



COLLEGE OF BUSINESS AND ECONOMICS (CBE)

**TOPIC: SHARE PRICE CHANGE AND INVESTMENT DECISION ON
THE RWANDA STOCK EXCHANGE (2011 – 2016)**

**Thesis submitted in partial fulfillment of the requirements for the award of the Degree of
Masters of Business Administration specialized in Finance.**

**Submitted by: KANSIIME Gloria
Supervisor: Dr. BARAYANDEMA Jonas**

June, 2018

DECLARATION

I declare that an evaluation of **SHARE PRICE CHANGE AND INVESTMENT DECISION ON THE RWANDA STOCK EXCHANGE IN RWANDA** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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Approval Sheet

This thesis entitled SHARE PRICE CHANGE AND INVESTMENT DECISION ON THE RWANDA STOCK EXCHANGE IN RWANDA written and submitted by KANSIIME Gloria

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DEDICATION

First and foremost, I dedicate my work to my beloved Aunt who toiled for my education and sacrificed the descent life they deserved to make sure I attained a bachelor's degree without which I could not have enrolled for this Master's Degree program. I am highly indebted to both of them.

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ABSTRACT

This study focused on the evaluation on share price change in investment decision on stock exchange especially in Rwanda stock exchange (RSE). An evaluation was needed to find out whether the share price change were effective and whether it really has an impact on investment decision in Rwanda and most especially on Rwanda stock exchange. The objectives of this study were to analyze the effects of share price changes on investment decision RSE. Relevant methods were used to gather necessary data from various sources; either primary or secondary sources A sample size of 394 respondents selected according to the formula of Morgan. This sample was chosen because it is easier to manage and it was enough to generate findings as well as to generalize the findings to a bigger population. Collected data was analyzed and interpreted through SPSS (Statistical Package for the Social Sciences). Findings from this research revealed that share price change have a greater influence in investment decision on the Rwanda Stock Exchange.

The research concluded that there is a positive relationship between share price change and financial actor investment decision at a very high extent. Therefore, without share price change the investment decision on the Rwanda Stock Exchange might be very critical.

The results of the empirical analysis are consistent with most of the findings in the literature review and support the evidence that the selected determinants have significant effects on share price. Basing on results from the study, it was showed that there is strong investment indicators like volume of stocks traded, number of transitions and number of traded companies where the regression analysis used in this research, showed a significant relationship between share price and investment decision indicators. The research concludes that there is a positive relationship between share price change and investment decision at a very high extent.

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LIST OF ACRONYMS AND ABBREVIATIONS

B/M Ratio	: Book to market
BK	: Bank of Kigali
BNR	: Banque Nationale du Rwanda
BRALIRWA	: Brasseries et Limonaderies du Rwanda
GDP	: Gross Domestic Product
IPOs	: Initial Public Offerings
RSE	: Rwanda Stock Exchange
SPSS	: Statistical Package for the Social Sciences
UR	: University of Rwanda

CHAPTER ONE: GENERAL INTRODUCTION

1.0. Introduction

Stock markets constitute an essential component of economic development as they provide investors with a forum for investing their surplus funds (Olweny and Kimani, 2011: But, investing in stock markets is risky and investment decision can be affected by various factors, including stock price change. This study intends therefore to analyze to what extent the share price change affects investment decision on RSE and is organized as follows: the first chapter highlights the background of the study, the problem statement, research objectives, research questions, research significance, research scope, as well as the study organization. The study further analyses the underlying theories on which this study is based, as well as reviewing the literature and related studies that provide support evidence as well as unfilled gaps which this study intends to fill. Moreover, it highlights the methodology used for data collection, as well as data analysis, presentation and interpretation of results, and the general conclusion that includes the summary of study findings and recommendations.

1.1. Background of the study

Companies seek a listing on the Stock Exchange, when they need to raise money. New companies may be looking for start-up capital, while older companies may be seeking additional funds for expansion. Moreover, well established firms may want to let their owners sell out their stake, or part of it, to other investors. Buying shares therefore means that the investor has taken a stake in the company. The company share gives the buyer a stake in the company and the entitlement to be paid a proportion of its profits (dividend). The value of shares in the company therefore outperforms all other forms of investment over a reasonable period of time (White, 2007).

The nature of stock prices causes price fluctuations which have direct and indirect implications on investment decisions.

Price changes can be caused by factors such as interest rates, foreign exchange rates; equity turnover, investor mood, capital structure and corporate announcements (Gatua, 2013). They are

also attributed to the historical data based on events (Jagongo 2013). Branston and Greenwood (2013) conclude that in general, when other determinants of investment are controlled, share prices tend to have a positive effect on investment.

Therefore, share price change has an effect on Investment decisions because they are a function of macroeconomic announcements, price-related evaluation, and the choice of investment strategy and behavioural patterns of the investors (Phau and Poon, 2000). In the views of Lease et al., (1974) and Lewellen et al. (1977) individuals are “investors” rather than “traders” who are long-term minded and give little interest to short-term yields, and whose main source of information is through fundamental or technical analysis. Antonides and Van Der Sar, (1990) reveal that the perceived risk of an investment is lower if an asset has recently increased in value. In the United Kingdom, for instance, share prices are underpinned by dividends (White, 2007).

Besides, Hodge (2000), Doritrius (2007); Naggy and Obenberger (1994), add that investors do not decide to buy shares based on the risk of price fluctuation. Francis and Soffer (1997). Krishnan and Booker (2002), echoes in and reveal that the investment decisions are affected mostly by the personal financial needs and analyst recommendations, with other factors occupying a miniature role. Therefore, a decrease in share prices will not lead to an immediate drop in investment because the funds are already committed.

The above literature reveals an irony in the relationship between price changes and investment decisions. Various studies have been conducted and their findings revealed in the following manner:

Fischer and Merton (1984) in their studies on the financial variables concluded that the share market was a prominent cause of investment. Mullins and Wadhvani (1989) conducted a study and revealed that in the United States and in the United Kingdom, stock markets have a much greater influence on the investment process. Morck et al. (1990) concluded that share prices add little explanatory power to the investment equation once other influences are taken into account.

Buigut, et al, (2013) revealed that debt, equity and gearing ratio were significant determinants of share prices. Fischer and Merton (1984) and Doan et al. (1983) found a causal relationship between share returns and investment decision, even when other traditional explanatory variables are added to the investment equation.

From the above literature it can be observed that investment decision is not only based on share prices but based on different variables. Kadiyala and Rau (2004) investigated investor reaction to

corporate event announcements. They concluded that investors appear to under-react to prior information as well as to information conveyed by the event, leading to different patterns. Baker and Haslem, (1973) argue that investors are primarily concerned with expectations about the future, considering earnings projection and historical data to be of high interest to investors. On the other hand, research by Lee and Tweedie, (1975, 1976, and 1977) reveal that the general public faces problems in understanding financial reporting in the corporate sector. Blume and Friend, (1978) provided evidence from their study that both price and earnings volatility are the primary measures of risk employed by individuals.

Although extensive studies have been carried out on effect of share price change on investment decision, their findings are not conclusive because they lack, a comprehensive methodology and in-depth analysis. It is this reason that interested the researcher to comprehensively investigate how investors react to share price change by allocating their investment.

1.2. Statement of the problem

Share prices change every day as a result of market forces. It means that share prices change because of supply and demand. If more people want to buy a stock (demand) than sell it (supply), then the price moves up. Conversely, if more people wanted to sell a stock than buy it, there would be greater supply than demand, and the price would fall. The share price change theory is that the price movement of a stock indicates what investors feel a company is worth. To further complicate things, the price of a stock doesn't only reflect a company's current value, it also reflects the growth that investors expect in the future.

Olweny and Kimani (2013) contend that stock markets are key drivers of economic development because they link, financial sector to the real economy. Among the many drivers of investment decision in the stock exchange market is stock price fluctuation.

As prices of the shares hike or lower, concerned investors are affected negatively or positively to either sell of their shares, or buy more. Some of challenges from share price fluctuations are the following:

The overconfidence of the investors that they will time the best opportunity to invest or sell their shares, Financial stability of the country, or the world stock market; the country's currency value and stability; available share price information; some investors apply the conventional wisdom, implying that they only buy what others are buying, thereby living other shares on the stock to be

left unconsidered for buying or selling; investor's awareness of the stock market prices and fluctuations, among others.

Some scholars have analyzed different effects of share price change. Lower share price means decrease in investors wealth (Tejvan Pettinger 2015) .

The stock price fluctuates time to time and stock exchange reacts with the environmental changes. This study attempts to identify the determinants of stock price change and find out to what extent the stock price change affects investment decision. So far, not much research has been done to assess the effect of share price change and investment decision in Rwanda, most especially on Rwanda stock exchange. Since its establishment in 2011, the Rwandan stock market has dramatically expanded and became one of the most important sources of capital mobilization and up to now, the Rwanda stock market has 8 listed companies and over the last 6 years, stock prices have been fluctuating.

Hence, this study intends to analyze the determinants of share price fluctuation on RSE, and their effect on investors' decisions. The study fills the current gap in the existing literature where various studies of which some show a casual effect, while others don't show effect but see the interplay of variables affecting the investors' decisions.

1.3. Research Objectives

The overall objective of this research is to analyze the effect of share price change on investment decision in Rwanda Stock Exchange.

1.3.1. Specific objectives

In order that the research achieves its principal objectives, the following specific objectives were investigated:

- To analyze the determinants of share price changes on RSE
- To analyze the effects of share price changes on investment decision.
- Identify factors that influence investment decision of investors at RSE
- To analyze to what extent share price change affects investment decision.

1.4. Research Questions

In order to empirically and objectively investigate on the share price change and investment decision on RSE, this research was guided by the following questions:

- What are determinants of share price changes?
- What is the effect of share price change on investment decision?
- What are the factors that influence the investment decisions on RSE
- To what extent share price change affects investment decision?

1.5. Hypotheses

To carry out the study and achieve the stated objectives, the following hypotheses can be formulated:

H₀1: Share price change has effect on investment decision.

H₀2: There is no significant relationship between share price changes and investment decision.

1.6 Significance of the Study

There is no controversy that this research was made on Share price change, however much emphasis was placed on literature review of this field of effect of share price change and investment decision in Rwanda stock exchange.

In fact, the data for this study was gathered from the field whereby individuals provided real evidences and this made it significant as all the information was given by those who are affected by share price change either positively or negatively.

This study is also significant in the following manner: To the University of Rwanda, it will be kept in the library for academic and research references purpose. To the RSE, it will inform policy on investment planning. To the investors, it will serve as a guide or advice on making decisions of investment on Rwandan stock market. To the field of research it will shed light on the existing literature in the same field. To the researcher it will provide insight on how to conduct research. Besides, it shall lead to the award of Masters Degree in Finance as a partial fulfillment for her masters' studies.

1.7. Scope

This study was confined to the share prices fluctuations and their impact on investment decisions at the Rwandan Stock Market. Data was collected from shareholders of Rwandan Stock Market. This study also was on individual investors at RSE. The research has covered 3 years period that

was enough to investigate the effect of share price change and investment decision in Rwanda stock exchange.

1.8. Limitations of the Study

Some limitations were encountered during the process doing this research especially in data collection process; however efforts were made in order to make the findings of the study available as planned. The following are the main limitations that were encountered:

- The research participants were not available at the time due to their responsibilities

Other limitations of this study were insufficient literature on share price change and investment decision on stock exchange mainly in our country of Rwanda because of sensitivity nature of this phenomenon.

The way of overcoming this limitation, the researcher used findings from different related researches to explain the phenomenon under the study focusing especially in Rwanda. The other revealed limitation of this research was that concerns to confidentiality of information or document that might be required by researcher and not availed to him by respondents. Thus the researcher has used the only available data and also relied much on secondary data that was readily available.

1.9. Organization of the Study

This study is organized as follows: The first chapter comprises the general which includes the background of the study, the problem statement; research objectives research questions, significance of the study, scope and limitation of the study.

The second chapter develops the literature review relevant to the share price and investment decision.

The third chapter highlights the research methodology comprising research methods applied for data collection and analysis.

The fourth chapter presents the research findings, and interpretation.

The fifth chapter includes the summary of findings, conclusion, and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

This chapter seeks to provide a literature review on share price change on global and national level but specifically with the case study of Rwanda Stock Exchange. In addition, the chapter highlights the theory behind the share price and share price change in order to shed more light on issues of share price change from investment decision perspective. It is quite true that many previous works carried out in the domain of share price change and Investment decision still prove the relevance of the present research direction. In this section, therefore some key concepts should be well defined and well understood in line with the topic itself. The focus of this chapter is to underline the theoretical perspectives surrounding the concepts of share price basing on capital market theory and expectation theory.

