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## **Portfolio Diversification and Capital Accumulation of Rwanda Stock Exchange of Listed Financial Companies: A Case of Selected Financial Companies Listed on Rwanda Stock Exchange**

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# Portfolio Diversification and Capital Accumulation of Rwanda Stock Exchange of Listed Financial Companies: A Case of Selected Financial Companies Listed on Rwanda Stock Exchange

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## Abstract

The fluctuation in stock markets disturbs the genuine investors and they build the mind of that it is not there for the new investors to be more creative due to price fluctuation. Despite the encouragement of investors in Rwanda, the problem existing is that the capital market is no longer growing at the pace expected and there are still few listed financial institutions in stock exchange and this slow the capital accumulation of stock exchange among listed financial institutions. The purpose of this study was to assess effects of Portfolio diversification on capital accumulation of Rwanda stock exchange of listed financial companies and to assess the role of market efficiency on capital accumulation of Rwanda stock exchange of listed companies. The study used three theories such as Model portfolio theory, risk aversion theory and Markowitz portfolio theory. The study used a descriptive research design with two mixed methods such as qualitative and quantitative. A descriptive statistic such as mean, standard deviation was determined while inferential statistics such as regression analysis and correlation analysis established. Therefore, data were analyzed through SPSS version 21 and the presentation was done using frequency tables, pie charts and bar charts. Research findings showed that the relationship between the study variables is significant with p-value  $0.000 < 0.05$ ). Therefore, the p-value for portfolio diversification is 0.025. All these components are statistical significant since p-values  $< 0.05$ . Based on the problems arising at capital market in that the capital invested in stock exchange market is raised on market situation and in fact that an increase in capital in almost firms do not stimulate enough capital accumulation for listed financial companies, researcher advice the management of I&M Bank Rwanda and Bank of Kigali to apply capital price model to achieve capital accumulation in Rwanda stock exchange operations. There is need to implement strategies regulating and encouraging investment decision in stock exchange operations

**Keywords:** *Portfolio Diversification, Capital Accumulation, Stock Exchange Listed Financial Companies*

## 1.0 Introduction

According to Shania and Ayse (2011), portfolio diversification is the risks management strategies of combining different securities to reduce the overall investment portfolio risks. Therefore, this consists of management practice of using aspects like capital price model, using single factor and multiple factor as means of sustainability of stock exchange. The capital price model is the best management tool of determining the expected return of listed financial institution along with risks management measurement. Most of companies uses capital price model as means of not only achieving return but also as tool for risks free return and beta where, beta is measured in terms of systematic risks associated with entire market. Most of investors in stock exchange market are determined by increase and ability to make decision due to high volatility and portfolio management (Milionis, 2011)

According to Schindler (2007), in investment decision, there may incur the systematic risks and unsystematic risks. All these risks affect the investment in stock exchange but investor develops strategies for management of risks. The systematic risks consist of risks market risks not diversified consists. The unsystematic risks consist of risks diversified throughout portfolio investment. In stock exchange, the probability of diversification occurs and this is expressed in terms of techniques used to manage risks in various ways. According to Aboard (2015), the simple factor influencing investment decision making consists of individual psychological factor of profit maximization which contribute to efficiency and effectiveness of decision making in investment opportunity. The multiple factors cover factors like social interaction, family and friends' interaction leads investor to make investment decision.

Investment in stock exchange also calls for investors towards multiple influencing reasons such as having long term capital accumulation and the intention to become the owner of listing financial or non-financial companies on stock exchange market. Therefore, this leads them to work through capital gain and increase share price (Waweru & Uliana, 2008)

According to Galanidis (2016), although loses and gains are part of economic cycle, most of investors feel positive attitude of realizing gains. Within competitive environment, most of investors need to invest in financial markets as this facilitates the raising of capital transfer of risks in the derivative market and facilitative environment where international trade for currency is observed. According to Naser and Nuseibeh (2003), the stock exchange market is the powerful tool in analyzing the return of investment and this is an indicator of stock market volatility. Countries applying stock market index stimulate investment opportunities and this leads to economic capital accumulation and development.

The stock exchange market provides is the basis of estimating long term capital for potential investors and are very used as indicators of countries economic health. Having good stock exchange market, this leads to liquidity preference, transparency and value creation, risks reduction and creativity (Bitar, 2012).

