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# EFFECT OF BEHAVIOURAL BIASES ON INVESTMENTS AT THE RWANDA STOCK EXCHANGE

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## Abstract

*With the emergence of behavioural finance as an alternative to analysis of investor choice, Behavioural biases have been identified to affect the investor's investment. It was therefore useful for investors to understand common emotional behaviours, from which they justify their reactions for better returns. The main objective of this study was to establish the effect of behavioural biases on investment in the Rwanda Stock Exchange. The specific objective was to establish the effects of loss aversion bias, on investment in the Rwanda stock exchange. The prospect theory, heuristics theory and herding theory formed the foundation of this study. The underlying epistemology of this research was positivist; focusing on examining earlier established theories under the assumption that reality is objectively given and can be described by measurable properties independent of the observer and the instruments. The study used cross-sectional descriptive survey research design to ascertain and establish the effect of behavioural biases on investment in the Rwanda stock exchange. A Linear regression model was used to predict the probability of different possibility outcomes of dependent variables, helping to predict the probability of an investor to invest in RSE. The results confirmed that there was a significant positive linear relationship between loss aversion bias, and Investment in Rwanda stock market. The study also concluded that most investors suffered from behavioural biases in investment in stock markets. The study further recommends that the individual investors to seek the advice of stock brokers/fund managers to advise them accordingly in terms of performance of a specific security in which an investor would wish to invest in.*

Keywords: Behavioural biases, stock exchange

## INTRODUCTION

Behavioural finance is the new field that seeks to combine behavioural (aspirations, cognition, emotions) and cognitive psychological theory. It explains why investors makes a rational financial decisions on the stock market (Lodhi, 2014). Behavioural finance attempt to better understand and explain how emotional and cognitive errors influence investment on the stock markets (Subrahmanyam, 2008). The stock markets are able to positively influence the economic growth through encouraging savings amongst individuals and providing avenues for firm financing. Liquid stock markets may improve the allocation of capital and enhance prospects for long-term growth ( Wasiu & Temitope, 2013). Investment is not an easy process, since the assumption is that investors always expect to maximize the returns although not all investors are so rational (Sukanya & Thimmarayappa, 2015).

The traditional theory of finance assumes that people are guided by reason and logic and therefore view investment through the transparent and objective lens of risk and return. It argues that markets are efficient and therefore security prices are an unbiased estimate of their intrinsic value. Behavioural finance recognizes that emotions, herd instincts and social influences play an important role in influencing investment leading to discrepancies between market price and fundamental value. Investor behaviour looks at how behaviour impacts the investment performance (Nyamute, Lishenga & Oloko, 2015).

Pompian (2012) defines behavioural biases as the tendency of decision making that result in irrational financial decisions caused by faulty cognitive reasoning and /or reasoning influenced by emotions. The interest in biases caused by faulty cognitive reasoning or emotions that affect individual financial outcomes has seen the emergence of research on behavioural finance as a concept. Singh (2010) stated that investors may be inclined toward various types of behavioural biases, which lead them to make cognitive errors. People may make predictable, non-optimal choices when faced with difficult and uncertain decisions because of heuristic simplification. Behavioural biases, abstractly, are defined in the same way as systematic errors are, in judgment (Chen *et al*, 2007).

According to Shefrin (2007) bias is nothing else yet the inclination towards failure. Bias is tendency to make decisions while the decision maker is already being subjected to an underlying credence or belief. There are so many biases in human psychology (Shefrin, 2010). These biases lay impact on individuals in such a way that they frequently deed on an obviously silly way, routinely disregard conventional ideas of risk aversion, and make foreseeable lapses in their conjectures and judgments (Sewell, 2007).