The underlying theories of this study are the Capital market theory and Expectation theory. The capital market theory states that investors hold diversified portfolios; there is a single-period transaction horizon; investors can borrow and lend at the risk free rate of return; and, a perfect capital market. These assumptions imply that investors will only require a return for the systematic risk of their portfolios since unsystematic risk has been removed and can be ignored, a standardized holding period for example one year is assumed to make comparable returns on different securities, a minimum level of returns, all securities are valued correctly, no taxes or transaction costs, perfect information is freely available to all investors, all investors are risk averse, rational and desire to maximize their own utility, as well as the presence of a large number of buyers and sellers in the market (Watson & Head, 2007).

It is evident from the above assumptions that the capital market theory focuses on the relationship between returns and systematic risk. However, these assumptions ignore the reality of the imperfectness of the investment world in which the investment decisions are made by the investors and companies. Furthermore, despite investors holding securities more than one year, returns are normally calculated annually. Besides, investors want to hold a portfolio that reflects the stock market as a whole (Watson & Head, 2007).

In a nutshell, therefore, the capital market theory reveals a relationship between investment returns and systematic risk and therefore, poses some reality. Despite this, however, the theory is presented as based on more of an idea than reality.

Another underlying theory of this study is the expectation theory. This theory assumes that investors are indifferent between investing for a long period on the one hand and investing for a shorter period with a view to reinvesting the principal plus interest on the other hand. For instance, an investor may have no preference between making a 12-month deposit and making a 6-month deposit with a view to reinvesting the proceeds for a further six months so long as the expected interest receipts are the same. In other words, expectation theory believes that an investor treats alternative maturities as perfect substitutes for one another (Mandura, 2008).

The pure expectations theory therefore, assumes that investors are risk-neutral as they are not concerned about the possibility that interest rate expectations will prove to be incorrect so long as potential favorable deviations from expectations are as likely as unfavorable ones. This implies that investment risk is not regarded negatively. On the other hand, investors are risk-averse as they are prepared to forego some investment return in order to achieve greater certainty about return and value of their investments. This leads investors not to be indifferent between alternative maturities (Mandura, 2008).

2.1. Share price change concept

Buying shares means that the investor has taken a stake in the company and the entitlement to be paid a proportion of its profits (white, 2007).

2.2.1 Share price determination and share price change process

Understanding how stock prices are determined the information used to make buy and sell decision is important to a successful investor. An overview of stock market efficiency provides a framework to understand why stock prices change over time. Basically, this idea is based on the notion that investors gather information about the company and what may affect its business.

This information is used to form some expectation of the company's future success, and, from that, a "correct" stock price. Only when there is new evidence presented does the rational investor alter their expectation and, therefore, the stock price.

There is evidence both in favor and against this idea about how the stock market determines share prices. Whether investors adhere to this theory or not, whether they use technical or fundamental analysis to make their decision to buy and sell, it is important to understand these various aspects of the stock market if one is to make sense of the stock market (Rik W. Hafer and Scott E. Hein, 2007)

2.2.2 The determinants of share price change

There are various factors that determine changes of the stock price. In line with the economic theory, the price of any asset is usually determined by the market forces. However, the most important factors that determine share price changes are the following:

- *Demand and supply forces*

Whenever investors want to buy shares, (demand) than sell it (supply), then the share price increases. Contrary to that, whenever investors want to sell their shares than buy, then the price would fall. If more investors are willing to buy and few are willing to sell, it implies that share prices will increase due to high demand (White, 2007).

- *Company news*

The company news may be positive or negative in relation to company takeover, mergers, acquisitions, low profits, and declared sales figures annually or quarterly (Jones & Charles, 2004). According to Fama (1970), a stock market is said to be efficient if current securities' prices reflect all available information. The author further adds that in an efficient market, stock prices would be analyzed by Technical Analysis or Fundamental Analysis.

Technical analysis evaluates the stock price movement and predicts the future stock price based on historical data of stock price. Fundamental Analysis evaluates the intrinsic value of the company and compares it to the stock price.

The comparison of these analyses gives insight to the investor whether the stock price is undervalued or overvalued and it will assist the investor in making the decision (Jones & Charles, 2004).

Some investors trade on technical charts and buy and sell on different prices; while others make move on fundamental ratios/factors so as to sell on different prices; others enter into share market just looking the buying and selling figures and so they have their different prices, yet others buy and sell basing on the current news. The other determinants of share price change are: High returns on share investment, Introducing innovative products and Expanding market scale. All these factors determine the share price change on the stock exchange market anywhere in the world, including Rwanda.

2.2.3 Share price change advantages and challenges

Share price change is both advantageous and challenging to companies and investors in the following manner:

2.2.3.1 Advantages of share price change

The advantages of share price change are the following:

- High returns on share investment. This is because, high demand for shares leads to high prices, hence high returns on share investment. This high returns leads to further investments not only in the stock markets but also in other domains, leading to the corporate development of the country (DeBondt & Thaler, 1985).
- It affects investor's decision by appropriately investing in shares during hot periods (high demand) than during cold periods (high supply). In other words, it helps investors to know the right time to invest in stocks (Angu, 2013).
- Companies can and do issue "secondary offerings" - the company (and thus shareholders, indirectly) sells new stock for cash. Existing shares are diluted, but the company may be more valuable since it has more cash.
- Higher stock prices also reflect an increase in the expected profits and thus in the sources of internal finance that are ultimately available for investment.
- Companies can use their stock to make acquisitions or other deals. Higher stock price means fewer shares are paid for the same cash value.
- Companies dilute shareholders by issuing stock compensation to employees, which shows up (these days) as an expense on the financial statements, lowering EPS to reflect the harm to shareholders. If the stock price is higher, fewer shares are needed to make employees happy.
- A company with a high stock price is not as vulnerable to a takeover. In a takeover, shareholders might receive less than the company is worth. Though generally at least some parties will feel the takeover is a good deal that gives shareholders more than the company is worth - after all shareholders are getting more than the stock price.

2.2.3.2. Share price change challenges

There are various challenges which stem from share price change. Some of them are the following:

- *It is unpredictable of when the prices will be high or low. We always plan for future unless we know about what will happen! Share price change challenges the investor in knowing in which perfect time to invest by buying shares because if investors realize that they will gain from shares bought, they immediately buy them (DeBondt & Thaler, 1985).*
- *It is influenced by various factors which can't be forecasted by investors, companies, and economic analysts. Share price changes day to day due to different variable factors that the investor can't be aware of. This is a big challenge to them because it is hard to make effective decision about investment (White, 2007).*
- *Lack of public (investors) awareness about changes in share price affects the level of investment. The public investors meet with challenges of lacking information on share price behaviour that lead to loss if the current price is high and decrease tomorrow. The investor may buy share today on high price and sell it at lower price tomorrow if he no longer needs to hold a share. This is a big challenge to both investors since the number of investors decrease by being afraid of share price change. (White, 2007, Angu, 2013).*
- *The Listing of more shares by companies on the stock exchange leads the existing share prices to decline as to much supply outweighs the demand of shares (White, 2007, Angu, 2013, DeBondt & Thaler, 1985).*

This lead to low profit of investors due to the decrease of share price and this is a challenge to all investors because they incur unpredicted loss.

2.2.4 Share price change implications

Whenever more investors are willing to sell and few are will to buy, it implies that share prices will decrease due to high supply. The reverse is true when more investors are willing to buy than sell which cause prices to hike. The implication of this is that whenever there is a high demand for buying shares, those investors who will be selling will hike the price and an a lot of returns. This also attracts more investors to invest in stocks because they have realized how the business profits. It also leads to corporate growth. Besides, the selling company, the broker, and the investor, profit from the high demand of the share prices as their dividends doubles (Jones & Charles, 2004).

On the other hand, however, this high demand may cause inflation, which negatively affects the economy of the country of which the stock exchange is traded. Furthermore, this high demand which leads to the hiking of the stock prices is seasonal or temporary and the investors may be misconceived to demand more shares hoping that the situation may be the same throughout. Yet, when they decide to sell, the prices decrease even below the price they bought at, depending on other unpredictable factors (Leonardo, 2010, white, 2007, Jones & Charles, 2004).

Harrison and Kreps (1978) contend that ownership of the stock implies not only ownership of a dividend flow but also the right to sell that dividend stream at a future date. Investors may be unable initially to achieve positions with which they will be forever content, and thus the current stock price may be affected by whether or not markets will reopen in the future. If they do reopen, a speculative phenomenon may appear. An investor may buy the stock now so as to sell it later for more than he thinks it is actually worth, thereby reaping capital gains.

2.2.5 Share price change and corporate growth

Capital market plays a vital role in economic prosperity that fosters capital formation and sustains economic growth. This is because it is through capital market that funds are pooled, risks shared, and wealth transferred for corporate growth (Nwude, 2004). Furthermore, as Kurihara (2006) reveals, stock markets are of great importance for corporate economic growth as they ensure the flow of resources to the most productive investment opportunities. Mitigating risks in stock market through spreading of investment across various options leads to future development as observed by Angu(2013).

Stock markets also accelerate the economic growth because they provide a boost to domestic savings as well as increase the quantity and the quality of investment. Particularly, stock markets encourage economic growth by providing an avenue for growing companies to raise capital at lower cost (Yartey, 2008). Besides, companies in countries with developed stock markets are less dependent on bank financing, which therefore, reduces the risk of a credit crunch. This implies that stock markets permit long term investment which is financed by funds provided by individuals, who wish to make them available for only a very limited period, or who wish to be able to withdraw them at will (Baumol, 1965).

Sohan (2010) indicates that the investors in the age group of below 35 years are actively participating in the speculation trade and the age group above 55 hesitates to take risk and is not at all interested in the share market. This implies that that middle age is very ambitious in making savings and investments for future purposes which results in the corporate development of the country. This is evidenced in Mukherjee and Bose (2008) findings that stock returns in India were a result of major stock exchange return in US, Japan, Singapore, South Korea. Furthermore, these authors revealed that the Indian market exerted a remarkable influence in stock return in Japan and South Korea, Malaysia, and Taiwan.

2.3 Investment decision.

Decision making is the process of choosing a particular alternative from a number of alternatives. It is an activity that follows after proper evaluation of all the alternatives. According to Dimitrios (2007) individual investors rely on media and noise in the market when making their investment decisions, while professional investors mostly rely on fundamental and technical analysis and less on portfolio analysis. This implies that stock market stakeholders are exposed to a constant flow of information, ranging from quantitative financial data to financial news in the media, and socially exchanged opinions and recommendations.

Investors are lead to consider the degree of market capitalization or concentration. This is because they want to know whether the stock market is constituted by a big number of various companies or concentrated on a few companies. This implies that some investors are reluctant to invest in small companies, as they fear that they offer poor liquidity (White, 2007).

Still more, investors want to invest their money in a stock market after applying two analytical approaches: technical analysis and fundamental analysis. In technical analysis approach, the investors evaluate the stock price movement and predict the future stock price based on historical data of stock price. In fundamental Analysis approach, however, investors evaluate the intrinsic value of the company and compare it to the stock price. According to Jones and Charles (2004), the comparison of these analyses will give insight to the investor whether the stock price is undervalued or overvalued, hence, influencing the investor's decision.

DeBondt & Thaler (1995) stressed that financial markets can be affected by investors' behaviours in the way of behavioural finance. If the perspectives of behavioural finance are correct, it is believed that the investors may have over- or under-reaction to price changes or

news; extrapolation of past trends into the future; a lack of attention to fundamentals underlying a stock; the focus on popular stocks and seasonal price cycles.

Baker and Haslem, (1973) contend that dividends, expected returns and the firm's financial stability are critical investment considerations for individual investors. Potter, (1971) identifies six factors: dividends, rapid growth, and investment for saving purposes, quick profits through trading, professional investment management and long-term growth that affect individual investors' attitudes towards their investment decisions.

