

**DETERMINANTS OF FINANCIAL PERFORMANCE OF  
FIRMS LISTED ON THE RWANDA STOCK EXCHANGE**

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Stock Exchange**

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## DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

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This thesis has been submitted for examination with our approval as University Supervisors

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## **DEDICATION**

To my beloved husband, to my darling children, to my family and my family-in-law, to all my friends and class fellows, I dedicate this work. This thesis is a source of motivation for hard work to my children: Beni Gael Irakoze, Ian Aime Mugisha and Kirstie Vania Ishimwe when they become of age.

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## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>iv</b>
<b>TABLE OF CONTENTS</b> .....	<b>v</b>
<b>LIST OF TABLES</b> .....	<b>xi</b>
<b>LIST OF FIGURES</b> .....	<b>xiv</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>xv</b>
<b>DEFINITION OF KEY TERMS</b> .....	<b>xvii</b>
<b>ABSTRACT</b> .....	<b>xviii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the study .....	1
1.1.1 Global context of financial performance .....	1
1.1.2 Regional perspective of financial performance .....	3
1.1.3 Local perspective of financial performance.....	3
1.2 Statement of the problem .....	7

1.3 Objectives of the study.....	9
1.3.1 General objective .....	9
1.3.2 Specific objectives .....	9
1.4 Research hypotheses .....	10
1.5 Justification of the study .....	10
1.6 Scope of the study .....	11
1.7 Limitations .....	11
<b>CHAPTER TWO .....</b>	<b>12</b>
<b>LITERATURE REVIEW.....</b>	<b>12</b>
2.1 Introduction.....	12
2.2 Theoretical Framework.....	12
2.2.1 Agency theory.....	12
2.2.2 Pecking order theory (Information asymmetry) .....	15
2.2.3 Stewardship theory .....	16
2.3 Conceptual framework.....	17
2.4. Review of variables.....	19
2.4.1 Dividend policy .....	19

2.4.2 Capital structure.....	19
2.4.3 Corporate governance.....	21
2.4.4 Timely rendition of information.....	21
2.4.5 Financial performance.....	23
2.5 Empirical Literature Review.....	24
2.5.1 Dividend policy.....	24
2.5.2 Capital structure.....	28
2.5.3 Corporate governance.....	30
2.5.4 Timely rendition of information.....	32
2.5.5 Financial performance.....	33
2.6 Critique of Existing Literature.....	35
2.7 Research gaps.....	35
2.8 Summary.....	37
<b>CHAPTER THREE.....</b>	<b>38</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>38</b>
3.1 Introduction.....	38
3.2 Research design.....	38

3.3 Target Population .....	39
3.4. Sampling Frame .....	39
3.5. Sample and sampling technique.....	39
3.6 Data collection Methods and instruments .....	41
3.6.1 Primary data.....	41
3.6.2 Secondary data.....	41
3.7 Pilot study .....	42
3.7.1 Validity Tests.....	42
3.7.2 Reliability Test.....	43
3.8 Data analysis and presentation .....	43
3.9 Variable measurement.....	45
<b>CHAPTER FOUR.....</b>	<b>49</b>
<b>RESEARCH FINDINGS AND DISCUSSION.....</b>	<b>49</b>
4.1 Introduction.....	49
4.2 Primary data analysis .....	49
4.2.1 Response Rate.....	49
4.2.2. Pilot Results .....	50

4.2.4 Factor Analysis .....	51
4.2.5 Demographic Characteristics .....	54
4.2.6 Descriptive Results .....	57
4.2.6.1 Dividend policy .....	57
4.2.6.2 Capital structure.....	59
4.2.6.2 Timely Rendition of Information.....	63
4.2.6.3 Financial performance .....	65
4.3 Secondary data analysis .....	68
<b>CHAPTER FIVE.....</b>	<b>100</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>100</b>
5.1 Introduction .....	100
5.2 Summary .....	100
5.2.1 Dividend Policy .....	100
5.2.2 Capital Structure .....	101
5.2.3 Corporate governance.....	101
5.2.4 Timely rendition of information .....	102
5.3 Conclusions .....	102

5.3.1	Dividend Policy.....	102
5.3.2	Capital Structure.....	102
5.3.3	Corporate governance.....	103
5.3.4	Timely rendition of information.....	103
5.4	Recommendations.....	104
5.4.1	Dividend policy.....	104
5.4.2	Capital structure.....	104
5.4.3	Corporate Governance.....	104
5.4.4	Timely rendition of information.....	104
5.5	Areas for Further research.....	105
	<b>REFERENCES.....</b>	<b>106</b>
	<b>APPENDICES.....</b>	<b>120</b>

## LIST OF TABLES

<b>Table 3.1:</b> Sample size .....	41
<b>Table 3.2:</b> Variable Measurement .....	45
<b>Table 3.3:</b> statistical test for the hypothesis .....	46
<b>Table 4.1:</b> Response Rate .....	49
<b>Table 4.2:</b> Pilot Results .....	50
<b>Table 4.3:</b> Multicollinearity .....	51
<b>Table 4.4:</b> Summary of Factor Analysis .....	54
<b>Table 4.5:</b> Attributes of Dividend Policy (in percentage) .....	58
<b>Table 4.6:</b> Attributes of Capital Structure (in percentage) .....	60
<b>Table 4.7:</b> Attributes of Corporate governance (in percentage) .....	62
<b>Table 4.8:</b> Attributes of Timely rendition of information (in percentage) .....	64
<b>Table 4.9:</b> Attributes of financial performance (in percentage) .....	66
<b>Table 4.10:</b> Serial Correlation Test.....	77
<b>Table 4.11:</b> Dividend Policy and Financial Performance (Model Summary).....	80
<b>Table 4.12:</b> Dividend Policy and Financial Performance (Model Fitness) .....	80
<b>Table 4.13:</b> Dividend Policy and Financial Performance (Regression Coefficients) .....	81

<b>Table 4.14:</b> Capital Structure and Financial Performance (Model Summary).....	82
<b>Table 4.15:</b> Capital Structure and Financial Performance (Model Fitness).....	83
<b>Table 4.16:</b> Capital structure and Financial Performance (Regression Coefficients) .....	84
<b>Table 4.17:</b> Corporate governance and Financial Performance (Model Summary) .....	85
<b>Table 4.18:</b> Corporate governance and Financial Performance (Model Fitness).....	86
<b>Table 4.19:</b> Corporate governance and Financial Performance (Regression Coefficients) .....	86
<b>Table 4.20:</b> Timely rendition of information and Financial Performance (Model Summary) .....	88
<b>Table 4.21:</b> Timely rendition of information and Financial Performance (Model Fitness) .....	89
<b>Table 4.23:</b> Correlation matrix .....	92
<b>Table 4.24:</b> Determinants of ROA (Model Summary).....	94
<b>Table 4.25:</b> Determinants of ROA (Model Fitness/ANOVA) .....	95
<b>Table 4.26:</b> Determinants of ROA (Model Coefficients).....	95
<b>Table 4.27:</b> Determinants of ROE (Model Summary) .....	96
<b>Table 4.28:</b> Determinants of ROE (Model Fitness/ANOVA).....	97
<b>Table 4.29:</b> Determinants of ROE (Model Coefficients).....	97