### Investment on Stock Markets in Africa

African stock markets have historically offered a limited, narrow range of products with the principle role of financial sector being the provision of the source of domestic funding to offset government budgetary deficits. Common factors still inhibiting stock market development include the lack of legal protection for investors and creditors (Odera, 2012). Prices in the

African stock markets tend to be highly volatile and enable profits within short periods. Critics point out that the actual operation of the pricing and takeover mechanism in well-functioning stock markets lead to short term and lower rates of long term investment (Mbaru, 2003). This is because prices react very quickly to a variety of information influencing expectations on financial markets (Mahonye, 2014).

These problems are further magnified in developing countries especially sub-Saharan African economies like Rwanda, with their weaker regulatory institutions and greater macroeconomic volatility (Bizimana, 2010). The higher degree of price volatility on stock markets in developing countries reduces the efficiency of the price signals in allocating investment resources. These serious limitations of the stock market have led many analysts to question the importance of the system in promoting economic growth in African countries (Dailami & Atkin, 1990).

Some of the common mistakes made by investors in designing their investment are identified as follows: investors fail to design their investment avenues systematically; investors fail to diversify their investment choice (Sukanya & Thimmarayappa, 2015); Behavioural motivations have been advocated as a main driving force in investment choice in Africa and the world at large. Nielsen & Riddle (2009) shows that irrational behaviours among investors do exist and collectively this irrationality can affect the movement of the stock market. According to Kumar & Goyal, (2015), markets and market agents are efficient and systematic. Investors have to choose a course of action among various alternatives in the world of uncertainty.

Rwanda is one of the youngest stock market in East Africa compared to the other markets in EAC, like Nairobi Security Exchange (NSE), with a small number of listed companies and low market capitalization, an indicator of low Stock Market development (Bizimana, 2010). The Rwanda Stock Exchange Limited (RSE) was incorporated in 2005 and launched officially in 2008. It is the principal stock exchange operating under the jurisdiction of Rwanda's Capital Market Authority (CMA), previously known as Capital Markets Advisory Council (CMAC), which in turn reports to the (MINECOFIN) Ministry of Finance and Economic Planning (Babarinde, 2012).

Currently RSE has only three Initial Public Offering (IPO), Bralirwa, Bank of Kigali and Crystal Ventures as primarily listed in Rwanda and four IPO as secondarily listed in Rwanda includes: Kenya Commercial Bank Group and Nation Media Group, which are primarily listed in Nairobi Stock Exchange and cross listed on the Rwanda Stock Exchange (Kidd, 2012). Uchumi Supermarkets and Equity are primarily listed on the Nairobi Stock Exchange and are cross listed on the Rwanda Stock Exchange starting from 2014. Equity Group Holdings Limited is primarily listed on the Nairobi Stock Exchange (2006) and cross listed on the Rwanda Stock Exchange starting from 2015. The RSE operates in close association with the Nairobi Stock Exchange in Kenya, the Dares Salaam Stock Exchange in Tanzania and the Uganda Securities Exchange in Uganda since regional integration is only one aspect of the financial policy agenda for Africa (ADB, 2012).

**Statement of the Problem**

The government of Rwanda has a goal to develop the economy by 2020 therefore it has to encourage participation and growth of the stock market, thereby facilitating the growth, flow, and regulation of the stock market (Mauwa, 2016). The government has ensured that investors in the Rwanda Stocks Exchange are protected, by advising and guiding companies seeking investment through provision of important infrastructures and conducive environment for business development (Mauwa, 2016).

Despite these efforts, investment in the Rwanda stock exchange is low and the Rwanda Stocks Exchange is not growing at the pace expected. Currently there are approximately 13,543 registered investors, all these investors are composed by the individual investors, group investors and institutional investors. The market capitalization of Rwanda Stocks Exchange is USD 3.7 billon with 7 listed companies (RSE, 2015). In comparison with Nairobi Securities Exchange, there are approximately 66 listed companies with a total market capitalization of approximately USD 23 billion (Mwangi, 2016).