2.3.1. Determinants of investment decision on stock exchange.

Different authors have identified various factors which determine investment decision on stock markets. According to Ryan and Zaichkowsky (2004), the main constructs that drive investor's behaviour are investment horizon, confidence, control, risk attitude, and personalization of loss. Other authors have identified the following factors:

- *Price changes:* Whenever prices of the shares change, the investors will react positively or negatively in regard to either buying more shares, or selling off their shares (Waweru et al. 2008)
- *Public information:* Public information is crucial in determining the investors' decisions on stock market prices. According to a study by Madhavan et al. (1997), public information accounts for 35 to 46% of the volatility of transaction price movements. This implies that public information does greatly influence price volatility, thereby affecting investors' decisions. Price changes will therefore, occur due to the arrival of new public information which forces investors to cancel or place orders on a stock market. For example, a positive firm's earning report information may force investors to demand for buying more shares, thereby hiking the prices.
- *Past trends of stocks.* Kadiyala and Rau (2004) have concluded that investors appear to under-react to prior information as well as to information conveyed by the event, leading to different patterns. Besides, Baker and Haslem, (1973) and Waweru et al. (2008) argue that investors are primarily concerned with expectations about the future, considering earnings projection and historical data to be of high interest or consideration when deciding to invest.
- *Customer preference.* Some investors prefer to buy shares during deteriorating prices. This means that when share prices fall drastically, some investors will buy more shares,

hoping to sell them during the time of high demand where they will double or triple profits (White, 2007; Waweru et al. 2008).

- *Over-reaction to price changes.* Investors over react positively or negatively to share price changes. This is because whenever there is high demand of shares; prices will hike, thereby compelling those investors who had no intention of selling their shares to sell them. Furthermore, whenever price shares start to decline, many investors will fear to keep their shares unsold hoping that prices may further deteriorate and they may incur great losses. So they will over react and sell off their shares (Waweru et al. 2008). Bayless and Chaplinsky (1996) stressed that the price reaction to the announcement of an equity issuance is smaller during “hot” periods when many other firms are issuing equity relative to “cold” periods when fewer firms are issuing new equity, which they interpret as evidence that firms are more likely to use equity finance at times when asymmetric information is less of a problem.
- *Firm’s performance.* The findings of Uwuigbe, et al., (2012) indicate a significant positive relationship between firms’ financial performance and the market value of share prices of the listed firms in Nigeria. Consequently, these authors conclude that the firms’ financial performance, being among the strong determinants of the market value of share prices in Nigeria.
- *Dividends.* Dividends are one of the strong determinants of investment decision on stock market. This is evidenced in the study of Uwuigbe, et al., (2012).
- *Interest rates and exchange rates.* Tweneboah and Anokye (2008) conclude that the exchange rate and a macroeconomic factor do affect the share prices. More significantly, their findings indicate the interest rates as among the key determinants of share prices on which investors base while making investment decisions. Khan and Amanullah (2012) however, reveal the interest rate as negatively relating to share prices. This signifies that in some stock exchanges, interest rate may either determine or not determine the investors’ decision making in relation to share prices.
- *Investment incentives.* Singh & Kaur (2015) propose that the best way to motivate investors to invest more in stock market is through advertisement and the establishment of investor friendly equity schemes.

- *Market forecast.* Sohan (2010) indicates that the middle age (below 35 years) investors do actively participate in the speculation trade of shares because they are ambitious in making savings and investments for future purposes. These investors do market forecasting when investing in shares.
- *Demand and supply of shares.* White (2007) stresses that whenever there are many investors wanting to buy shares, (demand) than sell it (supply), share prices will automatically increase. On the other hand, whenever many investors want to sell their shares than buy, the price of shares will fall drastically. This implies that share prices will increase due to high demand and less supply, or will fall due to high supply and less demand, thereby determining the investor's decisions. According to Gilpatric (1999), investment in stocks brings losses and profits because it is unpredictable as the investors don't know exactly when to gain profits and to incur losses. This future unpredictability, therefore, stands as a challenge to investors' decision.
- *Microeconomic factors.* Uddin (2009) analyzed the relationship of microeconomic factors with the stock price. He found a significant linear relationship among market return, net asset value per share, dividend percentage, earning per share of bank leasing, and insurance companies. He also found a significant non-linear relationship among the variables. Related findings with a highly significant relationship were also found by Fisher (2009), Al- Shubiri (2010), Malhotra & Tandon (2013), Sharma (2011), AL-Shubiri (2011), Irmala, et al., (2011) in their various studies.
- *B/M Ratio.* Mirza (2008) in his study of the book to market (B/M) ratio as key determinant of share prices, concludes that the value and size of premium given to investor boosts up the investors to invest more in the stock. Similarly, Khan and Amanullah (2012) reveal that the rise in GDP, dividend and P/E ratio results in the rise of share prices while B/M ratio negatively relates to share prices. This signifies that in some stock exchanges, B/M ratio may either determine or not determine the share prices.

Investment decision Indicators on Rwanda Stock Exchange

- ✓ Volume of stock traded(listed securities traded)
- ✓ Total number of transactions
- ✓ Number of traded companies
- ✓ Value traded on listed securities

- ✓ Number of listed companies
- ✓ Market capitalisation end of year or market capitalisation rate

2.3.2 Investment decision on stock exchange challenges

Although investing in stocks has been proved profitable in a long run, the investors' decisions in investing their money in stocks are in most cases challenged by factors which include the following: (Gilpatric, 1999).

- There is no money-back guarantee: Companies which list their shares for sale on stock exchanges don't insure the investor's money invested in stock. So the investors' just invest in stocks at their own risk of either gaining profits or incurring losses. The investors' decision to invest their un insured money means they have to bear the outcomes. Hence a challenge for investors to decide whether to invest in stocks or not since there is no guarantee of their money returning back.
- The investors don't have total control over the events. These events are uncontrollable and unpredictable. Hence, a challenge for the investors to make choices in investing in stocks. The investor can't see into the future. Although investment in stocks brings loses and profits, total investment in stock is un predictable as the investors don't know exactly when to gain profits and to incur losses. This future unpredictability, therefore, stands as a challenge to investors' decision.
- The investors fear to lose a big part of their invested money. Investing in stocks means that it is risky as all or part of the invested money may be lost. This situation challenges the investors while making their decisions on whether to invest all or part of their money in stocks because it may not be returned of the company makes losses.

2.3.3 Effect of share price change on investment decision

According to Thaler (2001), share price change affects the investment decision. For example, when the market correction deflates investor's net worth, they're more hesitant to sell at the smaller profit margin. They create mental compartments for the gains they once had, causing them to wait for the return of that gainful period. Likewise, some investors avoid the possibility of feeling this regret by following the conventional wisdom and buying only stocks that everyone else is buying, rationalizing their decision with everyone else is doing it (Pareto, 1997).

In addition to that, research further shows that money flows into high-performance mutual funds more rapidly than it flows out from funds that are underperforming (Kahneman and Tversky, 1979). Still more, many investors believe they can consistently time the market. In reality, however, there's amount of evidence that proves otherwise. Overconfidence results in excess trades, with trading costs denting profits (Tapia & Yermo, 2007). For instance, rises and falls share values reflect market perceptions of the profitability of the company concerned (White, 2007).

Besides, whenever, an investor expects the stock prices to increase, he or she buys the stock and takes a long position. Profits will be earned, if the stock is sold at a higher price. If a dealer expects the stock price to decline, he tries to benefit from a short position. In a short sale the security is borrowed and sold in the expectation of buying this security back later at a lower price. The impact of this is that the investor tries to sell high and buy low, while profiting from the difference. The short seller must pay any cash dividends to the lender of the security. This relates to the amount of drop in stock prices by approximately. Therefore, stock exchanges apply down stick restrictions on short sales in order to prevent from panic selling and driving stock prices sharply down (white, 2007).

In efficient financial markets, asset prices rapidly reflect all available public information and this will influence investors through the timing of cost. This is measured *by* the price change between the time the market participants assume responsibility for the trade, and the time they complete this responsibility for the transaction. Timing costs occur when orders are on the trading desk of a buy side company, but are not yet released to the broker, because the investor fears that the trade may swamp the market (white, 2007).

On stock markets, price performances are measured by price indices which represent the market as a whole. Investors therefore, will monitor stock price quotations that are provided in financial websites and press. Price volatility is therefore, an important measure in stock markets. Factors that affect the price volatility of securities in the stock markets are the breadth of that market and depth of the market. Breadth implies the number and diversity of the investors in the market (Leonardo, 2010).

Whenever there is large number of market participants with differing motivations and expectations, substantial price changes are less likely to happen compared to when there is small number of participants. Depth of market is based on the likely appearance of new orders

stimulated by any movement in price. If a rise in price brings forth numerous sell orders, the price rise will be small. A decline in price that stimulates many buy orders would be a small decline (Leonardo, 2010).

As Srinivasan (2013) stresses, understanding the impact of various fundamental variables on stock price is very much helpful to investors as it helps them in taking profitable investment decisions. Furthermore, Shiller (1981) indicates that stock prices are not stable and fluctuate excessively in relation to the news about fundamentals solely due to market irrationality.

Korajczyk, et al (1991) found that the price drop at the announcement of an equity offering is smaller if the announcement is closer to an information release. These authors argue that asymmetric information should be less of a problem. Besides, Bayless and Chaplinsky (1996) show that the price reaction to the announcement of an equity issuance is smaller during “hot” periods when many other firms are issuing equity relative to “cold” periods when fewer firms are issuing new equity, which they interpret as evidence that firms are more likely to use equity finance at times when asymmetric information is less of a problem.

2.4. Conclusion

From the review of literature and related studies above, it can be observed that most of the studies have attempted to examine share price change determinants on stock markets and their relationships. They have employed various data analysis techniques, including correlations and regression analyses to reach to the findings. Their findings indicate both significant positive and negative relationships among the variables. However, the literature provided is crucial due to relevant theories available from it regarding to share price change effect on investment decisions and most especially in least developing countries, including Rwanda. This justifies the need for conducting this study.

Earlier studies and researches on the stock price movement in the developing countries are carried out on the apparent approach by taking the most common Indicators in consideration. During the review of previous thesis, it is found that no researches have been conducted by taking the investors sample in Rwanda, which the researcher has selected in this research.

CHAPTER THREE: RESEARCH AND METHODOLOGY

3.0. Introduction

This chapter describes and discusses the methods and techniques that were used in data collection and processing. It also points out the research designs, Population and sampling techniques, Research instruments, Data gathering procedures, Statistical treatment of data, Ethical considerations , Validity and reliability of the instruments and methods of data analysis.

3.1. Research Design

In this study, historical as well as descriptive design was adopted. To determine the effect of company news and performance, demand and supply forces, inflation and other factors on share price, historical research design was adopted along with correlation and regression analysis and to identify the qualitative factors affecting share price, the descriptive research design was adopted. By explanation from Denzin and Lincoln (2005), qualitative research investigates the why and how of decision making, not just what, where, and when. This study was a qualitative and exploratory in nature because of non numerical data which was collected during this research.

Therefore, the main objective of this study is to examine the interrelation of share price change with company news and performance, demand and supply forces, inflation and other financial indicators. To achieve this objective descriptive and exploratory research designs have been adopted. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been used to determine factors determining share prices on Rwanda Stock Exchange. It is clear that this study didn't focus on how much is the effects of share price change and investment decision on Rwanda stock exchange, Yet it has gone in deep understanding through evaluation of why and how the share price change affect investment decision on Rwanda Stock Exchange as a case study. It must be noted, however, the findings and recommendations of this study was limited application to other contexts, and therefore one cannot generate axioms that are widely applicable to other situations. What this study does yield, however, are interesting insights into suggested areas for further research, specifically those using qualitative designs as a basis for developing insight and gaining understanding into process-issues of share price change and investment decision on RSE. For

the purpose of carrying out a good analysis and reaching to a reasonable conclusion, data was collected from various sources either through the primary sources or secondary sources.

3.4. Area of study

Due to the availability of relevant information and time constraints, this research was conducted in Rwanda Stock Exchange.

3.5. Population of the Study

Population is a totality of people or objects to which a study is conducted. It's for the benefits of the population that researches are conducted.

The targeted population for this study is made of investors in RSE, Brokers and Staff from RSE. In this study, the total population from Rwanda Stock Exchange was estimated to 25,647 made of all those who have investment in Rwanda Stock Exchange. However it is not easy to reach to everyone in the targeted population, That's why sample was selected from different concerned categories of population to constitute accessible population.

3.6. Sample Selection

The sample was drawn by purposive sampling techniques which is known also as judgment sampling in which researcher relies on his/her own judgment when choosing members of population to participate in the study. **Black, K. (2010)**. This technique was used because it is a criterion-based sampling and I, the researcher, established the inclusion criteria. Respondents were included the investors, brokers and staff from Rwanda stock Exchange and they were preferred because they are able to respond to all questions that related to the share price change and investment decision on RSE as they are the ones who are in good position and have sufficient and relevant information concerning to the study.