According to Balbhimrao and Kanahalli (2012), the having good stock exchange market encourages investors to create value for investors. The stock exchange market generates and disseminates information related to stock exchange operations in terms of stock price which reflect the investment performance. The stock exchange market allows the development of investors as this contributes to long term projects. However, there is opportunity for investor to diversify financial investments across different economic activities and spread up their associated risks. The stock exchange market provides the security of investment in tradable market and this encourages investment in venturing (Shania & Ayse, 2011)

A financial sector is very broad and its capital accumulation cannot be measured using single indicator, investors focused on the relationship between exchange index and capital accumulation of real economy. The stock exchange market keeps changes over time to reflect the market conditions and this helps investors to choose the best stock reflecting the general stock market (Bitar, 2012)

According to Shania and Ayse (2011), the stock exchange market stimulates capital accumulation of economic in terms of acquiring investment assets and having low risks of investments opportunities. Therefore, the risks aversion of investors become less when there is good stock exchange market. The capital accumulation of stock exchange implies appropriate resources allocation and utilization and this is determined by market efficiency and market value.

### 1.1 Problem statement

The situation of market behavior in stock exchange brings about the significant effect on investor capital accumulation in financial institutions. The stock market is said to be speculative than being normal. Therefore, the capital invested in stock exchange market is raised based on market situation mostly regulated with basis of setting appropriate market mechanisms. In most cases, the problem arising in stock market is that there is fluctuation of market prices due to new entrants with a diversity of prices (Milionis, 2011)

The challenges emerging stock exchange market in African countries consists of capital market transformation which affect economic situation of countries. Therefore, an increase in capital in almost firms do not stimulate enough capital accumulation for listed financial companies. Therefore, there is a need for proper planning and regulating capital structure of stock exchange market to achieve capital accumulation of stock exchange (Naser & Nuseibeh , 2003).

In East Africa, more specifically in Kenya the alternative way of speed up economic development is through a developed financial system in stock exchange to accumulate enough capital but some counties including Kenya remain behind in financial system of stock exchange and financial depth is below in sub-Saharan and East Africa average (Agyei-Ampomah, 2013). According to conducted a study done by (Bitar, 2012) to establish the challenges faced Rwanda stock exchange. The results showed that market recorded a total turnover of 38.54 rwf 136.1rwf of million shares in 1,542 deals. This translate into a decrease of 16.7 in turnover and a decrease of 37% in a number of transactions respectively over the same period.

Despite the effort made in Rwanda, market capitalization went down from 3.8 of USA dollars billion in 2015 to 3.3 billion. This was attributed to the country economic performance and other factors such as clients' turnover and few products traded at Rwanda stock exchange (Rwanda stock exchange of listed financial institution report, 2021). Despite the existence of few listed financial institutions in Rwanda, these banks need sufficient funds to stimulate capital accumulation of exchange by selling shares and creating income generating activities. The structure of capital of listed financial institutions does not allow them to perform the role more efficiently and respond prudently to the available market needs (Rwanda stock exchange of listed financial institution report, 2021).

This formed the motivation as to why researcher assessed the effects of Portfolio diversification on capital accumulation of Rwanda stock exchange operations listed in financial company by filling existing gap taking a case study of financial companies listed on Rwanda stock exchange.



## 1.2 Objective

To assess effects of Portfolio diversification on capital accumulation of Rwanda stock exchange operations listed in financial company

## 2.0 Literature review

Another study conducted by Li (2012 ) in Apergis and Eleftheriou (2002) on the effect of macro-economic variables such as inflation rate money supply, exchange rate and GDP. The study revealed that there is significant relationship between market capitalization and inflation, money supply and GDP. The study argued that macroeconomic variables contribute on stock exchange market development also include real income rate, investment rate and market capitalization of listed financial intermediaries.

The study conducted by Milionis (2011), to assess the impact of literacy on stock market showed that to achieve the capital accumulation of stock exchange, investors need to engage in online trading to capture variety of customers and this requires knowledge. Therefore, the study revealed that the level of investors knowledge to identify and apply online transaction analysis determine the level of capital accumulation in exchange of stock exchange. Another study conducted by Khan (2012), Identified the level impact of overconfidence on the investment performance which is measured by investment return rate and trading experience. The study revealed that return rate is evaluated on basis of investors peers profit rates.

