	-.022	.078	-.026	-.281	.779
Self-attribution bias	.123	.086	.155	1.430	.156
Regret aversion bias	.182	.079	.234	2.295	.024

Table 2: Regression Coefficients

The findings indicate that overconfidence bias significantly predicts tactical asset allocation in insurance companies in Mombasa town, Kenya ($t = 3.470$; $p < 0.05$). It is implied that overconfidence bias and tactical asset allocation in insurance companies in Mombasa town, Kenya are significantly related. It was determined that representativeness bias insignificantly predicts tactical asset allocation in insurance companies in Mombasa town, Kenya ($t = -.281$; $p > 0.05$). The implication is that representativeness bias and tactical asset allocations in insurance companies in Mombasa town, Kenya are insignificantly related.

The study established that self-attribution bias insignificantly predicts tactical asset allocation in insurance companies in Mombasa town, Kenya ($t = 1.430$; $p > 0.05$). This means that self-attribution bias and tactical asset allocation in insurance companies in Mombasa town, Kenya have an insignificant relationship. The study also established that regret aversion bias significantly predicts tactical asset allocation in insurance companies in Mombasa town, Kenya ($t = 2.295$; $p < 0.05$). Therefore, regret aversion bias and tactical asset allocation in insurance companies in Mombasa town, Kenya are significantly related. The results of the t-test of individual regression coefficients clearly depict that overconfidence bias, regret aversion bias and the constant would be included in the regression equation as they were significant ($p < 0.05$). The final regression model therefore is:

$$Y = 1.646 + 0.347X_1 + 0.182X_4$$

It is shown that increasing overconfidence bias by 1 unit enhances tactical asset allocation in insurance companies in Mombasa town, Kenya by 0.347 units. The findings indicate that increasing regret aversion bias by 1 unit enhances tactical asset allocation in insurance companies in Mombasa town, Kenya by 0.182 units.

4. Conclusion

The study concludes that tactical asset allocation process in insurance companies in Mombasa town, Kenya is subject to behavioural biases namely overconfidence bias, representativeness bias, SAB and RAB. Secondly, it is concluded that overconfidence bias positively and significantly affects tactical asset allocation in insurance companies in Mombasa town, Kenya. Thirdly, the researcher concludes that representativeness bias negatively and insignificantly affects tactical asset allocation in insurance companies in Mombasa town, Kenya.

It is also concluded that self-attribution bias positively and insignificantly affects tactical asset allocation in insurance companies in Mombasa town, Kenya. Fifthly, the study also concludes that regret aversion bias positively and significantly affects tactical asset allocation in insurance companies in Mombasa town, Kenya and vice-versa. Lastly, it was concluded that that financial regulations do not significantly moderate the relationship between the behavioural biases and tactical asset allocation in insurance companies in Mombasa town, Kenya is insignificant.

5. Recommendations

To insurance companies, this study recommends that when tactical investment decisions are being made, they should consider the adverse effects of representativeness bias which may lead to avoidance of profitable investment opportunities. Detailed analysis should always be conducted when evaluating tactical adjustments to the investment portfolios of insurance companies. Moreover, it is recommended that the effects of OCB, SAB and RAB should always be controlled for in tactical asset allocation process as it may hinder the achievement of ideal financial performance. To financial advisors and consultants, this study recommends that they should advise insurance companies appropriately taking into account the influence of behavioural biases namely overconfidence bias, representativeness bias, SAB and RAB in tactical asset allocation process. To future researchers and academicians, this study recommends that a study should be conducted on mechanisms that can be put in place to control for behavioural biases in the tactical asset allocation process in insurance companies. Moreover, a study should be conducted on the effect of tactical asset allocation on insurance companies' financial results, with behavioural biases controlled for, so that the rationale for and optimality of tactical asset allocation can be determined.

6. References

- i. Abreu, M. (2014). *Individual investors' behavioural biases*. Lisboa: Lisboa Economics and Management.
- ii. Akinde, M.A., Peter, E., & Ikpefan, O.A. (2018). Portfolio selection strategies and cognitive psychology biases: A behavioral evidence from the Nigerian equity market. *Investment Management and Financial Innovations*, 15(3), 267-282.
- iii. Alquraan, T., Alqisie, A., & Al Shorafa, A. (2016). Do behavioral factors influence stock investment decisions of individual investors? (Evidence from Saudi Arabia). *American International Journal of Contemporary Research*, 6(3), 159-169.