3.6.1. Sample Size

In my study, the sample size was selected because it is easy to be managed and it was very helpful to generate findings as well as to come up with findings related to a larger population. The respondents were having the criteria for being included in my study.

The sample size was determined by using the Krejcie and Morgan's table in determining a sample size for a population.(Krejcie and Morgan, 1970)

$$n = \frac{N}{1 + N(E)^2}$$

Where: n is the minimum sample size

N is the total population

E is the marginal errors estimated at 5%

$$\text{Then } n = \frac{25,647}{1 + 25647(0.05)^2} = 394.85$$

n=394.85 minimum sample size \approx 394 Respondents

The above Morgan's formula indicates the minimum sample size that should be 394 respondents representing the total population of 25,647 investors, brokers and staff of RSE.

3.7. Data collection Methods

- For making exact information for the study, data source referred to any material that consulted or used in the study, due to the course of the study. Secondary data was also used in the study. This is to mean that it is based on secondary data as well as primary data. To show the relationship between the different variables, secondary data was used but to determine the factors, which affect the share price, primary data were collected from the respondents through research questionnaire. The sources of the secondary data are AGM reports of related banks, RSE, financial statistics reports, bulletins publications of different authorities, researches, journals, unpublished thesis reports, newspapers, Internet Websites.

3.7.1. Research Instruments

The instruments that were used for the purpose of the study are questionnaires.

The questions for people were issued in accordance with the research work and the research hypothesis and are framed in a way that it would not be misunderstood by the respondents.

3.7.1.1. Primary source of data:

Primary data for the study was collected from original source i.e. from investors, brokers and staff from RSE.

The researcher used structured questionnaires, and this facilitated to obtain primary data from respondents. The researcher used the structured questionnaire because it was convenient for respondent who do not have enough time. In addition, the researcher used an open-ended

questions for giving the space of explanation to the respondents where there is information that was not mentioned in the questionnaires.

The closed ended questions were also there and were structured on four points of scale.

3.7.1.2. Secondary Source

During the collection for secondary data, a researcher read the different documents related to the research purpose. The information that was gathered not only for immediately study at hand, but also for some other purposes. The data was gotten from textbooks, Websites, journals, newspapers, articles, Thesis relevant to the study, Magazines, Reports and electronic libraries.

3.7.2. Administration of data collection instruments

The questionnaires were dropped by researcher to the respondents who gave their acceptance of answering the questionnaires and pick them after being answered. Those questionnaires were given to the respondent in hard copy and they read and answered the questions in the space that was provided. This technique was used for the reason of proving time to answer safety to the respondents and it was very helpful to the researcher to collect more information in short time. The researcher also used the secondary data which was composed by textbooks, Websites, journals, newspapers, articles, Thesis relevant to the study, Magazines, Reports and electronic libraries.

3.7.3. Validation and Reliability

The questions which were issued to the respondents for this study were designed in a way that it arouses interest in the mind of the respondent. The instruments were presented to the supervisor to validate the content's validity, appropriateness and clarity of settled questions with its ability to generate all necessary needed information related to the study. The study also is designed within the précised period so that the respondents were able to answer what they real know about share price change and investment decision on RSE concerned. The time taken to test if the validity of data that was collected is from 2014 up to 2016 where all relevant information concerning to the study are available.

3.8. Data Processing and Analysis

- **Data processing**

Data processing was also used to transform data collected into some meaningful clear and understandable patterns that enabled me to draw conclusion in relation to the set of objectives of study based on concrete measurable evidences.

- **Editing**

Editing was used by the researcher as the process whereby the completed questionnaires were analyzed in hope of amending recoding errors at least deleting data that are obviously erroneous.

- **Coding**

During coding, all data collected by the researcher was computerized. The purpose of coding in survey is to classify the answers to questions into meaningful categories so as to bring out essential patterns. This was used in order to summarize data by classifying responses given into categories for easy manipulation.

- **Tabulation**

This technique consists on putting data into some kind of statistical tables where the percentages were used to express data into ratio form. Tables were therefore, constructed and number of responses to particular questions were presented with calculated frequencies and percentages. An application software for data analysis known as Statistical Package for Social Sciences (SPSS) was also used for data analysis.

3.9. Data Analysis

The primary and secondary data collected from various sources leads to the logical conclusion, only if the appropriate tools and techniques are adapted for analysis of such data. The collected data has no meaning if such data are not analyzed. Various statistical and financial tools have been used to analyze the data in this study; the different tools used in the study are as follows:

3.9.1. Correlation

Correlation is a statistical technique that shows how strongly two variables are related to each other or the degree of association between the two. When the relationship is of quantitative nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it, in a brief formula is known as correlation. If the value of the variables are directly proportional than the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. According to Karl Pearson, the interpretation is as follows:

Where, $r_{x,y}$ is the correlation between two variables X and Y, 'r' lies always between +1 and -1

When 'r' = +1, there is perfect positive correlation. When, 'r' = -1, there is perfect negative correlation. When 'r' = 0, there is no correlation.

When 'r' lies between 0.7 to 0.999 (or -0.7 to -0.999) there is high degree of positive or negative correlation.

When 'r' lies between 0.5 and 0.699, there is a moderate degree of correlation. When 'r' is less than 0.5, there is low degree of correlation.

3.9.2. Regression Analysis

Regression analysis was used to determine the relationship between the dependent and independent variables while the magnitude of change in share prices for the companies was analyzed. Regression is the statistical tool, with the help of which we can predict the unknown value of one variable from known value of any other variable. Assuming that the two variables are closely related, we can estimate the value of one variable from the value of another. The variable, whose value is given, is called independent variable and the variable whose value is to be predicted is called "dependent variable". Hence, regression determines the average probable change in one variable based on a certain amount of change in another. It is a statistical tool for determining relationship between the variables by the establishment of an

approximate functional relationship between them. It is used to determine that whether the dependent variable is influenced by the given independent variable or not.

Regression analysis is a branch of statistical theory that is widely used in almost all the scientific disciplines. One of the most frequently used techniques in economics and business research, to find a relation between two or more variables that are related casually is regression analysis. The following type of regression was used in this study:

Multiple regression Analysis

Multiple regression analysis is a logical extension of the simple linear regression analysis. Instead of single independent variable, two or more independent variables were used to estimate the unknown values of a dependent variable. However the fundamental; concept in the analysis remains the same. In this study, the multiple regression analysis was used, however the model used to determine the association between the dependent and independent variables was:

Investment decision = a + b1 (company news and performance)+b2 (demand and supply forces)+b3(inflation)

Where,

Investment decision is dependent variable and company news and performance, demand and supply forces and inflation are independent variables.

3.10. Ethical Consideration

The process of this study also considered ethical issues regarding to the research problem identification to the spreading widely of findings (Sekaran, 2003). The researcher took into account all ethical issues related to anonymity, privacy, vulnerable group and confidentiality. This was be very helpful to the researcher to obtain all information concerning to the study without harming any respondents. Also, the quoted texts were also acknowledged by researcher for avoiding the plagiarism. The University of Rwanda , College of Business and Economics (CBE) provided the authorization letter which was presented to the respondents for permission and consent. All primary data was treated purely as academically and confidential in order to insure the safety, social and psychological wellbeing of the beneficiaries of Rwanda Stock Exchange.

CHAPTER IV: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Introduction

In this chapter, we are presenting, analyzing and interpreting the results obtained after investigation done by the end of 2016.

In order to obtain the results which permitted us to analyze the effect of share price change on investment decision in Rwanda stock exchange; as mentioned above, data were collected from 394 respondents. The answers obtained led us to get results presented in form of statistical tables and percentages followed by systemic interpretations and analysis.

4.2. Brief overview of RSE and listed/cross listed companies

Rwanda Stock Exchange (RSE) operates since 2008, with seven listed and cross listed companies, including Bank of Kigali, Bralirwa, KCB, Crystal Telecom, Equity Groups Holding Ltd, Nation Media Group Ltd, Uchuni Supermarket Ltd. Among the list above, listed companies are: Bank of Kigali and Bralirwa. Bralirwa Limited was the first company listed on the Rwanda Stock Exchange (RSE) as from 31st January, 2011.

Domestic investors mainly hold BRALIRWA and BK shares. It is noticeable that since the IPOs in 2011 and in 2013 respectively, stock prices have been fluctuating particularly BRALIRWA shares. In 2011, BRALIRWA share was issued at 136 RWF and increased up to 880 RWF in 2013. In aftermath of share bonus granted by the BRALIRWA in 2014, its share price declined to RWF 440 and currently the share is selling at Rwf 140 .

BK share price fluctuated as well since 2013 but not in the same proportion. It was issued at RWF135 and increase up to RWF 300 in 2015 and is currently selling at Rwf 234.

The Crystal Telecom is currently selling at 80 Rwf while Uchuni Supermarket Ltd currently selling at 104 Rwf. The Equity Group Holding Ltd is currently selling at 334 Rwf and Nation Media Group Ltd is selling at 1200 Rwf while KCB is at 330.

4.3. Data presentation, analysis and interpretation

1. Profile of respondents

Table 4.1: Gender of respondents

S/N	Gender	Number of respondents	Percentage
1	Female	98	25.0
2	Male	296	75.0
	Total	394	100.0

Source: Primary data, 2016.

This table No 4.1 indicates that the majority of respondents are male with a small number of female. This means that Rwanda Stock Exchange activities are currently dominated by male.

Table 4.2: Distribution of respondent per age

S/N	age (range)	Number of respondents	Percentage
1	Between 26- 35	80	20.0
2	Between 36-45	160	40.0
3	Between 46-55	102	26.0
4	Over 55	52	14.0
	Total	394	100.0

Source: Primary data, 2016

From this table, It is clear that the majority of respondents whose age ranged from 36 to 45 years old and from 46-55 years old, are active investors initiated to invest in different security

companies on RSE. The reason behind is that this majority number of investors who are interested in buying shares, is mature enough to manage investment decision and being risk taker for any change of share price.

Table 4.3: Distribution of Respondents According to their level of education.

S/N	response	Number of respondents	Percentage
1	Undergraduate level	74	19.0
2	Bachelors Degree	34	8.0
3	Masters Degree	98	25.0
4	PhD	188	48
	Total	394	100.0

Source: Primary data, 2016.

From this table n^o 4.3, It shows that the majority of respondents has PhD while other hold Masters Degree. This makes sense that the big number of investors on Rwanda Stock Exchange has enough knowledge and skills so that they make investment decision on RSE. They know well how to manage investment in shares projects and they are able to handle any effect from share price change since they are able to implement different investment strategies.

Table 4.4: Proportion of stocks held by surveyed investors.

S/N	Response	Number of respondents	Percentage
1	Bralirwa	179	45.0
2	Bank of Kigali	100	26.0
3	CTL	99	25.0
4	Other	16	4.0
	Total	394	100.0

Source: Primary data, 2016.

This table shows clearly that most of investors have invested their funds in Bralirwa shares and other investors have made their investments in Bank of Kigali while other small number of investors have invested in CTL. This must be understandable that Bralirwa has the big number of investors who invested in it because it is the first company listed on RSE while Bank of Kigali is the second.

Table 4.5: Duration of investment in RSE.

S/N	Response	Number of respondents	Percentage
1	Between 1 and 2 years	10	3
2	Between 2 and 3 years	151	37.5
3	Between 3 and 4 years	100	25.0
3	Between 4 and 5 years	125	32.0
4	Over 5 years	8	2.5
5	Total	394	100.0

Source: Primary data, 2016

This table, of respondents' views about their duration of investment in RSE shows that a big number of investors have between 2 and 3 years of investment in their security companies through RSE and the other investors are in range of 4 and 5 years of investment in Rwanda Stock Exchange. It is very understandable that most of respondents have enough experiences on effect of share price change on investment decision on RSE and this makes their views valid and reliable. This means that 36 of investors have skills and with convincing evidences due to their experiences with RSE. Hence there no reason to do not agree that they know much about share price change because they are the ones who work with the security company that has a long time listed on RSE.

4.3.1.1. Determinants of share price change.

Table 4.6: Effect of company's news and performance on share price change

S/N	Responses	Number of respondents	Percentage
1	Agree	38	10.0
	Strongly Agree	356	90.0
2	Total	394	100.0

Source: Primary data, 2016

From the table above, the most of RSE staff and brokers have strongly agreed with the statement saying that company's news and performance intervene in share price change and the remaining of staffs have also agreed with this statement. This means that positive news and performance make the share price of a company being increased and vice-versa since the company created the reputation. The staff and brokers from Rwanda Stock Exchange have clearly stated that if a listed company has a favourable financial performance automatically its share price is relatively increased.