A study conducted by Chinwuba and Amos (2011), to assess the investment companies revealed that Portfolio diversification strategies remain important and must be reviewed and adjusted time to time with basis of market condition. Therefore, portfolio is done in terms of target set for risks and return. A study conducted by Shania and Ayse (2011) in India to examine the efficiency of stock market revealed that stock return is triggered by dividend changes. The dividend policy of listed financial company in emerging market is very different from the widely accepted dividend policy in operating in developing countries. A study conducted by Hanif and Bhatti (2010) showed that there is significant use of CAPM in stock exchange as this provide stability of stock market. The study revealed that the application of CAPM is applicable to calculate accurate return for only limited period.

A study conducted by the African Stock Exchange Association report (2014), In South Africa showed that the macro economic variables such as GDP, stock market index, foreign direct investment (FDI) contribute to the capital accumulation of stock exchange. The study revealed that South Africa has large bases of financial sector and large assets under management but economic capital accumulation is slow. A study done by Raza and Qazi (2011), in Karachi to investigate the role CAPM in investment decision within financial companies undertaking stock exchange revealed that, Karachi used capital asset price model in stock exchange (SE) monthly, quarterly and semi-annually basis to predict stock return more accurately so as to achieve short investment rather than long term investment.

### 2.1.1 Model Portfolio Theory (MPT)

The model portfolio theory is the theory advanced by Merton (1973) and this put more emphasis on market efficient and rational as foundation of market strengths. This theory considers the market as rational, as efficient and clearly treats investors as the one to design portfolio based on portfolio mean variance and expected return. This theory assumes that the price model in the risks does not measure the beta and expected return but determines factors rather than risks. Based on this theory, the implication of the theory is that investors need to

make the right decision in investment opportunities and invest in most profitable and income generating activities.

### 2.1.2 Risk Aversion Theory (RAT)

This is the theory advanced by Fischer (1972). The theory assumes that investor generally desire to avoid participate in risky behavior and therefore, he wishes to maximize the return with the least amount of risk possible. The good investor is the one who chooses the investment with least risks as there are no benefits to choose higher level of risks unless there is an increasing level of return. This theory provides an assurance to potential investors in risks aversion by giving potential for accidents in investment opportunities and giving the relevance of insurance cover as tool for reducing risks in great outlay of accidental events.

### 2.1.3 Markowitz Portfolio Theory

This theory was developed by Markowitz (1953) and put more importance not only expected return but also the level of risks for a particular return. The theory assumes that given the same level of expected return, investor chooses an investment with low amount of risks which is measured in terms of investment variance and standard deviation.

The theory also assumes that an investor quantify an investment expected return and probability of return with specific period of time. Therefore, investor seeks to maximize utility and make decision based on investment risk and return. The implication of this theory is that the portfolio is considered as efficient to investor's high expected return with the same or low level of risks compared to other investors.

## 3.0 Methods/Procedures/Methodology

In this study, researcher used a descriptive research design with two mixed methods such as quantitative and qualitative approaches. This research design consists of describing events as they are in the field of research. Therefore, it helped researcher to achieve research objectives. The quantitative approach comprised statistical data to be collected using questionnaire in the form of agreement and disagreement for the stated statements pertaining research objectives. The qualitative approach comprised data collected from group discussion during interview with management of two selected financial companies listed in stock exchange and researcher used record keeping from the management of stock exchanges of listed financial company. However, the qualitative approach will be expressed in the form of quote and will serve as a complement of data for those collected using questionnaire.

The target population comprises of 198 different categories of Rwanda stock exchange of listed financial companies and these include management of listed financial companies, stock brokers, advisors and custodians populations who helped researcher in achieving research objectives. The sample size was determined by considering the sampling error of 5% and therefore he used the formula developed by Stephanie (2013) to calculate the sample size.

$$n = \frac{N}{1 + Ne^2}$$

Stephanie (2013), n= Number of samples or sample size

N= Total population, e= Error tolerance

Therefore, from the total target population of 198, taking sampling error of 5%, the sample size will be

$$n = \frac{197}{1 + 197(0.05)^2} = 132$$

In the research, a simple random sampling technique was used to get the representative sample as the category of respondents was distributed in four categories, the application of this technique was seen as important in achieving the research objectives. The simple random sampling technique is the technique which gave all respondents equal probability chance to be selected or participate in giving research information.