**Table 4.30:** Determinants of profit after (Model Summary) .....98

**Table 4.31:** Determinants of profit after tax (Model Fitness/ANOVA).....98

**Table 4.32:** Determinants of net profit (Model Coefficients) .....99

## LIST OF FIGURES

<b>Figure 2.1:</b> Conceptual framework .....	18
<b>Figure 4.1 :</b> Gender .....	54
<b>Figure 4.2:</b> Age Bracket.....	55
<b>Figure 4.3:</b> Level of education .....	56
<b>Figure 4.4:</b> Work experience.....	57
<b>Figure 4.5:</b> Trend Analysis Dividend Policy .....	68
<b>Figure 4.6:</b> Trend Analysis Capital structure .....	69
<b>Figure 4.7:</b> Trend Analysis corporate structure .....	70
<b>Figure 4.8:</b> Trend Analysis timely rendition of information.....	70
<b>Figure 4.9:</b> Trend Analysis of ROA.....	71
<b>Figure 4.10:</b> Trend Analysis of ROE .....	72
<b>Figure 4.11:</b> Within Firms Trend analysis for ROA .....	73
<b>Figure 4.12:</b> Within Firms Trend analysis for ROE.....	74
<b>Figure 4.13:</b> Within Firms Trend analysis for Profitability .....	75

## **ABBREVIATIONS AND ACRONYMS**

<b>ALSI</b>	All share index
<b>BOK</b>	Bank of Kigali
<b>BRL</b>	Bralirwa
<b>CMA</b>	Capital Market Authority
<b>CMAC</b>	Capital Market Advisory Council
<b>CS</b>	Capital Structure
<b>CSE</b>	Colombo Stock Exchange
<b>EQTY</b>	Equity Group Holding Limited
<b>FGLS</b>	Feasible Generalized Least Square
<b>GDP</b>	Gross Domestic Product
<b>IFRS</b>	International Financial Reporting Standards
<b>ISDA</b>	International Swaps and Derivates Association
<b>KCB</b>	Kenya Commercial Bank
<b>LP</b>	Liquid Position
<b>MINECOFI</b>	Ministry of Finance and Economic Planning
<b>NMG</b>	National Media Group
<b>NPV</b>	Net Present Value
<b>NSE</b>	Nairobi Security Exchange
<b>ROA</b>	Return on Assets

<b>ROE</b>	Return on Equity
<b>RSE</b>	Rwanda Security Exchange
<b>SMEs</b>	Small and Medium Enterprises
<b>STATA</b>	Statistical software
<b>UCHU</b>	Uchumi Supermarkets
<b>UK</b>	United Kingdom

## DEFINITION OF KEY TERMS

- Capital structure:** Is the permanent long-term financing of a company, including long-term debt, common stock and preferred stock, and retained earnings. Capital structure decision is the mix of debt and equity that a company uses to finance its business (Damodaran, 2001).
- Corporate governance:** Is a structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goal (Shleifer and Robert, 1997).
- Dividend Policy:** Is a distribution of profits earned by a joint stock company, among its shareholders (Adediran & Alade, 2013).
- Financial performance:** Is a measure of how well a firm can use assets from its primary mode of business and generate revenues. There are many different ways to measure financial performance, for example revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Vincent, 2011).
- Stock exchange:** Is an organized and regulated financial market where securities are bought and sold at prices governed by the forces of demand and supply (Srithan, 2014).
- Timely rendition of information:** Is availing the required information at the right or opportune time (Idowu, 2003).

## **ABSTRACT**

This study assessed the determinants of financial performance of companies listed on the Rwanda Stock exchange. The study was guided by the following research objectives: to appraise the effect of dividend policy on financial performance of firms listed on RSE, to identify the effect of capital structure on financial performance of firms listed on RSE, to evaluate the effect of corporate governance on financial performance of firms listed on RSE and to determine the effect of timely rendition of information on financial performance of firms listed on RSE. Both primary and secondary data were used by the study. The study adopted descriptive research design and the population was all the six companies listed in the Rwanda Stock Exchange (RSE). A census survey was conducted on all the six listed firms and purposive sampling technique was used to sample the respondents to participate in the study. Data was analyzed using descriptive statistics, correlation analysis and regression analysis using SPSS version 20. The study findings indicated that dividend policy, corporate governance and timely rendition affect positively ROA while capital structure affects negatively ROA. Furthermore, dividend policy, corporate governance and timely rendition positively affect ROE while capital structure negatively affects ROE. The regression results indicated that the relationship between dividend policy and both ROA and ROE is positive and significant, the relationship between capital structure and both ROA and ROE is negative and significant, the relationship between corporate governance and both ROA and ROE is positive but the relationship between corporate governance and ROA is significant while corporate governance is insignificantly related to ROE and finally the relationship between timely rendition and both ROA and ROE is positive and insignificant. The study recommends that firms listed at the RSE should improve their dividend policy as it leads to improved financial performance. The firms should operate under established and regularly observed dividend policy and also pays dividends in correlation with its value. The study also recommends that firms listed at the RSE should improve their capital structure and implement strategies that lead to a reduction in liquidity ratio as it leads to improved financial performance. The firms should keep its leverage level under control and have clear working capital management guidelines to avoid bankruptcy. Furthermore, the study recommends that firms listed at the RSE should improve their corporate governance as it leads to improved financial performance.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

##### **1.1.1 Global context of financial performance**

The financial system consists of public and private interests and the markets that serve them. It provides capital from individual and institutional investors who transfer money directly and through intermediaries (e.g. banks, insurance companies, and brokerage and fund management firms) to other individuals, firms, and governments that acquire resources and transact business.

Financial performance measures the efficiency and profitability of investments, the safety of debtors' claims against assets, and the likelihood that derivative instruments will protect investors against a variety of market risks (Seethaiah, 2012). The financial performance of companies changes over time as profits fluctuate from one year to another and from one company to another. Some companies obtain increases in profit while others record decreases and some even losses. These changes are determined by various factors. Performance factors can be structured in: factors of efficiency, that refer to economic, social and organizational efficiency; internal environmental factors that refer to ownership, management, company size, complexity, technical endowment, location, human potential, informational and intellectual capital, financial position, organizational culture; and external environmental factors: economical, technological, political, demographical, cultural, scientific, organizational, legal, social, educational, environmental and others (Sima, 2009). This study sought to investigate the determinants of financial performance of listed firms at the Rwandan stock exchange.

Financial aspect is a concern over the world. In Europe, Panu, Andrew and Erik (2006) Conducted a study on financial participation (profit-sharing and employee share

ownership plans) and positive financial performance outcomes. They used data from Finland, Germany, the Netherlands and the UK. Several outcome measures were used, based on respondents' assessments of the effects of financial participation. The results casted some doubt on complementarity between financial and other forms of participation.

There is a relationship between corporate governance, ownership and financial performance (Goergen, 1999). The author used detailed company micro-data to examine the ownership and performance in German and UK firms during the 1980s.

In America, Surroca *et al.* (2010) indicated positive association between financial performance and Corporate Social Performance supporting the theory that slack resource availability and Corporate Social Performance are positively related. Corporate Social Performance is also positively associated with future financial performance, supporting the theory that good management and Corporate Social Performance are positively related.

In Asia, the Corporate sector growth is essential to economic development. And the corporate finance pattern of the company is vital importance for the financial well being of companies in any sector. Corporate finance decisions affect the various areas of the corporate management, which determine the wealth of investors. Public sector of Sri Lankan corporate finance decisions accomplishments affects not only the financial soundness of the concerned Private Equity but also the financial health of the nation as a whole, while these are essentially public investment decisions of the government and a number of Sri Lankan Government agencies are involved in this process ( Sritharan, 2014).

### **1.1.2 Regional perspective of financial performance**

In Ghana, studies have been done on how dividend policy affects financial performance of the firm on Ghana Stock Exchange. Samuel & Edward (2010) examined the relationship between dividend policy and financial performance of banks in Ghana. The study used panel data constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. The result was in tandem with earlier studies that dividend policy had an effect on firm value.