Few studies have been conducted to establish the effect of behavioural biases on investment in the Rwanda Stock Exchange. Mwangi (2016) studied on the effect of financial structure and financial performance of listed firms at the East Africa Securities Exchanges. Specifically, the study evaluated the effect of short term debt, long term debt, retained earnings and other shareholders funds on financial performance. Mauwa (2016) b sought to appraise the effect of capital structure on financial performance of firms listed on Rwanda Stocks Exchange. The variable studied was capital structure. Studies on the effect of behavioural biases on investment have been conducted but outside Rwanda.

Nyamute, Lishenga and Oloko (2015) attempted to determine the contribution of investor behaviour in influencing investor investment performance at the Nairobi Securities Exchange. The variables studied were herding, disposition effect and overconfidence. This study was conducted in Kenya. Luong and Ha (2011) studied the behavioural factors influencing individual investors' decisions at the Ho Chi Minh Stock Exchange. The variables studied were herding, market, prospect, overconfidence-gamble's fallacy, and anchoring-ability bias. No study on effects behavioural biases on investment in Rwanda Stock Exchange has been undertaken specifically combining self-serving bias, over-optimism, loss aversion, self-attribution and confirmatory bias as the explanatory variables. This study attempted to fill this gap by analysing behavioural financial biases and their effects on investment in the Rwanda Stock Exchange.

**General objective**

The main objective of the study was to establish the effect of behavioural biases on investment in the Rwanda stock exchange.

**Specific Objectives**

1. To explore the effect of loss aversion on investment in the Rwandan stock market.

## Research Hypothesis

In this study the causal hypotheses to be tested was:

**$H0_1$:** Loss aversion has no significant effect on investment in the Rwandan Stock Exchange.

## Scope of the Study

This study focused on the individual and institutional investors registered at RSE over the period of 2010 to 2015. The study also focused on examination of the effects of behavioural biases on the investment in the individual and institutional investors. Econometric analysis was used to analyse the behavioural biases in investment and what pushes the investors to invest in stock market.

# LITERATURE REVIEW

## Theoretical Review

This study was guided by the following theories to explain the aspect of behavioural biases and more specific to explain on loss aversion bias. The theories include; Herding behaviour theory, prospect theory and heuristics theory.

## Research Gaps

Although there are many reviewed studies contributing to the development of behavioural biases on of investors investment, majority of these studies have focused on the developed world (Baddeley *et al*., 2012). Majority of behavioural finance literature analyses individual investors in developed markets such as USA, UK and Western Europe. Furthermore, many of the research in behavioural finance literature depend on data that is generally limited to the subsamples of overall investor groups in these countries. Many researchers have pointed out that the behavioural biases has a certain influence on the investment (Gomes, 2005; Baddeley *et al*., 2012). However, as stated, there are few studies about investments d in the developing world like Rwanda. Studies such as Sukanya and Thimmarayappa (2015) focussing on impact of behavioural biases in investment process in Sri Lanka have different findings pointing to the fact that affluent investors reported that their own stock-picking skills were critical to the investment performance. This study will be different as the focus will be on the relationship between loss aversion bias and investment among investors.

# METHODOLOGY

The underlying epistemology of this research was positivist; focusing on examining earlier established theories under the assumption that reality is objectively given and can be described by measurable properties independent of the observer and the instruments. The study used cross-sectional descriptive survey research design to assess and establish the effect of behavioural biases on investment at the Rwanda stock exchange. The design was suitable for the proposed study because it attempted to determine current status of the phenomenon. The cross-sectional

descriptive survey method was suitable for this study since data was collected at one particular time (Silverman, 2013) across the respondents in the Rwanda Stock Exchange.