Data collection methods consists of research tools or instruments to be used when collecting information at the field to make this research more accurate and effectiveness, researcher used different data collection instruments such as questionnaire, interview guide and documentations.

In this research, questionnaire was developed and distributed to the concerned research participants. In this study, the interview discussion was conducted among the management of companies listed in financial stock exchange. The interview was brief and served researcher to get in-depth data pertaining research objective. The results from the management of listed financial institutions operating stock exchange were a supplement of statistical data as coted as focus group discussion during discussion of research findings.

To ensure successful data collection, researcher used the research facilitator of each stock exchange of listed financial company to assist in accurate data correction process. In collecting information, questionnaire left to the research participants to be filled and picked after one week. Therefore, to make this research more effective, clarification of research questions for any misreading questions was done through mobile phone.

Reliability of research instruments is the degree to which research instruments measures what it intends to measure. Therefore, the single administration was used as this covers assessment to the concerned research participants to assess consistency of research questions. Moreover, researcher Unstandardized Coefficients and standardized Coefficients to calculate the percentage agreement between responses of two tests and p-value was determined to assess the significance of the study variables. Research facilitator in each stock exchange of listed financial company will be used on how to collect data pertaining research objectives.

Data were analyzed using quantitative and qualitative technique. Therefore, the study used both descriptive and inferential statistics. In descriptive statistics, the study used mean, standard deviation, while in inferential statistics, Spearman correlation analysis was used to establish the strengths of relation between independent variable and dependent variable

#### **4.0 Key result and findings**

##### **4.1 Demographic Characteristics of Respondents**

This part consists of respondents' characteristics in terms of gender, age group, education level, professional occupation and working experience. The total sample selected was 132 respondents comprising management of listed financial companies, stock brokers, advisors and custodians.

**Table 1 Response Rate of Research Findings**

Category of population	Targeted	Sample size	Respondents
Management financial Listed Investors (BK & I&M bank)	2	2	2
Stock brokers	112	75	75
Advisors	44	29	29
Custodians	39	26	26
<b>Totals</b>	<b>198</b>		<b>132</b>

**Source:** Primary, (2021)

The research used 132 questions to investigate management of BK and I&M bank stock brokers, advisors and custodians. All questions were returned 100% and respondents actively participated in answering the stated questions accordingly.

#### 4.1.1 Gender of Respondents

**Table 2: Gender of respondents**

Gender	Frequency	Valid Percent
Valid Male	112	84.8
Female	20	15.2
<b>Total</b>	<b>132</b>	<b>100.0</b>

**Source:** Primary, (2021)

Research findings in table 2 showed that 84.8% of the genders comprised of males while 15.2% comprised of female. This indicates that majority of the people in stock exchange were male as represented by the larger percentage. This is because female in business more specifically in stock exchange are few compared to other business as this requires more technical skills

#### 4.1.2 Age group of Respondents

**Table 3: Age of respondents**

Age group of respondents	Frequency	Valid Percent
Valid < 30 Years	11	8.3
31-40	67	50.8
41-50	48	36.4
>50Years	6	4.5
<b>Total</b>	<b>132</b>	<b>100.0</b>