In Kenya, Otieno (2013) states that macroeconomic determinants of firm profitability are those characteristics of a macro economy that affects the profitability of firms operating within it. According to him, they vary in their respective levels of significance from one economy to another and cannot be directly controlled by individual shareholder and managerial decisions and activities. In the literature, macroeconomic determinants of firm profitability include economic growth (GDP), inflation and interest rates and exchange rate.

In Tunisia, Sayedi (2013) argues that both internal and external factors affect performance of firms. External environment consist of macroeconomic factors like interest rates which plays a crucial role in attraction of investors. Without interest rates stability, domestic and foreign investors will stay away and resources will be diverted elsewhere. Econometric evidence of investment behavior indicates that in addition to conventional factors (past growth of economic activity, real interest rates, and private sector credit), private investment is significantly and negatively influenced by uncertainty and macroeconomic instability.

### **1.1.3 Local perspective of financial performance**

In Rwanda, Musonera and Safari (2008) conducted a study to establish the challenges facing the Rwandan stock exchange. The study only focused on the challenges and opportunities of Rwandan stock market and not on the determinants of financial

performance of firms listed on the stock exchange. According to Musonera and Safari (2008), despite the government efforts, the capital market is not growing at the pace expected. The Rwandan stock exchange faces many challenges such as a low savings rate, a complex tax regime, a small economy and the structure of companies that are family owned and the absence of financial intermediaries, financial advisory services and investment banks. Should the slow development of the stock market persist then the growth and development target for the year 2020 may be difficult to achieve (Musonera & Safari, 2008). The study recommended that the survey should be conducted to know the attitude of the Rwandan financial institutions and the private sector towards investment in the stock exchange. Also, a study to examine the determinants of financial performance of firms listed was also recommended.

A study was also conducted by Muheirwe, Memba and Warren (2013) to assess of the factors affecting the financial Performance of the Cross-Listed Companies in the Rwanda Stock Exchange. . The study however focused on the effect of the level of awareness of the market by the public, the regulation framework and technology on performance of cross-listed companies. The study revealed a need to carry out a related research so as to increase the generalizability of the findings. Also the researcher recommended a study on factors that determine performance of listed companies on the RSE where the relevance of dividend policy and its effect on the listed firms' value was

Wilson (2015) in his study on the challenges of emerging stock market in Africa, emphasized the role of the capital market in the transformation of the Rwanda economy, further stating the importance of the steady increase in capital both for firms and for economic growth. The study concluded that there are still only few listed companies, five in total and a slow growth of the stock market. Also listed company financing decisions were identified involving a wide range of policy issues. A t private, such decisions affect capital structure, corporate governance and profitability of firms. The

researcher therefore recommended a study on effect of capital structure and corporate governance on performance of firms listed.

#### **1.1.4 Rwandan Financial market**

Rwanda is member of East African Community and has trade relationship with free commerce, property and personnel movement with the members. Whatever happens to one as far as development is concerned usually affect the other. They are more or less partners and progress rather than competitors in business. Development programs in the communities' countries often follow the same pattern eg. 2020 development in Rwanda and 2030 program in Kenya. Even the program initiative and content are similar. Like many of their policies, constitution and institution including financial system (Ferris *et al.*, 2009).

A Financial market is where securities are bought and sold at prices governed by the forces of demand and supply. Stock exchanges impose stringent rules, listing requirements, and statutory requirements that are binding on all listed and trading parties. In Kenya, There are more than 50 businesses and companies listed in the Nairobi Stock Exchange, including Sasini Tea and Coffee Ltd., Kenya Airways, Jubilee Insurance, Kenya Commercial Bank Ltd., and Ken Gen Ltd. Most of the businesses in the exchange are in the financial or industrial sectors, though agriculture and other commercial services are also represented. Also listed are treasury bonds issued by the Government of Kenya. Occasionally, there are also privately issued corporate bonds as well. Trading takes place 5 days a week (Monday to Friday) but only between the hours of 10am and 12 noon (Wikipedia, 2014).

The Rwandan financial market is mainly composed of Money markets, Securities markets and Foreign exchange markets. The money markets dominate the Rwandan financial market with 96.5 percent (of which 60.9% is from Treasury bill for the Government) of total outstanding amount. The securities market in Rwanda is

dominated by Government bonds operations. The Rwanda Stock Exchange (RSE) is Rwanda's principal stock exchange. It was founded in January 2011. The RSE is operated under the jurisdiction of Rwanda's Capital Market Authority (CMA), previously known as Capital Markets Advisory Council (CMAC), which in turn reports to the Ministry of Finance and Economic Planning (Logie *et al.* 2008).

The stock exchange's doors opened for trading on 31 January 2011. That day coincided with the first day of trading in the stock of Rwanda's only brewery, Bralirwa, which trades under the symbol: BLR. The Rwanda Stock Exchange replaced the Rwanda Over The Counter Exchange that had been in operation since January 2008, with two companies listed, namely Kenya Commercial Bank Group (KCB) listed on 18 June 2009 and National Media Group (NMG) listed on 2 November 2010. With regard to the stock markets, the Rwanda Stock Exchange (RSE) has only two companies that have been active on RSE with approximately 25 million at the end of June 2013 (Logie *et al.* 2008).

The stock exchange, which is open five days a week, is a member of the African Stock Exchanges Association. The RSE operates in close association with the Nairobi Stock Exchange in Kenya, the Dar es Salaam Stock Exchange in Tanzania and the Uganda Securities Exchange in Uganda. There are plans to integrate the four stock exchanges to form a single East African bourse. As of April 2014, the RSE trades five listed local and East African companies and also carries out trading of three governments and one corporate fixed income instruments. The exchange, which is open five days a week, is a member of the African Stock Exchanges Association (Felician, 2014).

Six Companies are listed at RSE: Bralirwa (brewing and bottling), Kenya Commercial Bank (banking and finance), Nation Media Group (publishing, printing, broadcasting and television), Bank of Kigali (banking and finance), Uchumi Supermarkets (supermarkets) and Equity Group Holding Limited (banking and finance) (Rwanda Stock Exchange book, Feb. 2014)

Kenya Commercial Bank Group and Nation Media Group are primarily listed Nairobi Stock Exchange. They are cross listed on the Rwanda Stock Exchange, the Dar es Salaam Stock Exchange and on the Uganda Securities Exchange. Uchumi Supermarkets is primarily listed on the Nairobi Stock Exchange and is cross listed on the Rwanda Stock Exchange and starting in 2014, on the Uganda Securities Exchange and the Dar es Salaam Stock Exchange. Equity Group Holdings Limited is primarily listed on the Nairobi Stock Exchange (2006). It is crosslisted on the Uganda Securities Exchange (2009) and on the Rwanda Stock Exchange (2015).

The stock market reflects a country's prosperity and prospects. Most developing nations give top priority to the development of a stock exchange and think of it as a symbol that they truly entered the modern age (John, 1993). The Stock market development has a positive effect on economic growth (Nurudeen, 2009). Therefore, the government of Rwanda has a goal to develop the economy by 2020. And there is a need to stimulate availability of long term capital in this regard-capital formation. The government has to encourage participation and growth of the stock market, thereby facilitating the growth, flow, and regulation of the stock market. The government ensures that investors are protected, advises and guides companies seeking capital and provides an important infrastructure and conducive environment for business development. This study will identify factors that determine financial performance of firms listed on Rwanda Stock Exchange.

## **1.2 Statement of the problem**

The government of Rwanda has a goal to develop the economy by 2020 therefore it has to encourage participation and growth of the stock market by facilitating the growth, flow, and regulation of the stock market. The government ensures that investors are protected by providing advises and guidelines for companies seeking capital. Important infrastructures and conducive environment are provided for business development (Mittal, 2009). Rwanda Stock Exchange has listed a number of companies both domestic

and foreign in the near past. With integration of foreign companies, firms would raise as much capital as they desire, and profits would consequently go up. This is however not the case in 2014, as KCB and NMG both foreign companies from Kenya listed in RSE barely traded any shares while domestic companies like BK and Bralirwa listed on the same traded profitably according to Ben (2015).