Table 4.7. Effect of Demand and supply forces on share price change

S/N	Responses	Number of respondents	Percentage
1	Agree	22	6.0
2	Strongly Agree	372	94.0
	Total	394	100.0

Source: Primary data, 2016

The data collected from Rwanda Stock Exchange staff and brokers, shows clearly that Demand and Supply forces is a determinant of share price change and by analyzing their views, I find that they knew more about demand and supply forces . Yet, the biggest number of them strongly agrees that demand and supply force totally affect share price. Surely, Whenever investors want to buy shares than sell it, then the share price increases. on the other hand, when the offer is greater than the demand, stock price decreases.

Table 4.8. Effect of inflation on share price

S/N	Responses	Number of respondents	Percentage
1	Disagree	11	3.0
2	Agree	289	73.0
3	Strongly agree	94	24.0
Total		394	100.0

Source: Primary data, 2016

The table above also, provides views from RSE staff explaining how inflation affect the share price of any security company. As shown by in this table, it is clear that most of respondents i.e RSE staff, agreed with the statement saying that inflation is determinant of share price change since it influences the share price of security company therefore, Investment should be discouraged by uncertainty about future engendered by inflation and its wide fluctuation.

Table 4.9. Effect of High returns on share investment on share price

S/N	Responses	Number of respondents	Percentage
1	Disagree	1	1.0
2	Agree	159	40
3	Strongly agree	234	59.0
Total		394	100.0

Source: Primary data, 2016

This tables shows the responses from Rwanda Stock Exchange staff and brokers confirming that the high return on investment made in form of shares attracts more investors to look for investing their funds that result to an increase in share price. They strongly agree with this statement saying that High share investment return determines share price.

Table 4.10. Effect of introducing innovative products on share price change

S/N	Responses	Number of respondents	Percentage
1	Agree	4	1.0
	Strongly Agree	390	99.0
2	Total	394	100.0

Source: Primary data, 2016

From this table above, it shows that the majority of respondents strongly agree that innovation on products has a great contribution in share price change. This means that the company strategy to introduce the innovative products or services may immediately lead to share price change.

Table 4.11. Effect of expanding market scale on share price

S/N	Responses	Number of respondents	Percentage
1	Disagree	3	1.0
2	Agree	37	9.0
3	Strongly agree	354	90.0
Total		394	100.0

Source: Primary data, 2016

From the table above, the most of RSE staff and brokers have strongly agreed with the statement saying that the expansion of market scale affects the share price. The staff and brokers from Rwanda Stock Exchange have clearly stated that if a listed company has a favourable market condition automatically its share price is relatively increased since the investors need to shift to company getting more profit.

Table 4.12. Major problems faced by investors on RSE

S/N	Responses	Number of respondents	Percentage
1	An increasing decline of share prices on all stock listed companies in Rwanda	252	64.0
2	Lack of public awareness in investing in shares	76	19
3	Lack of proper share market operational framework by the Capital Market Authority	66	17
Total		394	100.0

Source: Primary data, 2016

This table of problems that are being encountered by investors on Rwanda stock Exchange it shows very clear the problems that are challenging the investments but most one that are facing with investors is an increasing decline of share prices on all stock listed companies in Rwanda, however others are : Luck of public awareness in investing in shares and Lack of proper share market operational framework by the Capital market authority.

Table 4.13. Selling off all shares if share price hikes.

S/N	Responses	Number of respondents	Percentage
1	Strongly disagree	10	3.0
2	Disagree	252	64.0
3	Neutral	100	25.0
4	Agree	23	6
5	Strongly Agree	9	2.0
Total		394	100.0

Source: Primary data, 2016.

From this table above, we found that the big number of investors disagreed that they sell off all their shares when price increased. However the others became neutral i.e. they didn't agree or disagree for this statement.

The reason behind is that the investors are willing to hold investments in terms of shares where they are expecting to get more interest from further increase in share price.

Table 4.14. Selling off some of their shares if share price hikes.

S/N	Responses	Number of respondents	Percentage
1	Strongly disagree	1	3.0
2	Disagree	2	64.0
3	Neutral	4	25.0
4	Agree	80	6
5	Strongly Agree	307	2.0
Total		394	100.0

Source: Primary data, 2016

The table no 4.11.indicates the respondents views on what they do when share price increases. The most of respondents have strongly agreed with the statement saying that they immediately sell off some of their shares hold in security company if share price increased. This is because all the investors buy shares expecting to gain money in future and when the price increase they need to get income from selling their shares and still remain active investors in security company at which they invested in, that's why they sell off some shares and leave with other small number of shares.

Table 4. 15. Investment in buying more shares if share price decline.

S/N	Responses	Number of respondents	Percentage
1	Strongly disagree	2	1.0
2	disagree	2	1.0
3	Agree	78	19.0
4	Strongly Agree	312	79.0
Total		394	100.0

Source: Primary data, 2016

According to this table, the investors were questioned about what they do when share price decline. All of them answered with different views but it is clear that most of them have strongly agreed with the statement saying that they make a decision of investing in buying more shares when share price decline. This is because the most of investors are always looking for gaining from their invested funds. They think that if share price falls down today, tomorrow will be increased. The target is to invest a little money and maximize profit in future.

Table 4.16. Selling off some of their shares if share price decline.

S/N	Responses	Number of respondents	Percentage
1	Strongly disagree	8	2.0
2	disagree	10	3.0
3	Neutral	4	1.0
4	Agree	150	38.0
5	Strongly agree	222	56.0
Total		394	100.0

Source: primary data, 2016

From this table above, the different investors have given their views on selling off some of their shares if share price decline. It is clear here that even though most of them strongly agreed that they sell some of shares because they are afraid of unexpected share price change thinking that it will continue to decline. Surely, this strongly agreed respondents to the statement, are not achieve at least 50% of total respondents, it means that the investors are not willing to sell their shares if the price decline because they expect that the price will increase and sell shares for receiving more profit.

4.2. Interpretation of the findings

This section investigates the relationship between share price change and investment decision indicators on Rwanda Stock Exchange. The primary data has been used.

There is correlation between share price change and Volume of stock traded, where share price change is significantly positively correlated with Volume of stock traded. This is in relation to previous studies with reference to Chandrapala (2008) in his study about relationship between trading stock returns. It indicates that when share price increases, Volume of stock traded also increases and vice-versa. The correlation between share price change and Total number of transaction is 0.891. It reveals that share price change is significantly highly positively correlated

with Total number of transaction at 0.01 level of significance (2-tailed). It indicates that when total number of transaction increases, share price also increases and vice versa. This means that change in total number of transaction is due to the effect of share price change. Podobnik (2009) in his study “cross correlation between volume change and price change” also found out that daily price change is proportional to average number of transactions. The correlation of share price with number of traded companies is 0.931. This correlation shows that there is also high degree of positive relationship, Olayinka (2016) in his study “profitability and stock price vitality of Nigerian listed manufacturing companies” also found out that there is a slight high level of positive relationship between share price and traded companies. The correlations of share price change and value traded on listed securities is .787 and has a high degree of association. This proves that when share price increases, value traded on listed securities also increases and vice versa. The relationship between share price and number of listed companies is positive and reveal that share price change is significantly highly positively correlated with number of listed companies at 0.01 level of significance (2-tailed). The association of share price change with market capitalization end of year is significantly positive.

The findings from the survey are as follows:

The primary data analysis shows that financial reports of companies listed on stock exchange helps in identifying over or undervalued securities. To change the share price of a company, publication of financial report has greater value. The majority of the respondents support the statement that company news and performance influence share price change and the minority of the respondents support that inflation determine share price, However, the correlation analysis carried out revealed that there is a strong association between investment decision indicators and share price change. A great number of investor’s activities from investment are done as much as possible by men because they occupy a big number of investors.

Different authors have identified various factors which determine share price on stock markets. According to Ryan and Zaichkowsky (2004), the main determinants of share price that drive investor’s behavior are company news and performance, demand and supply forces and inflation to price changes affect Investment decision on RSE. According to White, 2007. And Jones & Charles, 2004, said that Investors’ technical analysis to evaluate the stock price movement and predicts the future stock price basing on historical data of stock price and fundamental Analysis

to evaluate the intrinsic value of the company and compares it to the stock price. All these analyses give insight to the investor whether the stock price is undervalued or overvalued and it will assist the investor in making the decision.

The response shows that most of respondents have strongly agreed with the statement saying that they immediately sell off some of their shares hold in Security Company if share price increased. However investor's decision depends on appropriately investing in shares during hot periods (high demand) than during cold periods (high supply). (Angu, 2013) .

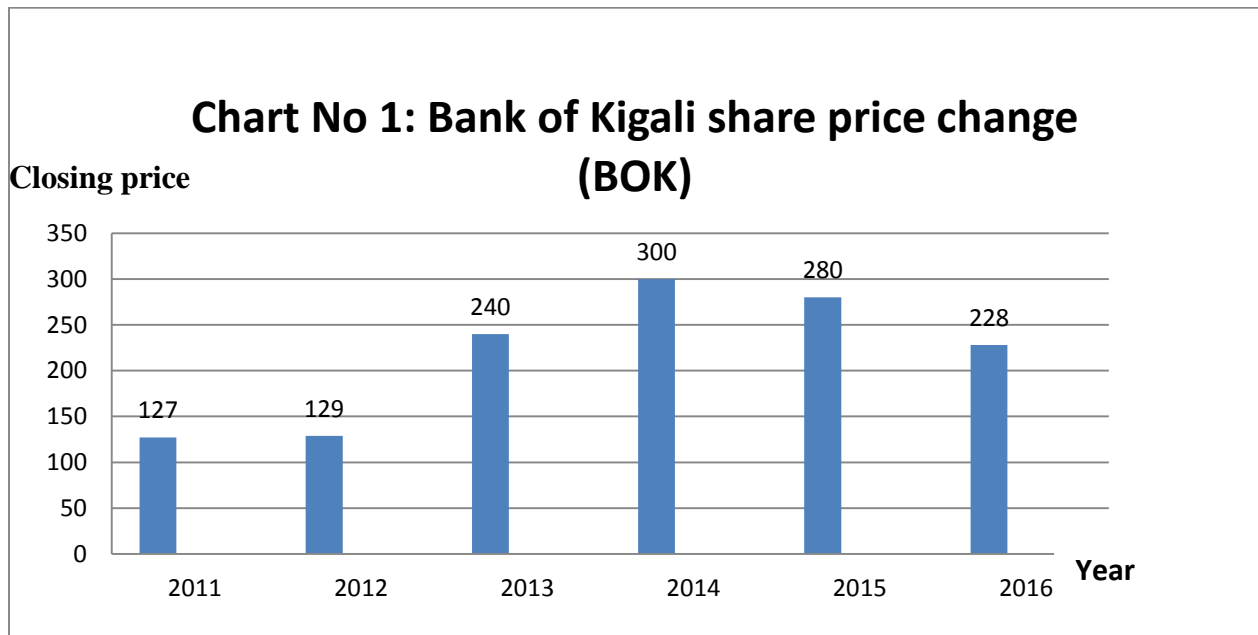
From primary data analysis, it shows that investors invest their funds in buying more shares if share price decline. while Rik W. Hafer and Scott E. Hein, 2007 stated that investors use technical or fundamental analysis to make their decision to buy and sell shares.

Responses show that investors face with problem of an increase in decline of share prices on all stock listed companies in Rwanda however, all investors are risk averse, rational and desire to maximize their own utility, as well as the presence of a large number of buyers and sellers in the market (Watson & Head, 2007).

4.3.1. Share price change analysis from 2011 to 2016

This section analyses and interprets findings from the data collected through secondary source and staff from Rwanda Stock Exchange and brokers. All questions asked were analyzed and interpreted basing on objectives of this study.