**Source:** Primary, (2021)

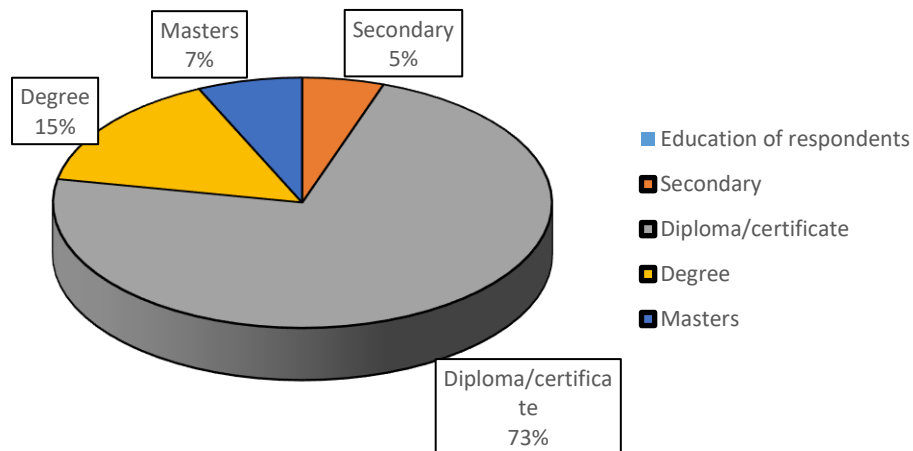
The research findings in table 3 showed that (50.8%), were generally in the age group of between 31 -40 years. Respondents equivalent to 36.4%) varied between 41-50 years' group width. A total of 8.3% of surveyed respondents had the age below 30years while4.5% of respondents had the age above 50years.



### 4.1.3 Education level of Respondents

In this research, the information related to respondents’ education are summarized in figure 1

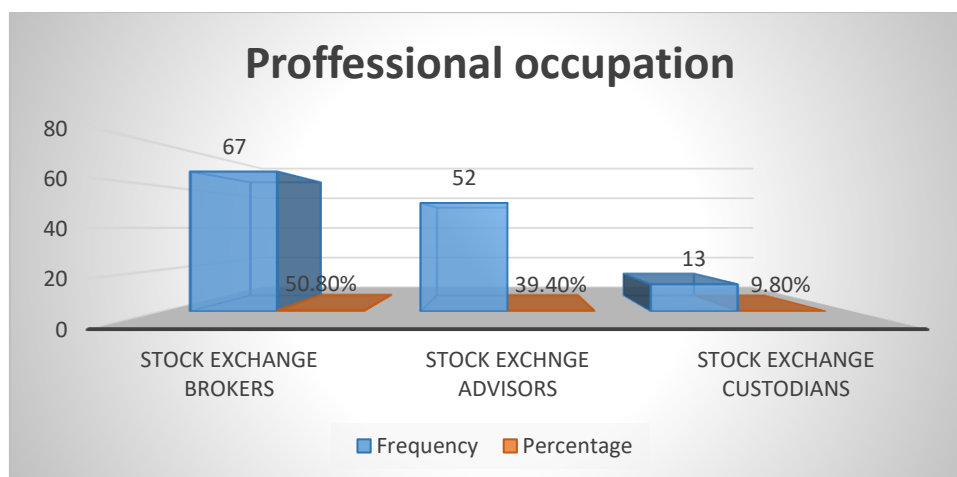
**Figure 1: Education level of Respondents**



**Source: Primary, (2021)**

Figure 1 show that 73.0% of respondents hold diploma/certificate level of education, 15.0% of the respondents have completed Bachelor’s Degree,7% of respondents completed Master’s Degree while 5% of respondents have completed secondary level of education. Having big number of respondents who have completed diploma/certificates implies that financial companies listed in stock exchange have more qualifies people with technical knowhow. In regards, these companies hold people who completed Master’s degree which means that the selected companies are very strong in capital market operations.

### 4.1.4 Professional Occupation of Respondents



**Figure 2: Professional Occupation**

**Source: Primary, (2021)**

The information collected as shown in figure 2 showed that 80% of respondents work as stock exchange brokers, 39.40% work as stock exchange advisors while other respondents equivalent to 9.8% work as stock exchange custodians. The general conclusion is that the selected companies have more experienced personnel to perform stock exchange operations.

#### 4.2.5 Working Experience

In this study, researcher was interested in assessing respondents working experience in investment opportunity more specifically in stock exchange. This provide an idea of how financial listed companies operate within competitive market and extent to which these investors achieve the stated goals and objectives. The information collected from research participants are summarized in table.4.

**Table 4: Working Experience**

	<b>Working experience</b>	<b>Frequency</b>	<b>Valid Percent</b>
Valid	2-3 years	13	9.8
	3years and above	119	90.2
	<b>Total</b>	<b>132</b>	<b>100.0</b>

**Source:** Primary, (2021)

As indicated, the study findings showed that 90.2% of respondents have worked in financial companies between 3 years and above followed by minority of respondents of 9.8% who have worked in financial listed companies of stock exchange between 2-3years. The general conclusion is that people working in two selected financial listed companies have experience and have given required information pertaining research objectives.