According to Musonera and Safari (2008) who conducted a study to establish the challenges facing the Rwandan stock exchange, despite the government efforts, the capital market is not growing at the pace expected. The Rwandan stock exchange faces many challenges (Musonera & Safari, 2008). This was also confirmed by Rwanda Stock Exchange report (2015). The market recorded a total turnover of Rwandan Francs 38.54 billion 136.1 million shares and in 970 deals in 2015 compared to the same period for the previous year of 2014, the market recorded a total turnover of Rwandan Francs 46.3 from 135 million shares in 1,542 deals. This translates into a decrease of 16.7 in turnover, and a decrease of 37% in number of transactions, respectively over the same period. From January –December, 2015 the ALSI (all share index) recorded a decrease of 3.8%. From January –December, 2015 the Rwanda Share Index recorded a decrease of 37.5%.

In his study on the challenges of emerging stock market in Africa emphasizing the role of the capital market in the transformation of the Rwanda economy, Wilson (2015) state the importance of the steady increase in capital both for firms and for economic growth. The study concluded that there are still only few listed companies and a slow growth of the stock market. He recommended a study on effect of capital structure and corporate governance on performance of firms listed at the RSE as he concluded that listed company financing decisions were identified involving a wide range of policy issues and such decisions were affecting capital structure, corporate governance and profitability of firms. Also the relevance of dividend policy and its effect on the listed firms at the RSE

were identified to be very important by Muheirwe, Memba and Warren (2013) who conducted a study to assess of the factors affecting the financial Performance of the Cross-Listed Companies in the Rwanda Stock Exchange.

More Studies have been conducted to investigate determinants of financial performance of firms. For example, a study was conducted by Adediran & Alade, (2013) to establish the relationship between dividend policy and corporate profitability, Mwangi, Muathe and Koimbei (2014) investigated the relationship between capital structure and financial performance of non-financial companies listed in the Nairobi Securities Exchange (NSE), Vincent (2011) investigated the effects of corporate governance on financial performance of listed companies in Kenya and Vintila and Nenu (2015) analysed the effect of transparency and disclosure in reporting on financial performance of Bucharest Stock Exchange Listed Companies

The current study hence sought to assess determinants of financial performance of firms listed on the Rwanda Stock Exchange.

### **1.3 Objectives of the study**

#### **1.3.1 General objective**

The general objective of this study was to assess determinants of financial performance of firms listed on the Rwanda Stock Exchange.

#### **1.3.2 Specific objectives**

The study pursued the following specific objectives:

1. To determine the effect of dividend policy on financial performance of firms listed on the Rwanda Stock Exchange
2. To identify the effect of capital structure on financial performance of firms listed on the Rwanda Stock Exchange

3. To evaluate the effect of corporate governance on financial performance of firms listed on the Rwanda Stock Exchange
4. To establish the effect of timely rendition of information on financial performance of firms listed on the Rwanda Stock Exchange

#### **1.4 Research hypotheses**

This study sought to address the following pertinent research hypotheses;

H<sub>01</sub>: Dividend policy does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange.

H<sub>02</sub>: Capital structure does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange.

H<sub>03</sub>: Corporate governance does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange.

H<sub>04</sub>: Timely rendition of information does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange.

#### **1.5 Justification of the study**

The Rwandan stock exchange is not growing at the expected rate despite the government efforts. Since its introduction, there are still only a few listed companies, six in total and there is generally a slow growth of the stock market. It was hence necessary to conduct a study to establish the factors that determine financial performance of firms listed on the Rwanda Stock exchange with a keen interest of recommending policies which will aim to improve the condition of the stock market.

The results of the current study on timely and accurate rendition of information, corporate governance, capital structure, and dividend policy of companies listed on the Rwanda stock exchange help to bring a clear picture of the determinants of financial performance of the firms listed at Rwanda stock exchange. The findings are of help to

policy makers and other agencies that intend to promote development of financial market by unearthing factors that determine financial performance of firms listed on the RSE and consequently the stock market development in Rwanda. The findings of the study are of immense benefits to listed firms and their directors, because they tell about the compliances level of their companies to statutory and regulatory requirement and avoidance of sanctions. They now present them as responsible investible company to the public.

The study is useful to students and future researchers, as it contributes to literature concerning financial market in Rwanda. It enriches literature in financial system solidity and individual company reliable strength. That is information available at the Stock Exchange about any particular company is authentic and data thereby collected is reliable for research purposes. The study is value-added to the existing body of knowledge as it recommends ways for improvement of financial performance. Nevertheless, this study serves as a stepping stone for newer research on financial performance.

### **1.6 Scope of the study**

The focus of this study was to identify determinants of financial performance of listed firms on Rwanda Stock Exchange between 2011 and 2014. The choice of Rwanda was because RSE is a new market. The unit of analysis was the firms listed at the Rwanda stock Market. All the 6 firms were used in the study. The geographical scope of the study was Rwanda in Africa. The time scope was the year 2016.

### **1.7 Limitations**

The study experienced an initial slow response from the respondents. This was mitigated by having constant follow up on phone and physical visits to the respondents' offices by using research assistants. The distance also was a challenges, the researcher had to make several travels from Kenya to Rwanda

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of literature on determinants of financial performance of firms listed on Rwanda Stock Exchange. It starts with the theoretical perspectives; it shows the conceptual framework and then reviews the factors determining financial performance of listed companies.

#### **2.2 Theoretical Framework**

Theory provides an explanation for a class of event. It is a way of binding together a multitude of facts so that one may comprehend them all at once (Kelly, 1955). A theory performs a number of functions. First, it allows us to organize our observations and to deal meaningfully with information that would otherwise be chaotic and useless. As French mathematician Jule-Henri Poincare observed: Science is built up with facts, as a house is with stones, but a collection of facts is more a science than a heap of stones is a house. Second, theory allows us to see relationships among facts and uncover implications that would not otherwise be evident in isolated bits of data. Third, it stimulates inquiry as we search for knowledge about many different and often puzzling aspect of behavior. A theory, then, inspires a research that can be used to verify, disprove or modify that theory. The theories reviewed inform the source of the variables of the study and the interactions between the dependent and independent variables.

##### **2.2.1 Agency theory**

The agency theory explains how best the relationship between agents and principals can be tapped for purpose of governing a corporation to realize its goals. Interest on agency relationship became more prominent with the emergence of the large corporation. There

are entrepreneurs who have a knack for accumulation of capital, and managers who have a surplus of ideas to effectively use that capital. Since the owners of the capital (principals) have neither the requisite expertise nor time to effectively run their enterprises, they hand them over to the agents (managers) for control and day-to-day operations, hence, the separation of ownership from control, and the attendant agency problem. In an agency relationship, principals and agents have clearly defined responsibilities: Principals select and put in place governors (directors and auditors) to ensure an effective governance system is implemented, while agents are responsible for day-to-day operations of the enterprise.

Historically, definitions of corporate governance also took into consideration the relationship between the shareholder and the company, as per “agency theory”, i.e. director-agents acting on behalf of shareholder-principals in overseeing self-serving behaviors of management. However, broader definitions of corporate governance are now attracting greater attention (Solomon and Solomon, 2004). Indeed, effective corporate governance is currently understood as involving a wide number of participants.