The target population of this study comprised of individual, group and institutional investors at the Rwanda Stock Exchange which are approximately 13,543 RSE, 2015. There are approximately 10,662 local investors, 2,474 from EAC and 407 registered as foreigner investors, all these investors are composed by the individual investors, group investors and institutional investors (Directory, Rwanda Stocks Exchange, 2015). The sampling frame comprised of a list of 13,543 individual investors which was sought from the Rwanda Stock Exchange. Stratified random sampling was first be used where the targeted population was stratified into three distinct strata Rwandese investors, EAC and foreign investors. According to RSE (2015) there are 13,543 investors registered at the RSE, 10,662 Rwandese investors, 2,474 EAC and 407 foreign investors at the Rwanda Stock Exchange that means 79% of domestic, 18% EAC and 3% foreign investors RSE, 2015. Corresponding samples were drawn from each sample. Stratified random sampling was used and it involved dividing the population into homogeneous subgroups followed by a simple random sample (Kombo & Tromp, 2006).

To determine the sample size for this study in consideration of the population of 13,543 investors the study used the normal approximation to the hyper-geometric distribution. Hence, 374 was the suitable sample size for the population of 13543 investors from Rwanda Stock Exchange. The sample size is 374, were selected using the simple random sampling.

## RESEARCH FINDINGS AND DISCUSSION

### Descriptive Results on Investment at Rwanda Stock Exchange

This section provides the results on respondents' opinion on various statements regarding investment at RSM. The statements were provided on a likert scale ranging from strongly disagree (SD) to strongly agree (SA). The findings also present the mean and standard deviation of the responses.

*Table 1 Descriptive Results on Investment at Rwanda Stock Exchange*

| | SD | D | NS | A | SA | Mean | Std Dev |
|---|---|---|---|---|---|---|---|
| I invest in the stock market whenever I anticipate dividend income from companies | 7.1% | 13.7% | 20.6% | 41.4% | 17.1% | 3.48 | 1.14 |
| I invest in the company that has a future high capital gain than other | 6.9% | 0.0% | 10.6% | 17.1% | 65.4% | 4.34 | 1.12 |

companies

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| My past investment successes motivates me to invest more in stocks | 7.1% | 10.3% | 10.3% | 41.4% | 30.9% | 3.79 | 1.19 |
| I increase my trading activities if the past trading volume of stock market was higher than usual | 7.1% | 20.9% | 30.9% | 24.0% | 17.1% | 3.23 | 1.17 |
| I only invest in stocks that frequently trade at Rwanda Stock Exchange | 3.4% | 17.1% | 10.3% | 17.1% | 52.0% | 3.97 | 1.27 |
| I only consider stock prices when investing in the stock market | 17.4% | 6.9% | 13.7% | 30.9% | 31.1% | 3.51 | 1.44 |

The study sought to find out whether the respondents invested in stock market with anticipation of dividend income from the companies. The results indicated that 41.4% of the respondents agreed, 17.1% strongly agreed, 20.6% not sure. On the other hand, 13.7% disagreed while 7.1% strongly disagreed. The statement had a mean response of 3.48 and a standard deviation of 1.14. On whether respondents invested in the company that has a future high capital gain than other companies, 65.4% of the respondents strongly agreed, 17.1% agreed and 10.6% indicated not being sure. Only 6.9% strongly disagreed with the statement. The statement had a mean response of 4.34 and a standard deviation of 1.12 which confirmed that majority of the respondents was in agreement with the statement.

The study was further interested in whether respondents past investment successes motivated them to invest more in stocks. The findings indicated that 41.4% and 30.9% of the respondents agreed and strongly agreed respectively. On the other hand, 10.3% and 7.1% disagreed and strongly disagreed respectively. Those who were not sure were 10.3%. The statement had a mean of 3.79 and standard deviation of 1.19 which also confirmed that majority of the respondents agreed and that the response had a slight variation from the mean.

On whether, respondents/investors increased trading activities if the past trading volume of stock market was higher than usual, the findings showed that 30.9% of the respondents indicated not sure, 24.0% and 17.1% of the respondents agreed and strongly agreed respectively while 20.9% and 7.1% disagreed and strongly disagreed respectively. The findings further revealed that 52.0% and 17.1% of the respondents strongly agreed and agreed respectively that they only invest in stocks that frequently trade at Rwanda Stock Exchange. Those who disagreed with the statement were 21.5%. The statement had a mean response of 3.97 and a standard deviation of 1.27 which further confirmed that majority agreed with the statement.