Figure 1 Chart No 1: Bank of Kigali share price change (BOK)

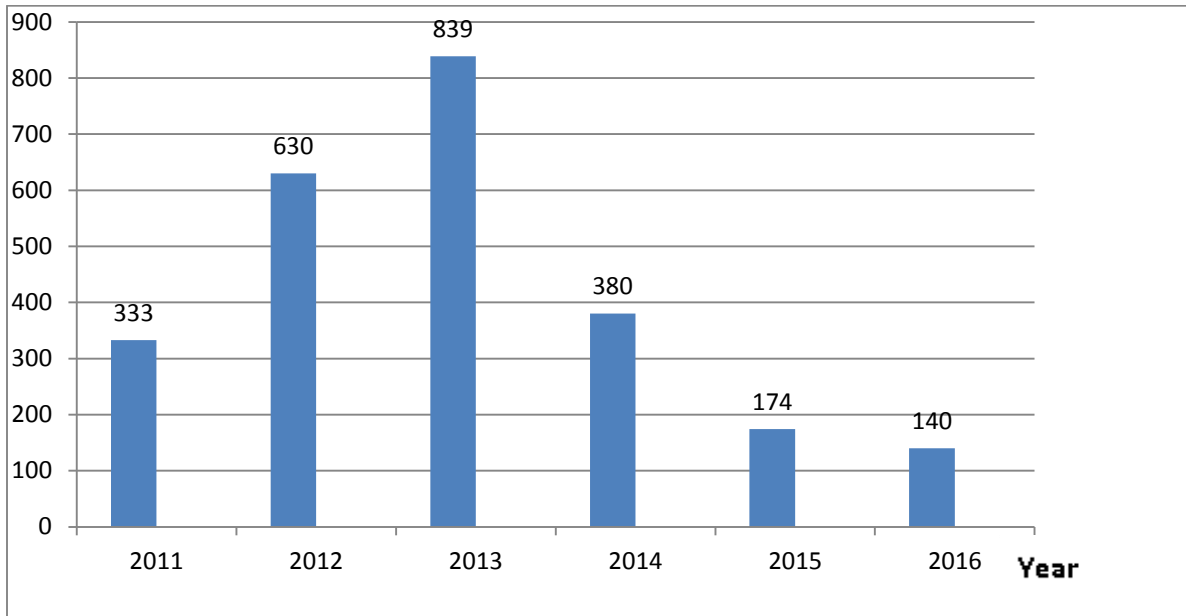


Source: Secondary data

From the chart above, Bank of Kigali share price has been varied as follows: in 2011, its share price was 127. Share price changed to 129 in 2012 while in 2013, the price varied to 240. As provided by this table, the Bank of Kigali has performed well in 2014, where its share price increased quickly to 300 but after falls down till it became 228. It is clear that the BOK share price is characterized by serious variation that led to investor's loss.

Figure 2 Chart no 2: Bralirwa share price change (BLR)

Closing price



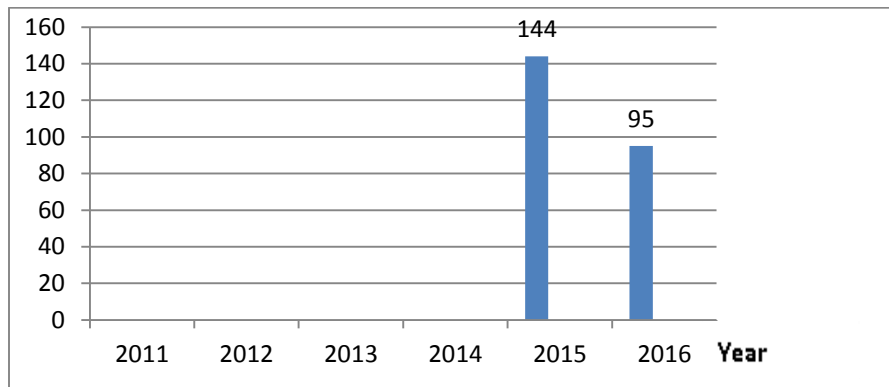
Source: Secondary data

Data from this figure clearly shows the closed share variation price in six consecutive years. In 2011, the share price was 333, in 2012, it was 630 while in 2013, the share price changed to 839 which was the good standard price for investors but in the following years, due to high demand for the shares at the market but after it started decreasing due to a lot of supply because BLR shares had been spirited to increase the number of shares at the market hence leading to continuous decrease of share price where the share price changed to 380, 174 and 140 respectively.

This Bralirwa share price has been dramatically characterized by price change as it is shown by the above chart.

Figure 3 Chart N^o 3: Crystal Telecom Ltd share price change (CTL)

Closing price



Source: Secondary data

Interpretation from the above figure shows how the share price of Crystal Telecom has been changed during the year indicated on the above chart. The price has been changed from 144 to 99 in 2015 and varied from 95 to 90 in 2016. This is understandable that these changes are unfavorable hence it change from 144 to 90 in two respective years.

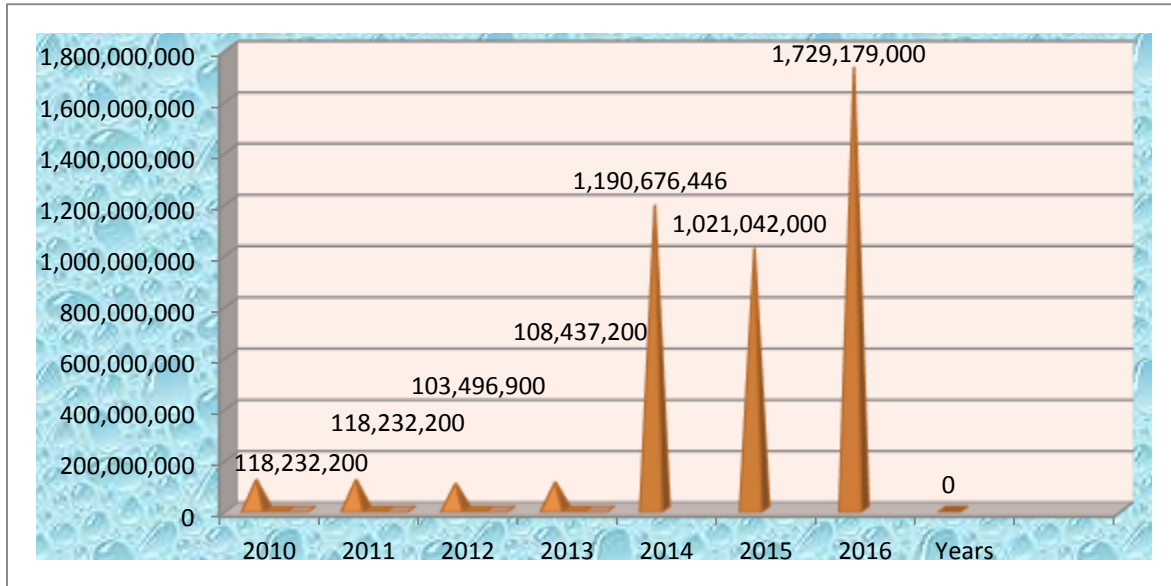
4.3.2. Investment decision on RSE analysis

This section analyses and interprets findings from both secondary data and primary data collected from-investors. All data explored and questions asked were analyzed and interpreted in line with the study objectives.

4.3.2.1. Investment decision Indicators

Figure 4 Chart N^o 4: Total Volume of stocks traded

Volume of Stocks

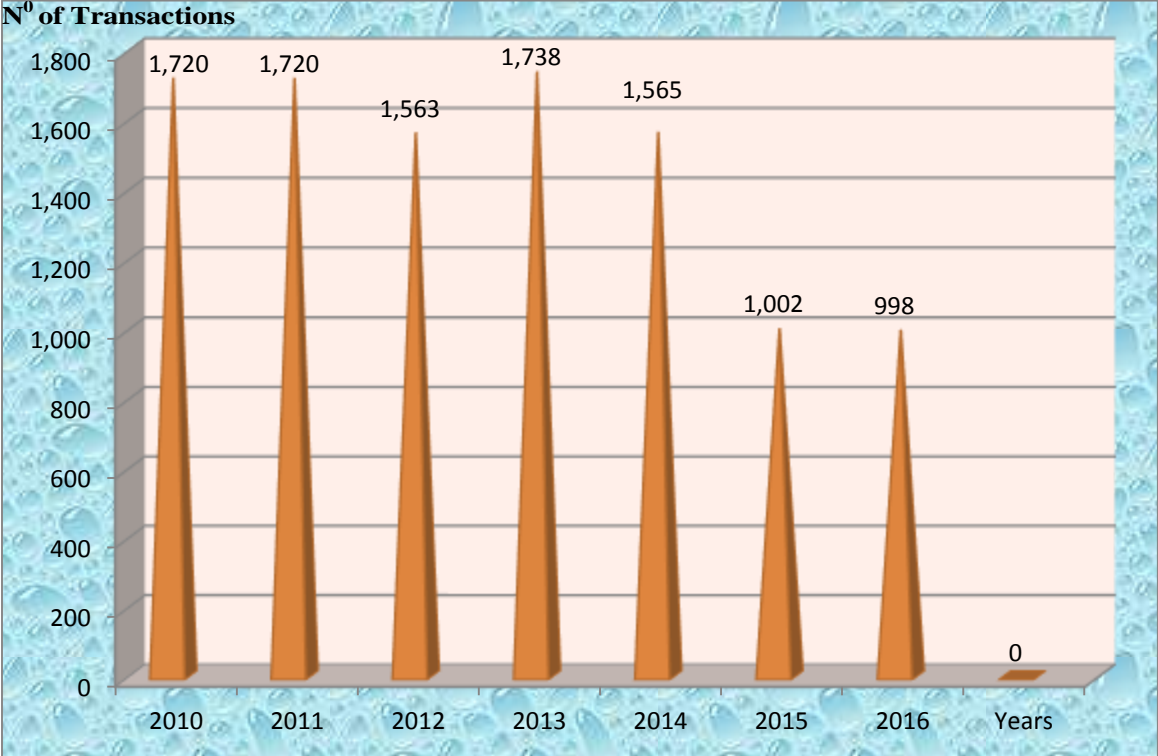


Source: Secondary data

Data from Rwanda stock exchange website under annual statistics as presented in meaningful way above, it clearly shows the volume of traded stocks from 2010 to 2016 as showed. The volume of stocks traded has been increasing from 2010 to present except the first three years where 2010 and 2011 the volume of stocks was constant because the RSE was on introduction stage. As showed on the above figure, the number of stock traded has been dramatically decreased from 2011 to 2012, This has been caused by different reasons including awareness of investors on RSE that was low because of being on introduction stage, means that the number of investors was very low. In 2010, there was only two cross listed companies which means that some of the Rwandan investors were not aware and those who knew it didn't trust them. In 2011, listed companies were BoK and Bralirwa and that time nothing has been changed on volume of traded stocks because the investors had not more information but in 2012 the volume began to increase since the Rwanda Stock Exchange began to grow up.

From 2012 to 2016, the volume of stocks was well increased from 103,496,900 to 1,729,179,000. This significant increase in volume of stocks traded was caused by splitting of shares from Bralirwa. This shows also how the investors were willing to invest in Rwanda stock exchange according to the share price that was favorable.

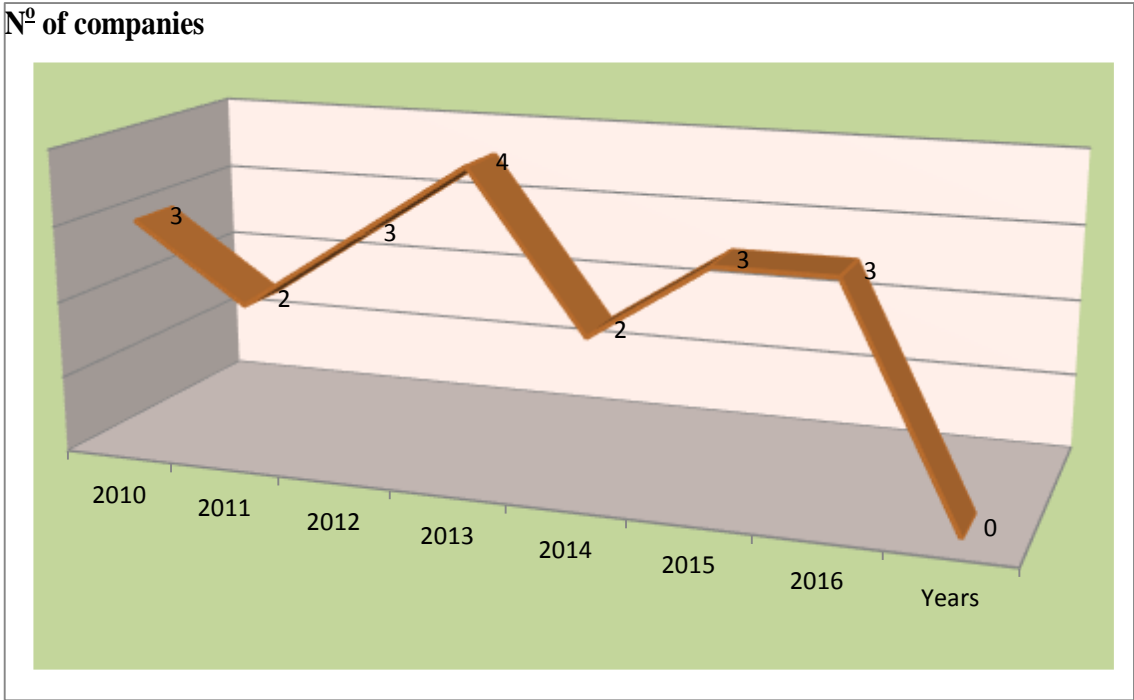
Figure 5 Chart N^o 5: Total Number of Transactions



Source: Secondary data

The above figure shows well the change in number of transactions during 2010 to 2016. The number of transactions was constant in the first two consecutive years (2010 and 2011) because the RSE was on introduction stage. As showed on the above figure, the number of transaction has been considerably decreased from 2011 to 2012, this decrease in number of transactions has been caused by decrease in stocks traded. In 2013, the number of transactions has been increased significantly due to increase in share price on investment that made also the volume of stock traded being increased. From 2013 to 2016, the number of transactions was significantly decreased from 1738 to 998. This tremendous decrease in number of transaction is resulting from decrease in share price due to the performance of the listed companies.