The primary participants are management, shareholders and the boards of directors, but other key players whose interests are affected by the corporation are employees, suppliers, customers, partners and the general community. Therefore, corporate governance, understood in these broadening social contexts, ensures that the board of directors is accountable not only to shareholders but also to non-shareholder stakeholders, including those who have a vested interest in seeing that the corporation is well governed. Some corporate governance scholars (Carter and Lorsch, 2004; Leblanc and Gillies, 2005) also argue that at the heart of good corporate governance is not board structure (which receives a lot of attention in the current regulations), but instead board process (especially consideration of how board members work together as a group and

the competencies and behaviors both at the board level and the level of individual directors).

As a result, the current scholarly discourse about the nature of corporate governance has come to reflect this body of research. This separation is however, linked and governed through proper “agency relationship” at various levels, among others “between shareholders and boards of directors, between boards and senior management, between senior and subordinate levels of management” (ISDA, 2002). In such a principal – agent relationship, there is always “inherent potential for conflicts within a firm because the economic incentives faced by the agents are often different from those faced by the principals” (ISPA, 2002).

According to ISDA (2002), all companies are exposed to agency problems, and to some extent develop action plans to deal with them. These include establishing such measures as: “controls on the actions of agents, monitoring the actions of agents, financial incentives to encourage agents to act in interest of the principals, and separation of risk taking functions from control functions” (ISDA, 2002).

The theory is relevant to the study as it informs dividend policy which is one of independent variables. Even if a firm does not have free cash flow, dividend payments can still be useful for the shareholders in order to control the overinvestment problem. Easterbrook (1984) argues that dividends reduce the over investment problem because the payment of dividends increases the frequency with which firms have to go to equity markets in order to raise additional capital.

### **2.2.2 Pecking order theory (Information asymmetry)**

Information asymmetry arises as a result of the separation of ownership and management. First, Myers and Majluf (1984) suggested about this pecking order theory, it started with the assumption of asymmetric information, representing that managers know more than the investors about their companies' prospects, values, risks, and about the characteristics of the firm's return stream or investment opportunities.

Pecking Order theory says that the firms pursue a financing hierarchy due to information costs (Myers and Majluf, 1984). When firms approach the external markets to raise capital, they primarily face information asymmetry costs and transaction costs, those additional costs make external capital more expensive and automatically lead firms to use internal over external funds.

Managers would attempt to issue equity when its market value is higher (Myers & Majluf, 1984). Naturally, the stock price usually falls when a stock issue is announced. That may create equity an expensive source of financing and direct firms to underinvest. Such problems not affect retained earnings. As well, as debt needs fixed interest payments, that is less sensitive to information asymmetries.

Likewise transaction costs also can dictate in a firm's sources of financing. Baskin (1989) indicates in his study that, "borrowing costs can be as low as 1% of the amount raised whereas the costs for issuing equity are anywhere between 4% and 15% of the total amount". Thus, this statement proof that debt can be a favored source of external financing than compared to equity, when the problem of asymmetric information is considered as the most important issue.

Therefore, the pecking order theory is a result of information asymmetries that exist between insiders of the firm and outsiders. And it proposes steps to raise the capital, that

firms meet their capital requirement through internal funds first, then after go for external borrowing and finally equity issuance.

The theory is relevant to the study as it explains capital structure which is one of the independent variables.

### **2.2.3 Stewardship theory**

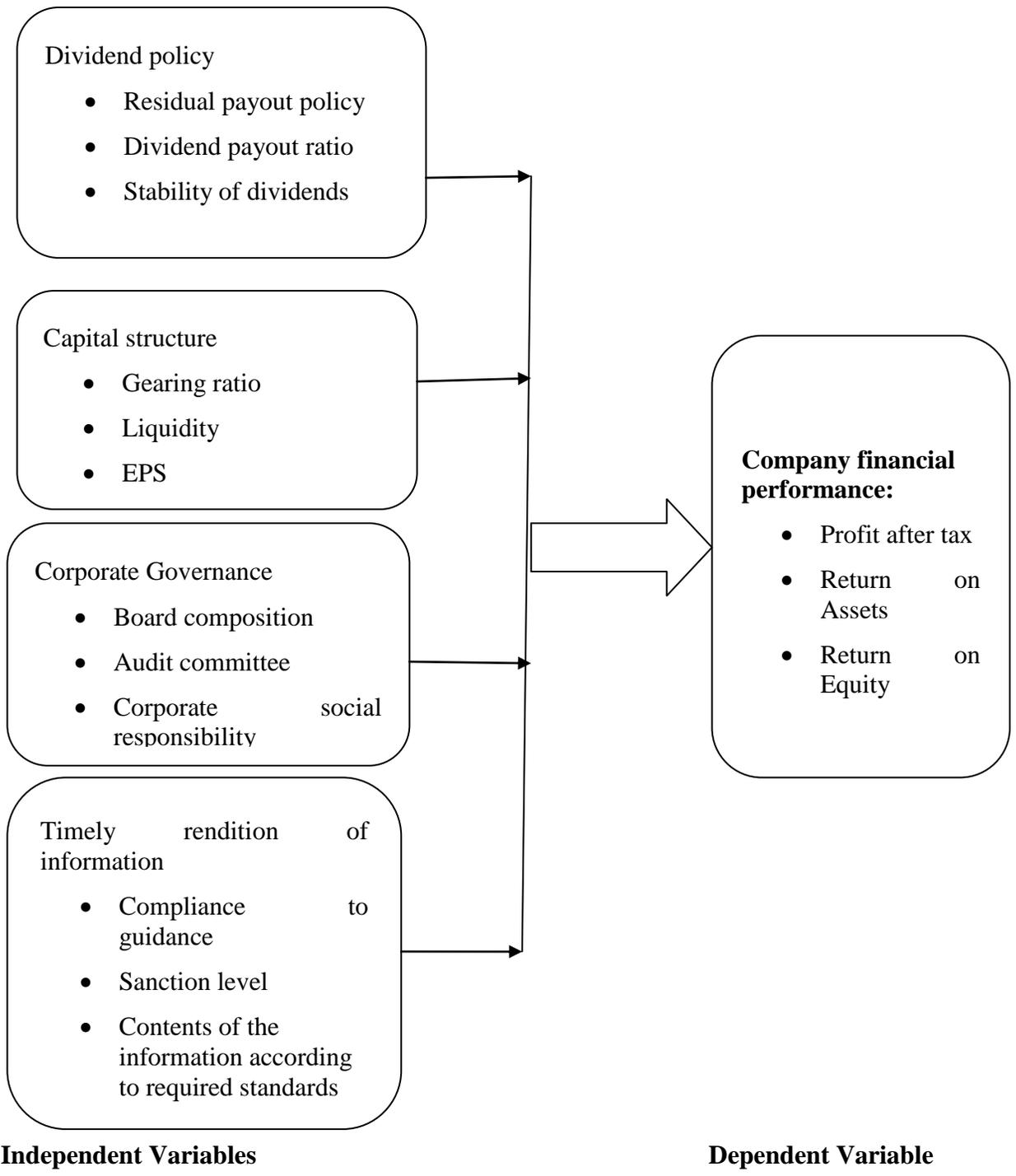
According to Davis et Al. (1997), a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized. In this perspective, stewards are managers working to protect and make profits for the shareholders. Therefore, stewardship theory emphasizes on the role of management being as stewards, integrating their goals as part of organization (Davis et Al., 1997).

The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. The theory recognizes the importance of governance structures that empower the steward and offers maximum autonomy built on trust (Donaldson & Davis, 1991). It stresses on the position of employee to act more autonomously so that the shareholders' returns are maximized. Indeed, this can minimize the costs aimed at monitoring and controlling employee behaviour (Davis et Al., 1997). Daily et Al. (2003) assess that in order to protect their reputations as decision makers in organization, managers are inclined to operate the firm to maximize financial performance as well as shareholders 'profit. In this sense, it is believed that the firm's performance can directly impact perfection of their individual performance.