The study finally, sought to establish whether respondents only considered stock prices when investing in the stock market. The results indicated that 30.9% and 31.1% of the respondents strongly agreed and agreed respectively. On the other hand, 17.4% and 6.9% strongly disagreed and disagreed respectively. However, the mean of 3.51 was an indication that majority of the respondents agreed and strongly agreed with the statement.

These findings implied that behavioural biases played a significant role in the investors' decision in investment in securities at the Rwanda stock exchange. The findings further implied that investors at the Rwanda stock exchange invest based on various anchors or biases from past experience. The findings of this study agreed with Barber and Odean (2011) who noted that individual investors underperform standard benchmarks such as a low cost index fund, sell winning investments while holding losing investments and are heavily influenced by limited attention and past return performance in their purchase decisions.

**Descriptive Results of the Study Variable**

This section provides descriptive results on how respondents responded to the statement in the questionnaire. This section presents the findings of descriptive statistics based on the research objective.

**Loss Aversion Bias**

The third objective of the study was to examine the effect of Loss Aversion Bias on investment in the Rwandan stock market. The findings in Table 4.2 present the descriptive results on the effect of Loss Aversion Bias on investment in the Rwandan stock market.

*Table 2 Descriptive Results on Loss Aversion Bias*

| | SD | D | NS | A | SA | Mean | Std Dev |
|---|---|---|---|---|---|---|---|
| I invest in the stock market when faced with a sure gain | 16.6% | 22.9% | 20.3% | 24.0% | 16.3% | 3 | 1 |
| I avoid investing when faced with a sure loss | 20.0% | 16.9% | 20.9% | 20.0% | 22.3% | 3 | 1 |
| I don't buy stock that doesn't have a good dividends | 21.1% | 17.4% | 23.7% | 23.1% | 14.6% | 3 | 1 |
| I buy stocks and avoid stocks that have performed poorly in the recent past I don't buy share in companies does not rising trade | 16.0% | 20.3% | 21.4% | 17.4% | 24.9% | 3 | 1 |
| I fear losing money invested in securities at Rwanda Stock Exchange | 19.4% | 24.3% | 20.9% | 17.1% | 18.3% | 3 | 1 |
| I fear poor investment advice from stock blockers | 26.3% | 20.3% | 19.1% | 14.6% | 19.7% | 3 | 1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I fear poor investment advice from family members | 23.1% | 22.9% | 18.9% | 20.3% | 14.9% | 3 | 1 |
| I only invest in stable securities | 15.7% | 20.3% | 24.6% | 19.7% | 19.7% | 3 | 1 |
| I dispose of securities when the affected company declare trading losses | 18.6% | 19.7% | 22.3% | 19.7% | 19.7% | 3 | 1 |
| I rarely invest in securities whose prices are falling | 21.3% | 17.0% | 22.5% | 21.0% | 18.2% | 3 | 1 |

The study sought to establish whether respondents invest in the stock market when faced with a sure gain, the results showed that 24.0% and 16.3% agreed and strongly agreed respectively while 22.9% and 16.6% disagreed and strongly disagreed. The statement had a mean of 3 indicated varying opinions among the respondents. The findings further revealed that 20.0% and 22.3% agreed and strongly agreed respectively that they avoid investing when faced with a sure loss while 20.0% and 16.9% strongly disagreed and disagreed respectively.

The study further sought to find out whether investors at Rwanda stock exchange don't buy stock that doesn't have good dividends, the finding presented in Table 4.7 showed that 23.1% agreed, 14.6% strongly agreed, 23.7% were not sure, 17.4% disagreed while 21.1% strongly disagreed. On whether, investors buy stocks and avoid stocks that have performed poorly in the recent past and respondents not buying share in companies does not raise in trade, 24.9% strongly agreed, 17.4% agreed, 20.3% disagreed while strongly disagreed 16.0%. The results further revealed that 24.3% and 19.4% disagreed and strongly disagreed that they fear losing money invested in securities at Rwanda Stock Exchange. Those who agreed and strongly agreed with the statement were 17.1% and 18.3% respectively.