#### 4.2 Presentation of Findings

Portfolio diversification and capital accumulation of Rwanda stock exchange operations listed in financial company.

**Table 5: Effects of Portfolio diversification on capital accumulation of Rwanda stock exchange operations listed in financial company**

	SA	A	D	SD	N	Mean	St.D
Statement	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Portfolio diversification assists in achieving Rwanda stock exchange	56.8	37.1	3.8	-	2.3	1.537	0.775
The Portfolio diversification is based on capital asset price model	62.9	29.5	-	5.3	-	1.462	0.681
The Portfolio diversification is based on single factor	51.5	43.2	5.3	-	-	1.590	0.751
The Portfolio diversification is based on multiple factor to achieve Rwanda stock exchange.	51.5	48.5	-	-	-	1.484	0.501
The use of CAPM in stock exchange provide stability on stock market value	51.5	40.9	7.6	-	-	1.560	0.633
There is market efficiency influences the capital accumulation in Rwanda stock exchange.	65.2	31.1	-	-	3.8	1.462	0.841
Market efficiency led to investment opportunity throughout information symmetry.	49.2	48.5	2.3	-	-	1.530	0.544
The market value is important aspect of capital accumulation of Rwanda stock exchange operations	47.7	47.7	4.6	-	-	1.590	0.664
<b>Overall average</b>						<b>1.527</b>	<b>0.674</b>

**Source: Primary, (2021)**

The research findings showed that 56.8% strongly agreed that in two selected financial listed company, investors demonstrate portfolio diversification assists in achieving Rwanda stock exchange. This was also agreed by 37.1% of respondents. In regards, the overall conclusion is that this objective was achieved as in fact that majority of research participants have agreed. When assessing whether Portfolio diversification is based on capital asset price model, the study findings on this statement strongly agreed by 62.9% and also agreed by 29.5%. The research findings in assessing whether Portfolio diversification is based on single factor were strongly agreed by 51.5% and also agreed by 43.2%. The study findings to assess if in two selected companies, Portfolio diversification is based on multiple factor to achieve Rwanda stock exchange this was strongly agreed by 51.5% and also 48.5% of surveyed respondents agreed. As indicated, research findings showed that the use of CAPM in stock exchange provide stability on stock market value as strongly agreed by 51.5% and 40.9% respectively.

In this study, when assessing the investors' behavior and capital accumulation of Rwanda stock exchange, research intended to assess whether in two selected financial companies the market efficiency influences the capital accumulation in Rwanda stock exchange. The research participants strongly agreed by 65.2% and 31.1% agreed of surveyed respondents. Therefore,

Market efficiency led to investment opportunity throughout information symmetry as indicated by 49.2% and 48.5%. The research findings therefore showed that in I&M Bank and KCB the market value is important aspect of capital accumulation of Rwanda stock exchange operations as indicated by 47.7% and 47.7% respectively.

#### 4.3.1 Correlation analysis

The study used both correlation, egression to establish relationship between the study variables. Therefore, Spearman correlation matrix where 0.1-0.3 is treated as moderate, 0.3-0.5 is treated as moderate, 0.6--0. A value of 10 is treated as strong relation. The analysis is as follow.

**Table 6: Correlation analysis between portfolio diversification and capital accumulation of Rwanda stock exchange**

	Portfolio diversification	Capital accumulation
Portfolio diversification	1	.009**
Capital accumulation	.848**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation between portfolio diversification towards capital accumulation of Rwanda stock exchange operations has strong positive correlation based on association of the components such as investor attitude, investor character, portfolio diversification. Similarly, the correlation between the components towards capital accumulation was found to be significant since portfolio diversification ( $r=0.009$ ,  $p< 0.05$ ).

#### 4.3.2 Inferential Statistics

In order to ascertain the nature of the relationship between the independent and dependent variables of the study and establish the statistical significance of the hypothesized relationships, multiple regression analysis was used. This was performed using the field data and tested at 5% level of significance. The findings of the multiple regressions were summarized in the form of model summary, Anova and coefficient correlations as presented in table 7, table 8 and table 9.