The theory is relevant to the study as it also explains the role of the corporate governance as stewards on performance of the firm. One of the objectives of the study is to investigate the effect of corporate governance on performance of firms listed on Rwanda stock market and the study will seek to test the relevance of the theory on those Rwanda firms.

### **2.3 Conceptual framework**

When clearly articulated, a conceptual framework has potential usefulness as a tool to assist a researcher to make meaning of subsequent findings. It forms part of the agenda for negotiation to be scrutinized, tested, reviewed and reformed as a result of investigation and it explains the possible connections between the variables (Smyth, 2004). This study was informed by: agency theory (dividend policy), Pecking order theory (capital structure) and stewardship theory (corporate governance).



**Figure 2.1 Conceptual framework**

## **2.4. Review of variables**

### **2.4.1 Dividend policy**

Nissim and Ziv (2001) defines dividend policy as the regulations and guidelines that a company uses to decide to make dividend payments to shareholders. The dividend policy decisions of companies are the primary element of corporate policy. Dividend, which is basically the benefit of shareholders in return for their risk and investment, is determined by different factors in an organization. These factors include financing limitations, investment chances and choices, firm size, pressure from shareholders and regulatory regimes (Nissim and Ziv 2001). Nevertheless, the dividend payout of firm's is not only the source of cash flow to the shareholders but it also offers information relating to firm's current and future performance. So dividend policy is one of factors that affect the performance of corporate organizations.

### **2.4.2 Capital structure**

The Corporate sector growth is crucial to economic development. And the corporate finance pattern of the company is vital importance for the financial well being of companies in any sector. Directly or indirectly, corporate finance decisions affect the various facets of the corporate management, which ultimately determine the wealth of investors. Capital structure includes equity capital and debt capital generally equity capital includes shareholder's fund and reserve of the firm on the other hand debt capital considers preference share capital and other non-current liabilities of the firm. Generally debt to equity ratio is use to analyses the capital structure of the firms here capital structure includes equity and debt capital. Velnampy and Aloy (2012) stated that the term capital structure of an enterprise means combination of equity shares, preference shares and long-term debts. Most of the firms try to keep their capital structure to maximize their profitability and sustainability which means that how much of fund should be maintained in the form of equity and debt capital. Every firm has to pay the

interest or other compensation for their debt capital whether the firm has earned profit or not but in the case of equity capital the firm may pay the dividend to the equity share holders only if the firm has earned profit.

Capital structure generally long term decision and the liquidity position are related with every day operation. The deciding the capital structure is related with board of director and top finance people decision of the firm however liquidity position is depending on the management of the firm. According to Gitman (2003) it is generally believed that the value of a firm is maximised when its cost of capital is minimized. The kind of combination of debt and equity that will minimize the firms cost of capital and hence maximizes the firm's profitability and market value is the optimal capital structure. Poor capital structure decisions can lead to an increased cost of capital thereby lowering the net present value (NPV) of many of the firm's investment projects to the point of making many investment projects unacceptable (known as the underinvestment problem). Effective capital structure decisions will lower the firms overall cost of capital and raise the NPV of investment projects leading to more projects being acceptable to undertake and consequently increasing the overall value of the firm (Gitman, 2003). Unfortunately, financial managers do not have a well-defined formula that for taking decision on optimal capital structure. The effect of foreign ownership on firm performance has been an issue of interest to academics and policy makers. Edim, *et al.* (2014) attempted a theoretical review of the relationship between capital structure and firm's performance. They tried to locate, identify and analyze comments, suggestions, conclusions and recommendations by other researchers and scholars alike on the contentious issue of capital structure and maximization of a firm's performance in the face of systematic risk.

### **2.4.3 Corporate governance**

The history of corporate governance systems is now well documented. According to Gomez (2005), the past one decade or so has however, witnessed significant transformations in corporate governance structures, leading to increased scholarly interest in the role of board of directors in driving corporate performance. Arising from many high profile corporate failures, coupled with generally low corporate profits across the globe, the credibility of the existing corporate governance structures has been put to question. Subsequent research (Shleifer and Vishny, 1997; Shleifer, 2001; Jensen, 2000) has thus, called for an intensified focus on the existing corporate governance structures, and how they ensure accountability and responsibility.

Researchers in corporate governance (Donaldson, 2005; Huse, 2005; Frentrop, 2003) have reported that there is still lack of concurrence on the ideal corporate governance structure that could safeguard shareholders' assets while promoting wealth creation ventures. The corporate governance debate has largely centered on the powers of the Board of Directors vis-à-vis the discretion of top management in decision making processes. The traditional approach to corporate governance has typically ignored the unique influence that firm owners exert on the board, and by extension, the top management, to behave or make decisions in a particular way. The corporate governance framework in its current form is evidently lacking in a monitoring system or contract, aligning the role of the firm owners, board of directors and managers' interests and actions within the wealth creation and welfare motivation of stakeholders.

### **2.4.4 Timely rendition of information**

Financial reporting information helps capital providers make better decisions which results in more efficient functioning of capital markets and lower cost of capital for the economy as whole. Individual entities also enjoy benefits, including improved access to capital markets, favorable effect on public relations, and perhaps lower cost of capital.

The benefits may also include better management decisions because financial information used internally is often based at least partly on information prepared for general purpose financial reporting purposes

People that are given responsibility of pivoting the affairs of companies must give management and financial reports. In Rwanda, the company's act of 2009 has made this reporting compulsory. According to IFRS for SMEs (2009) apply to the general purpose of financial statements and other financial reporting of all profit-oriented entities. General purpose financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, creditors, employees and the public at large. The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions. General purpose financial statements are directed to general financial information needs of a wide range of users who are not in a position to demand reports tailored to meet their particular information needs. General purpose financial statements include those that are presented separately or within another public document such as an annual report or a prospectus.

Other financial reporting comprises information provided outside financial statements that assists in the interpretation of a complete set of financial statements or improves users' ability to make efficient economic decisions. IFRS (2009) for SMES describes notes as an important component of financial statements which contain information in addition to that presented in the statement of financial position, statement of comprehensive income, income statement (if presented), combined statement of income and retained earnings (if presented), statement of changes in equity, and statement of cash flows. Notes provide narrative descriptions or disaggregation of items presented in those statements and information about items that do not qualify for recognition in those statements. The notes shall: present information about the basis of preparation of the financial statements and the specific accounting policies used; disclose the information

required that is not presented elsewhere in the financial statements; and provide information that is not presented elsewhere in the financial statements but is relevant to an understanding of any of them.

In Rwanda, by law the Board of Directors of every company shall, within six (6) months after the company's financial statement date, prepare an annual report on the affairs of the company during the accounting period. Every annual report for a company shall be in writing and be dated. The annual account must comply with the relevant guidelines issues by Exchange from time to time (Rwanda stock exchange, 2013). Audited annual and consolidated accounts prepared on this basis of true and fair view of the assets and liabilities and financial position and profit and losses must be disclosed in the information memorandum.

#### **2.4.5 Financial performance**

Financial performance is at the heart of the managerial function of an organization' (Samuel 1989). Analysis of corporate performance is mainly concerned with the development of a modeling methodology to help in the diagnosis of past performance and thus provide a framework for evaluating the effect of changes in operating parameters as a guide for future planning. The performance of an Organization is measured by the choice of the management form of wealth to be held. If the performance of an organization is good there will be little or no disagreement between the management and the shareholders (Ghosh and Subrata, 2006).