The finding further showed that 26.3% and 20.3% of the respondents strongly disagreed and disagreed that they fear poor investment advice from stock blockers. On the other hand, 14.6% and 19.7% agreed and strongly agreed that with the statement. Similarly, 23.1% and 22.9% of the respondents strongly disagreed and disagreed that they fear poor investment advice from family members while 20.3% and 14.9% agreed and strongly agreed with the statement.

On whether the respondents only invested in stable securities, 19.7% and 19.7% agreed and strongly agreed respectively while 20.3% and 15.7% disagreed ad strongly disagreed respectively. The finding also revealed that the respondents varied in opinion on whether they dispose securities when the affected company declares trading losses with a combined 39.4% agreeing while 38.3% disagreeing. Finally the results revealed that 39.2% agreed that they rarely invest in securities whose prices are falling while 38.3% disagreed with the statement.

These finding confirmed that investors are loss aversion and tend to escape any investment that will them to losses. The findings concur with Genoseve and Mayer (2007) who suggested that people tend to give losses more weight than gains they're loss averse. Similarly, Kumar and Goyal (2015) who found that investors avoid regret by refusing to sell decreasing shares and

willing to sell increasing ones. Moreover, investors tend to be more regretful about holding losing stocks too long than selling winning ones too soon.

**Inferential Statistics Results**

**Univariate Regression Results for Loss Aversion Bias and Investment in RSM**

The objective of the study was to examine the effect of Loss Aversion Bias on investment in the Rwandan stock market. The findings in Table 4.19 present the univariate regression results on the effect of Loss Aversion Bias on investment in the Rwandan stock market. The study conducted a regression analysis for Loss Aversion Bias sub-constructs before conducted that for overall univariate regression for mean for loss aversion bias

*Table 3 Regression Results for Loss Aversion Bias Sub-Constructs*

| | **B** | **Std. Error** | **t** | **Sig.** |
|---|---|---|---|---|
| (Constant) | 3.06 | 0.056 | 54.667 | 0.000 |
| Attitude towards gain | 0.159 | 0.023 | 6.9 | 0.000 |
| Attitude towards loss | 0.059 | 0.021 | 2.75 | 0.006 |
| | | | | |
| R | | | | 0.569 |
| R Squared | | | | 0.323 |
| Adjusted R Squared | | | | 0.319 |
| F statistic (p value) | | | | 82.919 (0.000) |

The study conducted a regression analysis to test the effect of Loss Aversion Bias subcontracts which included Attitude towards gain and Attitude towards loss on investment in Rwanda stock exchange. The finding showed that model had R-squared of 0.323 which indicated that 32.3% of the variation in investments in Rwanda stock market can be accounted for by Loss Aversion Bias subcontracts. The model also yielded F-statistics =82.919 with a corresponding p-value = 0.000 which was less than 0.05, meaning that there is a relationship between Loss Aversion Bias subcontracts and Investment in Rwanda stock market.

**Investment in Rwanda Stock Market** = **3.06** + **0.159** (**Attitude towards Gain**) + **0.059** (**Attitude towards Loss**) **+ ε**

The regression coefficient of Attitude towards gain was (β=0.159, p=0.000, <0.05) shows that the effect of Attitude towards gain on investment in the Rwandan Stock Exchange was statistically significant relationship. The finding implied that a unit increase in Attitude towards gain would results to an increase of 0.159 units in investment in the Rwandan Stock Exchange.

The results further showed that regression coefficient of Attitude towards loss was (β=0. 0.059, p=0.006, <0.05) indicating that Attitude towards loss had a positive and significant effect on

investment in the Rwandan Stock Exchange. The finding implied that a unit increase in Attitude towards loss would results to an increase of 0.059 units in investment in the Rwandan Stock Exchange. Similarly, Kumar and Goyal (2015) who found that investors avoid regret by refusing to sell decreasing shares and willing to sell increasing ones.