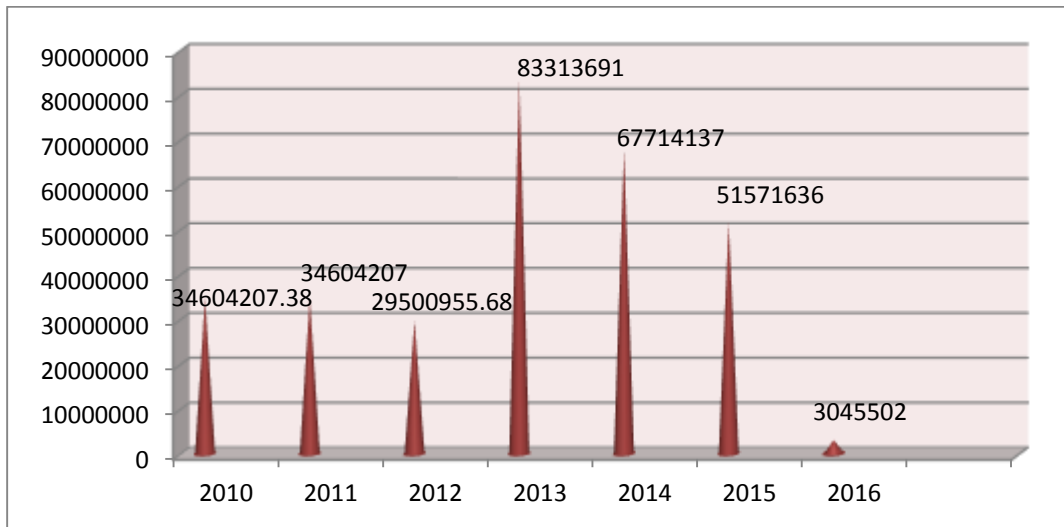
Figure 6 Chart N° 6: Number of traded companies



Source: Secondary data

The analysis of data from the table above, shows that the number of traded companies has been varying from 2010 to 2016 as showed. The number of traded companies was three in 2010 and two in 2011 while in 2012 the number of traded companies was three. By referring to the above table, the number of traded companies was four in 2013, two in 2014 and three in 2015 while in 2016 the number of traded companies was three. This proves the active companies on Rwanda Stock Exchange of transaction on Rwanda Stock Exchange. Performance of companies on Rwanda Stock Exchange is being showed by the high number of traded companies.

Figure 7 Chart No 7: Value traded on listed securities (USD)

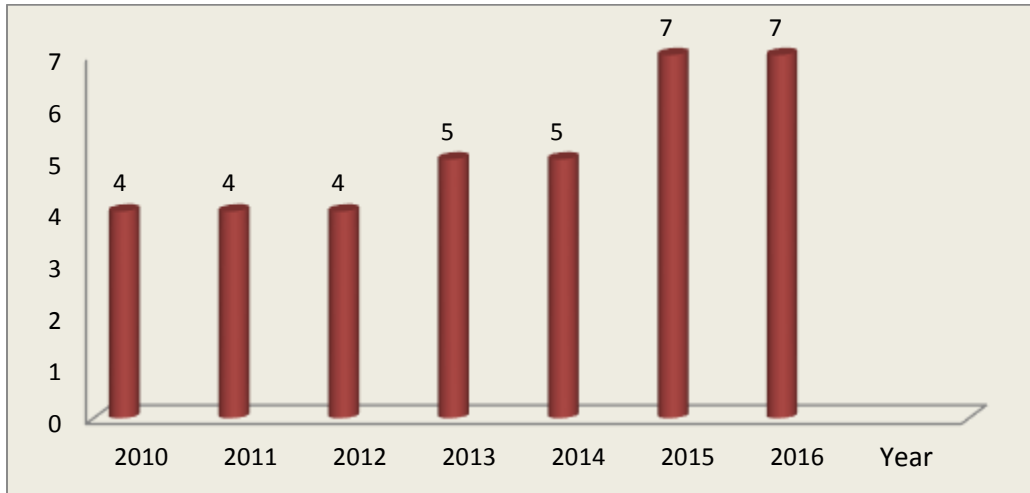


Source: Secondary data

The above chart shows well the change in value traded on listed securities during 2010 to 2016.

The value traded was constant in the first two consecutive years (2010 and 2011) because the RSE was on introduction stage. As showed on the above figure, the value traded has been considerably decreased from 2011 to 2012; this decrease in value traded on listed securities has been caused by decrease in stocks traded. In 2013, the number of value traded has been significantly increased due to increase in share price on investment that made also the volume of stock traded being increased. From 2013 to 2016, the number of value traded on listed securities has significantly decreased as showed on figure. This tremendous decrease in value traded resulted from decrease in share price due to the performance of the listed companies.

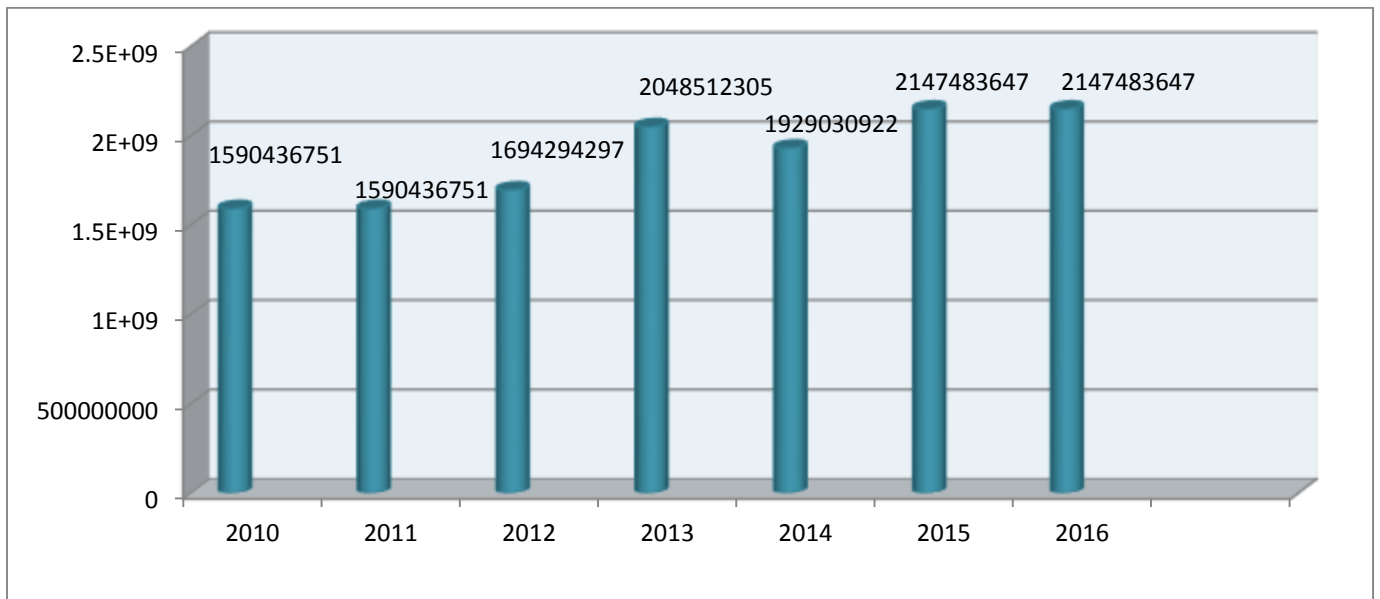
Figure 8 Chart N°8: Number of Listed Companies



Source: Secondary data

By analyzing data from the table above, shows that the number of listed companies has been varying from 2010 to 2016 as showed. The number of listed companies was four in 2010, 2011 and 2012 while five in 2013 and 2014 respectively. The number of listed companies has been increasing up to 7 in 2015 and 2016 respectively. This proves the active and performance of Rwanda Stock Exchange as showed by the high number of listed companies each year.

Figure 9 Chart N° 9: Market capitalization end of each year (USD)



Source: Secondary data

Data collected from Rwanda stock exchange website under annual statistics as presented in meaningful way in the above figure, Shows the market capitalization end of each year from 2010 to 2016 as showed. The market capitalization has been increasing from 2010 to present except the first three years where 2010 and 2011 it was constant because the RSE was on introduction stage but as well being performed by RSE, the market capitalization increased till 2013. As showed on the above chart, the number of market capitalization has been dramatically decreased from 2013 to 2014, This has been caused by different reasons including awareness of investors on RSE that was low because of being on introduction stage, means that the number of investors was very low. From 2014 to 2016, the volume of stocks was well increased .This shows the performance of Rwanda Stock Exchange.

Correlation Analysis

The correlation analysis overall data is done to find out the relationship of different variables with Share price change.

Table 17 Relationship of Share price change with Volume of stock traded, Total number of transaction, Number of traded companies, Value traded on listed securities, Number of listed companies and Market capitalisation end of year.

		Share price	Volume of stock traded	Total number of transactions	Number of traded companies	Value traded on listed securities	Number of listed companies	Market capitalisation end of year
Share price	Pearson Correlation	1	.736	.891	.931	.787	.876	.775
	Sig. (2-tailed)		.777	.892	.892	.777	.892	.892
	N	394	394	394	394	394	394	394
Volume of stock traded	Pearson Correlation	-.014	1	-.811**	-.811**	1.000**	-.811**	-.811**
	Sig. (2-tailed)	.777		.000	.000	.000	.000	.000
	N	394	394	394	394	394	394	394
Total number of transactions	Pearson Correlation	-.007	-.811**	1	1.000**	-.811**	1.000**	1.000**
	Sig. (2-tailed)	.892	.000		.000	.000	.000	.000
	N	394	394	394	394	394	394	394
Number of traded companies	Pearson Correlation	-.007	-.811**	1.000**	1	-.811**	1.000**	1.000**
	Sig. (2-tailed)	.892	.000	.000		.000	.000	.000
	N	394	394	394	394	394	394	394
Value traded on listed securities	Pearson Correlation	-.014	1.000**	-.811**	-.811**	1	-.811**	-.811**
	Sig. (2-tailed)	.777	.000	.000	.000		.000	.000
	N	394	394	394	394	394	394	394
Number of listed companies	Pearson Correlation	-.007	-.811**	1.000**	1.000**	-.811**	1	1.000**
	Sig. (2-tailed)	.892	.000	.000	.000	.000		.000
	N	394	394	394	394	394	394	394
Market capitalisation end of year	Pearson Correlation	-.007	-.811**	1.000**	1.000**	-.811**	1.000**	1
	Sig. (2-tailed)	.892	.000	.000	.000	.000	.000	
	N	394	394	394	394	394	394	394

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

The correlation between share price change and Volume of stock traded is 0.736. It shows that share price change is significantly positively correlated with Volume of stock traded at 0.01 level of significance (2-tailed). It indicates that when share price increases, Volume of stock traded also increases and vice-versa. The correlation between share price change and Total number of transaction is 0.891. It reveals that share price change is significantly highly positively correlated with Total number of transaction at 0.01 level of significance (2-tailed). It indicates that when Total number of transaction increases, share price also increases and vice versa. This means that change in total number of transaction is due to the effect of share price change. The correlation of share price with Number of traded companies is 0.931. Correlation between share price and Number of traded companies shows that there is also high degree of positive relationship. The correlations of share price change and Value traded on listed securities is .787 and has a high degree of association. This proves that when share price increases, Value traded on listed securities also increases and vice versa. The relationship between share price and Number of listed companies is positive and reveal that share price change is significantly highly positively correlated with number of listed companies at 0.01 level of significance (2-tailed). The association of share price change with market capitalization end of year is significantly positive.