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues and expand its operations (Copisarow, 2000). Financial performance can be measured in many different ways, but all these ways should be aggregated. Revenue from operations, operating income or cash flow from operations can be used as well as total unit sales. According to Demsetz and Lehn (1985), financial ratios from financial statements are a good source of data to measure

financial performance: Return on Assets (ROA) measures the profitability of the firms and calculated as  $\text{Return on assets} = \frac{\text{operating income}}{\text{total}}$ , Return on Equity (ROE) is used to calculate a firm's profitability by revealing how much profit a firm generates with money invested by shareholders and its formula is:  $\text{Return on equity} = \frac{\text{net profit attributed to shareholders}}{\text{total shareholders}}$ .

Financial performance can also be measured in terms of net earnings which are divided into two parts, that is, retained earnings and dividends. The retained earnings of the business may be reinvested and treated as a source of long-term funds. The dividend should be distributed to the shareholders in order to maximize their wealth as they have invested their money in the expectation of being made better off financially.

## **2.5 Empirical Literature Review**

This section discusses past studies according to the objectives of the study. The section has reviewed literature on dividend policy, capital structure, corporate governance and timely rendition of information on financial performance. According to Kothari (2004), the review of similar studies is used along with empirical data collected.

Literature review allows a researcher to place his or her research into an intellectual and historical context. In other words, literature review helps the author declare why their research matters (Kaifeng & Miller, 2008).

### **2.5.1 Dividend policy**

Empirical studies show that firms in developing Countries smooth on their income and therefore, their dividends (Adediran & Alade, 2013). The pattern of corporate dividend policies not only varies over time but also across countries, especially between developed, developing and emerging Capital markets. If the value of a company is the function of its dividend payments, dividend policy will affect directly the firm's cost of capital.

A difficult decision for both public and private limited companies is to determine the appropriate level of dividend to be paid to shareholders, and to decide whether or not to offer non-cash alternatives such as scrip dividends according to Davidson (1990). Agrawal and Jayaraman (2004) observed that Dividend payments and leverage policy are substitute mechanism for controlling the agency cost of free cash flow hence, improves performance. If a firm's policy is to pay dividend each year end to shareholders, the level of activity in the organization will increase to obtain more income and have excess retained earnings to meet the standard set.

Samuel and Edward (2010) examined the relationship between dividend policy and performance of banks in Ghana. The study used panel data constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. These financial statements were obtained from the Banking Supervision department of Bank of Ghana. STATA was used for the data analysis. From the results of the study, the average dividend paid by banks over the study period was 24.65%. Also, it is apparent that banks that pay dividend increase their performance. Generally, the result was in tandem with earlier studies that dividend policy had an effect on firm value.

Adediran and Alade (2013) conducted a study to establish the relationship between dividend policy and corporate profitability, Investment and Earning Per Shares. Data for the study were extracted from annual report and accounts of twenty five quoted companies in Nigeria. These data were subjected to regression analysis, using e-view software and the findings indicated that; there was a significant positive relationship between dividend policies of organizations and profitability, there was also a significant positive relationship between dividend policy and investments and there was a significant positive relationship between dividend policy and Earnings Per Share. It was recommended that Organizations should ensure that they have a good and robust

dividend policy in place because it will enhance their profitability and attract investments to the organizations.

Shisia *et al.* (2014) found out the effect of dividend policy on financial performance of companies quoted at the Nairobi Securities Exchange (NSE). The study sourced data from secondary sources. Random sampling technique was adopted in this study. A sample of 30 listed companies at NSE was used. A regression relationship was generated to show the extent to which each independent variable influenced the dependent variable. A correlation analysis was also performed to find how the variables are related to each other in the model. The study concluded that there is a significant relationship between dividend pay-out ratio and dividend per share. It further indicated that the relationship is not only significant but also direct such that a unit change in dividend per share is followed by a unit positive change in retained earnings. The study also found out that the performance of returns on equity is higher than the performance of all the other variables as given in the trends. The trends illustrated that returns on equity recorded a constant performance while that of dividend pay-out ratio recorded a decreasing trend though that of dividend per share showed more upwards and downwards trends in most cases.

A survey of the extant literature reveal that the key determinants of dividend decisions include liquidity, after tax earnings of the firm, cash flow considerations, future earnings, past dividend practices, returns on investment, legal requirements, growth prospects, inflation and interest rates. According to Brigham (1995), an increase in dividend signals management's confidence that future earnings will be strong enough to support new and higher dividend and vice versa. This view is corroborated by Foong *et al.* (2007) when they noted that there is evidence to support the view that investors respond to dividend changes. For example, Fama and Babiak (1968) found a time series relation between annual dividends and earnings that is consistent with the view that

dividend paying firms increase their dividend only when management is relatively confident that their higher payments can be maintained.

Firms in emerging markets are subjected to more financial constraints than their counterparts in developed markets Glen and Singh (2004); they often have less information efficiency, more volatility, and are smaller market capitalization Fuss, 2000; Bekaert and Harvey, (2003) which may have difference influence on their dividend policy. As an example, in Adaoglu (2000) study, it showed that the emerging market firms followed unstable cash dividend policies and the main factor that determines the amount of cash dividends was the earnings of the corporation in that year. Aivazian and Booth (2003) also found out that companies in developing countries were shown to be less reluctant to change its dividends than their United States counterparts. A very important financial policy, the dividend policy remains one of the most puzzling issues in corporate finance (Baker *et al.* 2002). These differences of the particular markets themselves raised the question about the extent to which the competing dividend policy theories could apply to such markets, in particular to Rwanda.

Charles *et al.* (2014) conducted a research on finance performance. The objective of the study was to ascertaining the relationship between dividend policy and firm's profitability, Investment and Earning Per Shares. Data for the study were extracted from annual report and accounts of Nine (9) quoted manufacturing companies in Kenya. These data were subjected to regression analysis, using e-view software and the findings indicate that; there was a significant positive relationship between dividend policies of organizations and firm's profitability, there was also a significant positive relationship between dividend policy and investments and there is a significant positive relationship between dividend policy and earnings per share. It was recommended that Organizations should ensure that they have a good and robust dividend policy in place because it will enhance their profitability and attract investments to the organizations.

Timothy and Ochuodho (2013) studied the relationship between dividend payout and firm performance: a study of listed companies in Kenya. The findings indicated that dividend payout was a major factor affecting firm performance. Their relationship was also strong and positive. This therefore showed that dividend policy was relevant. It can be concluded, based on the findings of this research that dividend policy is relevant and that managers should devote adequate time in designing a dividend policy that will enhance firm performance and therefore shareholder value.

### **2.5.2 Capital structure**

Sritharan (2014) employed a pooled ordinary least square regression to analyze the determinants of the capital structure of 28 Listed Banks Finance & Insurance Companies in Colombo Stock Exchange for the period of 2008-2012 and further evidence of the capital structure theories. The results reflected the intermediate nature of the Sri Lankan corporate environment. The study suggested that some of the insights from modern finance theory of capital structure were moveable to Sri Lanka in that certain firm-specific factors that were relevant for explaining capital structure in developed economies are also relevant in Sri Lanka. Statistical results show that tangibility, profitability, growth, and liquidity are negatively related to the debt ratio, while size is related positively. Non-debt tax shield is not significantly related to the debt ratio. Furthermore, this results consistent with the forecasts of the trade-off theory, pecking order theory, and agency theory, and provide some help in understanding of financing behaviour of Sri Lankan firms. Also, this study explored the determinants of capital structure of Banks Finance & Insurance Companies of Sri Lankan firms and these findings will help to decision makers and policy makers to make optimal decisions.

According to Gorg and Greenaway (2004), the main challenging question in the international business strategy is the outcome gained from foreign ownership of firms. It is mainly accepted that foreign ownership plays a crucial role in firm performance, particularly in developing and transitional economies. Researchers (Aydin *et al.* 2007)

have concluded that, on average, multi-national enterprises have performed better than the domestically owned firms. According to a study by Vithessonthi's and Tongurai's (2015) recent research leads to the conclusion that leverage has a negative relationship with firm performance, but they also found moderating effects on their result.