*Table 4 Regression Results for Loss Aversion Bias and Investment in RSM*

| | **Model 3** |
|---|---|
| **Parameters** | **Dependent Variable: Investment RSM** |
| Constant | 3.07 (**0.000**) |
| Loss Aversion Bias | 0.217(**0.000**) |
| R | 0.508 |
| R Squared | 0.258 |
| Adjusted R Squared | 0.258 |
| F statistic(**P-Value**) | 121.174 (**0.000**) |

The results also revealed a relationship R= 0.508, indicating a strong positive association between Loss Aversion Bias and investment in Rwanda stock market. R-squared= 0.258 indicated that 25.8% of variation in the investment in Rwanda stock market can be explained by Loss Aversion Bias while the remaining percentage is explained by other variables not in the model. The results of ANOVA test show that the F value is 121.174 with a significance of p value = 0.000 which was less than 0.05, meaning that there is a relationship between Loss Aversion Bias and investment in Rwanda stock market.

The model $\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon}$ therefore became **Investment in Rwanda stock market = 3.07 +0.217 (Loss Aversion Bias) +ε.**

The results on the beta coefficient of the resulting model showed that the constant $\alpha = 3.136$ is significantly different from 0, since the p- value = 0.000 is less than 0.05. The coefficient $\beta$ = 0.217 is also significantly different from 0 with a p-value=0.000 which is less than 0.05. The results imply that change in Loss Aversion Bias will result in 0.217 units change in Investment in Rwanda stock market. This also confirmed that there was a significant positive linear relationship between Loss Aversion Bias and Investment in Rwanda stock market. Similarly, Kumar and Goyal (2015) who found that investors avoid regret by refusing to sell decreasing shares and willing to sell increasing ones.

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### Summary of Findings

The objective of the study was to examine the effect of loss aversion bias on investment in the Rwandan stock market. The correlation coefficient was found to be significant and positive implying that as loss aversion bias increases the investment in Rwanda Stock Market also increases. The results of univariate regression analysis showed indicated that a significant variation in the investment in Rwanda stock market can be explained by loss aversion bias.

This confirmed that there was a significant positive linear relationship between loss aversion bias and Investment in Rwanda stock market. The coefficient of loss aversion bias in the multivariate regression analysis revealed a statistically significant relationship between loss aversion bias and investment in the Rwandan Stock Exchange. Hence the study rejected the null hypothesis and concluded that loss aversion bias has a significant effect on investment in the Rwandan Stock Exchange.

### Conclusion

This study established that loss aversion bias, significantly affected investment in Rwanda stock market. Based on the findings, the study further concluded that investors at the stock market tend to be more regretful about holding losing stocks too long than selling winning ones too soon. This is because to many stock market investors failure depresses them.

### Recommendations of the Study

The study recommended that stock market investors should be smart enough to capture the essence of loss aversion bias which could guide them in taking the right investment decision and also behave rationally when making investment decisions.

The study further recommends that the individual investors to seek the advice of stock brokers/fund managers to advise them accordingly in terms of performance of a specific security in which an investor would wish to invest in. The implication is that such brokers/fund managers have the information of the market and are aware of the movers and shakers of securities and therefore provide their advice at a fee. The study recommends that investors should be keen to identify such bias to increase their rationality in stock trading.

### Suggestions for Further Research

These results indicated that 50.8% of variation in the investment in Rwanda stock market can be explained by loss aversion bias. Therefore, future studies should focus on others factors not included in this study that account for the remaining percentage.

The study further suggested that future studies should focus on behavioural biases on investment at other mature stock market for comparison purposes. This is because Rwanda is one of the

youngest stock market in East Africa with a small number of listed companies and low market capitalization, an indicator of low Stock Market development.

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