We cannot conclude that any of single indicator play more vital role to show the increase of investment decision, However, All the indicators have almost equal significance on the investment decision.

Regression analysis

The regression analysis was carried out to determine whether the dependent variable which is investment decision is influenced by the given independent variables (share price change) or not.

Table 18 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 ^a	.762	.749	874.779

Predictors: (Constant) share

From the above table, provides the R and R^2 values. The R value represents the simple correlation (0.873) which indicates a high degree of correlation. The R Square here, is indicating how much of the total variation in the dependent variable, investment decision indicators, is being explained by the share price change at 76.2%. The R-Square, the Coefficient of determination is an overall measure of the strength of association between the dependent and independent variables. In this case 76.2 percent, as shown in above table can be predicted from the independent variables, indicating that other factors account for 24.8 percent of share price changes.

Table 19 Analysis of variances

Model		Sum of Squares	df	Mean Square	f	Sig.
1	Regression	44182633.37	1	44182633.37	57.737	.000 ^b
	Residual	13774291.07	18	765238.394		
	Total	57956924.44	19			

a. Dependent Variable: Investment decision indicators

b. Predictors: (Constant) Share price change

The analysis from this table indicates that the regression model predicts the dependent variable significantly well. It indicates the statistical significance of the regression model that was run. Here, $p < 0.0005$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable. The overall p value is less than 0.05 (0.000) and it was deduced that the group of independent variables when used together reliably predicted the dependent variable therefore showed a significant statistical relationship. This however did not address the ability of any of the particular independent variables to predict the dependent variables

Table 20 Model Coefficients

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients		
Constant	4.246	152.256		4.474	.000
Company news and performance	.564	.074	.873	7.578	.000
Demand and supply forces	.200	.403	.100	.497	.001
Inflation	.212	.152	.226	.391	.000

a. Dependent Variable: Investment decision indicators

The above Coefficients table, provides the necessary information to predict investment decision from share price change, as well as determine whether share price change contributes statistically significantly to the model. The predicted model from above table was: Investment decision = 4.246 +.564 company news and performance+ .200 demand and supply forces + .212 Inflation.

The constant is statistically significant as its coefficient is different from zero and its p value is less than 0.05 (0.00). The ability of each individual independent variable to predict the dependent variable was addressed above based on the model coefficients.

By concluding, the analysis from the above three tables shows that there is a significant strong relationship between share price change and investment decision.

CHAPTER V: SUMMARY OF FINDINGS, RECOMMENDATION AND CONCLUSION

This chapter consists of three sections; first section provides the summary of the study, the second draws the conclusion of the study and the final section proposes recommendation formulated on the basis of findings.

5.1. Summary of Findings

This research intended to investigate whether the share price change affects investment decision on the Rwanda Stock Exchange.

The results from this study indicate that the selected independent variables can be used as determinants of share price as they have significant impacts on investment decision on Rwanda Stock Exchange. This has been observed in the correlation and regression results of the selected variables. The correlation analysis showed that the relationship between share price change and investment indicators is significantly positive, However, All the investment decision indicators have almost equal significance on the investment decision.

The results show that the model has predictive value, since it is significant. (Null hypothesis of no predictive value was rejected.

The investors prefer to make investment decisions in buying more shares when share price decline. This is because the most of investors are always looking for gaining from their invested funds.

The volume of stock traded, number of transactions and number of traded companies were constant in 2010 and 2011 because the Rwanda Stock Exchange was at introduction stage and investors had no more sufficient information about the capital market. From 2013 to 2016, the number of transactions was significantly decreased from 1738 to 998. This tremendous decrease in number of transaction resulted from new companies listed on Rwanda Stock Exchange decreased and share price also decreased.

Bralirwa share price, has been characterized by rapid increase in 2010 till 2013 caused by small number of listed companies and from 2013 to 2016, a scandal relating to unreasonable decrease in Bralirwa share price has occurred and this might be due to more listed new companies entered into the capital market.

5.1.1. Determinants of share price changes.

As strongly agreed by RSE staff and brokers with the statement saying that company's news and performance intervene in share price change. Positive news and performance make the share price of a company being increased and vice-versa. if a security company has a favorable financial performance automatically its share price is relatively increase and vice-verse. Demand and Supply forces also affect the share price because if investors want to buy shares than sell it, then the share price increases. Contrary to that, if investors sell their shares than buy, then the price falls down. This means when more investors are willing to buy and few are willing to sell, it implies that share prices will increase due to high demand.

5.1.2 Effects of share price changes on investment decision

The researcher has found that share price changes have affected investment decision in Rwanda Stock Exchange as clearly interpreted and analysed in chapter four. The most of views from respondents have strongly agreed with the statement saying that they immediately sell off some of their shares hold in Security Company if share price increased. The investors buy shares expecting to gain money in future and when the price increase they need to get income from selling their shares and still remain active investors in Security Company at which they invested in. The responses from investors proved that they make investment decision in buying more shares when share price decline. This is because the most of investors are always looking for gaining from their invested funds and they are thinking that if share price falls down today, tomorrow will be increased. This day to day change in share price has seriously affected investment decision on RSE since more investors left from investing in Capital market that led to decrease in investment on RSE due to lack of proper capital market policies on making attention to shareholders interest.

5.1.3. Factors that influence investment decision of investors at RSE

Increase in share price motivate the public to come for investment as they are expecting that the price will continue to increase further and they prefer to hold money in terms of investments. Public information provided by the company make the investors being aware about the performance of the company and this encourage different investors and having confidence on their investment's security. Demand and supply forces of share also intervene in investment decisions.

5.1.4 Analyzing the extent share price change affects investment decision

The researcher found out that share price change affects investment decision. The respondents agreed to the decision to buy or sell greatly depends on past financial performance of the company.

The standard deviation helped to measure how far or near from the mean. A measure of the centre is not enough to describe the distribution well. It tells the researchers about the spread of the data. The mean located between 3.50-4.00 is identified as strong and with the standard deviation equal to 0.99736 (99.736%) shows that level of spreading is heterogeneity and justify how share price change affects investment decision in Rwanda stock exchange.

5.2 Conclusions

As the main focus of this study was to establish the effect of share price change on investment decision on Rwanda Stock Exchange, the findings from this research revealed that share price change have a greater influence in investment decision on the Rwanda Stock Exchange by different investors. The results of the empirical analysis are consistent with most of the findings in the literature review and support the evidence that the selected determinants have significant effects on share price. The study revealed that the selected variables are independent series although there was indication of some causality relationship from some of the variables such as company news and performance, demand and supply forces and inflation. Share prices are influenced by numerous factors so that predictions using only a number of select variables may give incorrect results. Many researchers have striven hard to build models which incorporate a diverse array of variables to predict the share prices but have not been successful in having one such model. The research findings showed a strong relationship of share price change with investment indicators like Volume of stock traded, Total number of transaction, Number of traded companies, Value traded on listed securities, Number of listed companies and Market capitalisation end of year.

The regression analysis used in this research, showed a significant relationship between share price and investment decision indicators. The result from the study, shows the major problems that are challenging the investments but most one that are facing with investors is an increasing in decline of share prices on all stock listed companies in Rwanda, however others are: Lack of

public awareness in investing in shares and Lack of proper share market operational framework by the Capital market authority.

The research concludes that there is a positive relationship between share price change and investment decision indicators at a very high extent. Therefore, this generally means that without share price change the investment decision on the Rwanda Stock Exchange might be very critical.

5.3 Recommendation

The research find out the recommendation relates to the overall orientation of the individuals and Capital market management to emphasize the stakeholder's interest. This research centred on listed companies in Rwanda for a six years period. Stock markets are very complex hence finding a pattern in share price is quite difficult when using limited data and time period. Due to the seasonality and cyclic nature of stock markets the time period selected may have affected the final results. The selection of variables could also be of concern, and selection of one that does not have any bearing on the share price may affect the results.

Based on this study, the other major recommendations are as follows:

- More company should be listed on RSE
- The Rwanda stock market (RSE) should take some effective initiatives to control random fluctuation of share price and establish the system of regular monitoring and evaluation of stock market, so that investors would be assured on the RSE.
- The companies should provide updated reports to the investors periodically informing actual financial position of the company.
- There is necessity of separate body to analyze strengths and weakness of public companies, which should disclose right information and suggestions to public investors about investment risk. This will help the investors to take proper investment decision at the right time to avoid or minimize the level of risk. The RSE should be able to protect investor's interest effectively.
- Government should formulate and implement a rigid rules and regulation for further development of share market. A mechanism to take immediate action for the faulty company is to be established.

- More studies on effect of share price change on investment in Rwanda Stock Exchange should be conducted in Rwanda.

5.4 Area for further research

The following topics should be researched upon for further studies: the relationship between exchange rate fluctuations and stock prices in Rwanda stock exchange, Effective management as the mean to improve project financial performance in Rwanda and the Impact analysis of reputation building strategy on the performance of long term project. Possible further research recommended in line with the present study is:

- The present research can be extended to cover longer time periods, more firms and more macroeconomic variables.
- This study focused on the linear relationships and could be extended to include non-linear relationships between the variables. Also, other multivariate statistical forecasting models could be employed to verify the results.

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APPENDICES

Research instrument

Dear respondent (investor), I am Gloria Kansime, MBA student at the College of Business and Economics, University of Rwanda. I am currently conducting a master's thesis entitled, «Effect of share price changes on investment decisions, a case study of Rwanda Stock Exchange (RSE). This is in partial fulfillment for the award of Masters Degree in Finance management. I therefore kindly request you to voluntarily participate in this research by answering the questions bellow. Your responses will be kept confidential. Thank you very much.

(Please tick appropriate cell)

A. Personal Information:

- **Gender:** Female: Male:
- **Age** : 18 – 25: 26 – 35: 36 – 45: 46 – 55: Over 55:

3 . Level of Education :

Primary and lower level Secondary School level Undergraduate level
Bachelors Degree: MSc Degree PhD Obove PhD,s

- **Please indicate the security company in which you have invested**

Bralirwa BOK CTL Others

- **Duration of your investment in security company through RSE**

Less than 1 year: 1- 2 years 2 to 3 years 3 to 4
4 to 5 years over 5 years

How far do you agree/ disagree with the following statements? (Please tick- mark at the appropriate number as per following scheme.

5 = Strongly agree 4= Agree 3 = Don't know 2 = Disagree 1 = Strongly disagree (please tick only cell per statement)

N ^o	PART: B.	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)
	Determinants of share price change					
1	Company news and performance					
2	Demand and supply forces					
3	Inflation					
	Investment decision Indicators					
4	Volume of stock traded					
5	Number of transaction					
6	Number of traded companies					
	Investment decision determinants					
	My investment decision at RSE is influenced by :					
7	Share Price increase					
8	Dividends					
9	market forecast					
10	Public information					
11	Investment incentives					
12	Past trends of the stock					
13	Customer preference					
14	Over-reaction to price changes					
15	Firm's performance					
16	Interest rates and exchange rates					
17	Demand and supply of shares					
18	Macroeconomic factor					
	(Part C: Effects of the share price changes on investment decision)					
	When share prices hike:					
19	I sell off all my shares					
20	I sell off some of my shares					
	On the other hand, when share prices decline:					

1	I invest in buying more shares					
2	I sell some of my shares					
	The extent of the effect of share price changes on my investment decision is:					
1	Positively					
2	negatively					

6) In your opinion, what are the major problems faced by investors on RSE?

- An increasing decline of share prices on all stock listed companies in Rwanda
- Mind-change of many investors investing in other investment opportunities like bonds
- Lack of share market forecasting in Rwanda
- Lack of public awareness in investing in shares
- Lack of proper share market operational framework by the Capital Market Authority
- Lack of proper stock valuation

7) In your views, suggest what can be done to develop Rwanda Stock Exchange?

- a) More company should be listed on RSE
- b) Capital market policies should not be complicated in favor of investors