- iv. Antony, M.K. (2009). Effect of investor psychology on real estate market prices in Nairobi and Kenya. *Journal of Finance*, 23: 122-134.
- v. Gitau, G.M. (2011). Effect and extent of behavioural factors and their influence on property decisions in Kenya. *Journal of entrepreneurship*, 2 (1), 3-5.
- vi. Goertz, G., & Mahoney, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences*. Princeton, New Jersey, United States: Princeton University Press.
- vii. Hirshleifer, D., Low, A., & Teoh, S.H. (2012). Are overconfident CEOs better innovators? *The Journal of Finance*, 67(4), 1457-1498.
- viii. Insurance Regulatory Authority. (2018). *Insurance industry report for the period October – December 2018: Fourth quarter release*. Nairobi, Kenya: Author.
- ix. Kafayat, A. (2014). Interrelationship of biases: Effect investment decisions ultimately. *Theoretical and Applied Economics*, 21(6), 85-110.
- x. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 47(3), 263-291.
- xi. Kahneman, D., Slovic, P., & Tversky, A. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157): 1124-1131.
- xii. Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge, UK: Cambridge University Press.
- xiii. Kanojia, S., Singh, D., & Goswami, A. (2018). An empirical analysis of the factors influencing individual investors in the Indian stock market. *IOSR Journal of Business and Management*, 20(3), 30-37.
- xiv. Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance and Accounting*, 6(1), 1-15.
- xv. Kisaka, E. K. (2015). *The effect of behavioral finance factors on stock investment decisions in Kenya* (Unpublished doctoral dissertation). South Eastern Kenya University, Kenya.
- xvi. Kothari, C. R., & Garg, V. (2014). *Research Methodology Methods and Techniques*.
- xvii. Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners* (4th ed.). Thousand Oaks, California: SAGE Publications Inc.
- xviii. Li, W. (2019). Research on asset allocation of insurance companies based on mean-variance model. *Advances in Economics, Business and Management Research*, 76, 196-204.
- xix. Mahina, N.J., Muturi, W., & Florence, M. (2017). Effect of behavioural biases on investments at the Rwanda Stock Exchange. *International Journal of Accounting, Finance and Risk Management*, 2(4), 131-137.
- xx. Mugenda, O. M., & Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press.
- xxi. Niedrig, T. (2015). Optimal asset allocation for interconnected life insurers in the low interest rate environment under solvency regulation. *Journal of Insurance Issues*, 38(1), 31-71.
- xxii. Odean, T. (1998). Are investors reluctant to realize their losses? *Journal of Finance*, 53(5), 1775-1798.
- xxiii. Park, J.H., Gu, P.K.B., Kumar, A., & Raghunathan, R. (2010). *Confirmation bias, overconfidence, and investment performance: Evidence from stock message boards*. USA: Author
- xxiv. Polkovnichenko, V. (2005). Household portfolio diversification: A case for rank dependent preferences. *The Review of Financial Studies*, 18, 1467-1502.
- xxv. Pompian, M.M. (2012). *Behavioural finance and wealth management: How to build investment strategies that account for investor biases*. Hoboken.
- xxvi. Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). Harlow, England: Pearson Education.
- xxvii. Shefrin, H. (2007). Behavioral finance: biases, mean-variance returns, and risk premiums. *CFA Institute Conference Proceedings Quarterly*, 24(2), 4-12.
- xxviii. Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. *Journal of Financial and Quantitative analysis*, 35(2), 127-151.
- xxix. Singh, R. (2010). Behavioural finance studies: Emergence and developments. *Journal of Contemporary Management Research*, 4(2), 1.
- xxx. Usman, D.I. (2018). *Influence of cognitive biases on investment decision making in property market in Plateau state, Nigeria* (Unpublished doctoral thesis). Jomo Kenyatta University of Agriculture and Technology, Juja, Kenya.
- xxxi. Wen & Jianfeng. (2011). Do foreign investors improve informational efficiency of stock prices? Evidence from Japan. *Pacific-Basin Finance Journal* 27, 32 – 48.
- xxxii. Yosra, M.R., & Younes, B. (2013). Determinants of institutional investors' behaviours: Evidence from Tunisian Stock Market. *IOSR Journal of Business and Management (IOSR-JBM)*, 8(2) 109-119.