**Table 7 Model Summary**

Multiple R	.803
R Square	.792
Adjusted R Square	.759
Std. Error of the Estimate	.100

**Source:** (Primary Data, 2021)

According to the finding in table 7 the relationship between investor behavior and capital accumulation had a coefficient of 0.803 with a R square of 0.792, means that the findings show strong linear, positive, and that investor's attitude, investor character and portfolio diversification contribute 79.2% capital accumulation of Rwanda stock exchange of financial companies listed in stock exchange 20.2% is contributed by other factor. The relationship was positive implying improvement in investor's attitude, investor character and portfolio diversification leads to capital accumulation of Rwanda stock exchange of financial companies listed in stock exchange

**Table 8: ANOVA between investors’ behavior and capital accumulation of Rwanda stock exchange**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.093	4	5.523	167.370	.000 <sup>b</sup>
	Residual	4.884	128	.033		
	Total	26.977	132			

a. Dependent Variable: capital accumulation of Rwanda stock exchange  
 b. Predictors: (Constant), Portfolio diversification

**Source:** Primary Data (2021)

The researcher also conducted the analysis of variance to determine the significance of the model. Table 8 shows the overall significance of the predictors in explaining capital accumulation of Rwanda stock exchange. The model between investor character and capital accumulation of Rwanda stock exchange shows that model was significant since the p-value was less than 0.05 without the interaction term, F (4, 128) 167.370, p<.000

**Table 9: Regression Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	1.030	.119			8.679	.000
Portfolio diversification	.075	.088	-.119	.123	-.970	.025

**a. Dependent Variable: Capital accumulation of Rwanda stock exchange**

**Source:** (Primary Data, 2021)

The regression analysis using  $Y = \beta_0 + \beta_1 X_1 + \alpha$  became

Capital accumulation of Rwanda stock exchange = 1.030 + 0.075 Portfolio diversification. The interpretation of this is that when all the three holding other factors constant (Investor attitude, Investor character, Portfolio diversification) Capital accumulation of Rwanda stock exchange is 1.030. Unit in Investor attitude will lead increase of Capital accumulation of Rwanda stock exchange with 0.100, unit of Investor character will lead increase 0.043 while unit of Portfolio diversification will lead increase of Capital accumulation of Rwanda stock exchange with 0.075.

**5.0 Summary**

The study findings showed that 56.8% strongly agreed that in two selected financial listed company, investors demonstrate portfolio diversification assists in achieving Rwanda stock exchange. The research findings therefore showed that in I&M Bank and BK the market value is important aspect of capital accumulation of Rwanda stock exchange operations as indicated by 47.7% and 47.7% respectively. There is strong positive correlation with based on association of the components such as investor attitude, investor character and portfolio diversification. The intercept of the regression was 1.030 and statistically significant p= 0.000). While the coefficient of investor attitude which is 0.100 and p = 0.003. Investor character had



an intercept of 0.043 but significant with p-value of 0.002 and portfolio diversification with intercept of 0.075 and significant with p=value 0.025.

### 5.1 Conclusion

Based on the study findings, most of research participants agreed that portfolio management contribute to capital accumulation of Rwanda stock exchange. Investment decision, there may incur the systematic risks and unsystematic risks. All these risks affect the investment in stock exchange but investor develops strategies for management of risks. The systematic risks consist of risks market risks not diversified consists. The unsystematic risks consist of risks diversified throughout portfolio investment. In stock exchange, the probability of diversification occurs and this is expressed in terms of techniques used to manage risks in various ways.

### 5.2 Recommendations

Based on the problems arising at capital market in that the capital invested in stock exchange market is raised on market situation and in fact that an increase in capital in almost firms do not stimulate enough capital accumulation for listed financial companies. The researcher advice the management of I&M Bank and BK to undertake risks management, increase skills abilities in stock exchange operations, and apply capital price model to achieve capital accumulation in Rwanda stock exchange operations. As capital market is no longer growing at the pace expected and there are still few listed financial institutions in stock exchange in Rwanda, which slow the capital accumulation of stock exchange among listed financial institutions. There is need to implement strategies regulating and encouraging investment decision in stock exchange operations

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