Mwangi and Murigu (2015) conducted a study to establish the factors that affect the profitability of general insurers in Kenya. The study employed multiple linear regressions, with return on assets as the dependent variable, and considered all the general insurance companies in Kenya for the period 2009-2012. The study findings indicated that profitability was positively related to leverage, equity capital, management competence index and negatively related to size and ownership structure.

Kamau and Bosire (2015) conducted a study to assess the factors influencing financial performance of animal feeds' manufacturing firms in Nakuru town, Kenya. It examined the influence of working capital, firm size, and capital structure on financial performance of these firms. It was established that the three elements positively and significantly influenced financial performance of the firms.

Mwangi *et al.* (2014) investigated the relationship between capital structure and performance of non-financial companies listed in the Nairobi Securities Exchange (NSE), Kenya. The study employed an explanatory non- experimental research design. A census of 42 non-financial companies listed in the Nairobi Securities Exchange, Kenya was taken. The study used secondary panel data contained in the annual reports and financial statements of listed non-financial companies. The data were extracted from the Nairobi Securities Exchange hand books for the period 2006-2012. The study applied panel data models (random effects). Feasible Generalised Least Square (FGLS) regression results revealed that financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE). The study recommended that managers of listed non-financial companies should reduce the reliance on long term debt as a source of finance.

Velnampy and Vickneswaran, (2014) examined the significant impact of capital structure (CS) and liquidity position (LP) on profitability and identify the relationship between CS, LP and profitability of listed telecommunication firms in Colombo Stock Exchange (CSE) from the financial year 2008 to 2012. CS is vital in determining the return on equity (ROE). There are number of studies in the field of CS and profitability also those studies reveal different results. Regression and Correlation analysis were performed in this study; regression results revealed that there is no significant impact of capital structure and liquidity position on the profitability , however Dialog Axiata PLC's capital structure and liquidity position have a significant impact on its profitability. Correlation results confirmed that there is no significant relationship between listed telecommunication firms' capital structure, liquidity position and profitability but capital structure is negatively correlated with its profitability. Finally as a researcher suggested that Dialog Axiata PLC should heavily focus on its capital structure and liquidity position to enhance its profitability, on the other hand Sri Lanka Telecom should give consideration on other factors which can influence or impact its profitability other than capital structure and liquidity position in the future.

### **2.5.3 Corporate governance**

The pertinent literature on corporate governance pays much attention to the issue of shareholder identity (Shleifer and Vishny, 1997; Welch, 2000; Xu and Wang, 1997). The cited authors argue that the objective functions and the costs of exercising control over managers vary substantially for different types of owners. The implication is that, it is important, not only how much equity a shareholder owns, but also who this shareholder is, that is, a private person, manager, financial institution, non-financial institution enterprise, multi-national corporation or government.

Vincent (2011) investigated the effects of ownership structure on performance of listed companies in Kenya using agency theory as an analytical framework. Ownership structure was operationalized in terms of ownership concentration (percentage of shares

owned by the top five shareholders) and ownership identity (actual identity of shareholders). Measures of performance were return on assets, return on equity and dividend yield. Forty two (out of fifty four) listed companies were studied using both primary and secondary data. Using Pearson's product moment correlation and logistic regression, the study found that ownership concentration and government ownership have significant negative relationships with firm performance. On the other hand, foreign ownership, diffuse ownership, corporation ownership, and manager ownership were found to have significant positive relationships with firm performance.

Kimie and Pascal (2011) tested two agency-based hypotheses regarding the effect of ownership concentration on dividend policy using a large sample of Japanese firms. Level regressions associating payout rates to ownership concentration were run. Different measures of payout were used to ensure the robustness of findings. Endogeneity of ownership was taken into account. The choice of instruments was carefully motivated and their statistical power and exogeneity were checked. How ownership concentration affected the propensity to increase dividends following changes in variables correlated with free cash flows was also examined.

The results were consistent with rent extraction by large shareholders. Ownership concentration was associated with significantly lower dividends in proportion to earnings as well as relative to book equity. An endogenous relation between ownership concentration and dividend payout was established, but the results are not statistically different. Firms with concentrated ownership were also less likely to increase dividends when earnings increase or when debt decreases. Large shareholders did not appear to use dividend policy to remove excess cash and impose greater financial discipline on managers. Instead, the results underline the conflicts of interest between majority and minority shareholders. The endogeneity of ownership was controlled for using firm age and the industry's average ownership concentration as instruments. The effect of

ownership concentration on dividend changes following changes in proxies for free cash flows was also analyzed.

A study was conducted by Nikolaus (2015) to examine the determinants of firm performance of Indonesian and Dutch firms over the period of 2009-2013. The results indicated that that leverage is a strong predictor of Tobin's Q in both countries. Ownership concentration lead to differing results; in Indonesia, a higher concentration seems to improve performance. The Dutch results however suggest a negative relationship between concentration and financial performance when compared to firms with a dispersed ownership.

Kungu *et al.* (2015) conducted a study to analyze the factors affecting the performance of 41 non-financial companies listed on the Nairobi Securities Exchange (NSE) using panel data over the period 2003 to 2013. A Hausman test results suggested the application of a random effects model for ROA and a fixed effects model for ROE. The empirical results of the estimation of both ROA and ROE show that corporate governance was statistically significant in determining the performance of firms and it had the expected sign (Positive). The leverage of the firm also had the expected negative sign and was statistically significant in explaining the performance of companies. Liquidity was however found to be statistically insignificant in determining the performance of these firms.

#### **2.5.4 Timely rendition of information**

According to Weetman (1999) financial reporting is an essential component in the process of communication between a business and its stakeholders. The importance of communication increases as organizations become larger and more complex. Reporting management and financial information to external stakeholders not involved in the day-to-day management of the business requires a carefully balanced process of extracting the key features while preserving the essential core information. The participants in the

communication process cover a range of expertise and educational background, so far as accounting is concerned.

Weetman (1999) emphasizes that the range begins with the preparers of financial statements, who may have special training in accounting techniques, but ends with those who may be professional investors, private investors, investment advisers, bankers, employee representatives, customers, suppliers and journalists.

A study was conducted by Vintila and Nenu (2015) to analyse the effect of transparency and disclosure in reporting on financial performance of Bucharest Stock Exchange Listed Companies. The findings of the study indicated that in terms of leverage a negative relationship was revealed. At the same time, the relationship regarding transparency and disclosure in reporting was not statistically validated.

#### **2.5.5 Financial performance**

Joshua and Vera (2013) examined the effect of corporate governance on firms' dividend payout policy in sub-Saharan Africa. The study also aimed to examine how dividend payout influenced corporate governance. Using a sample made up 27 Ghanaian firms, 177 Nigerian firms, 51 Kenyan firms, and 270 South African firms covering the period 1997-2006, the paper employed a simultaneous panel regression model in its estimation. The results showed that board composition and board size exhibit significantly positive relationship with dividend payout in Kenya and Ghana, respectively.

Institutional ownership positively influenced dividend payout among South African and Kenyan firms. In the case of Nigeria, all the corporate governance measures showed significantly negative effects on dividend payout. The findings clearly suggested that, with respect to South Africa, Kenya and Ghana, good corporate governance structures lead to high-dividend payout, probably due to easy access to finance and low cost of external finance. However, in Nigeria, improving the governance structures may be associated with high-earnings retention or low-dividend payment in order to reduce cost

of external finance. The author found in the case of Ghana that, dividend payout positively affected board composition, suggesting that Ghanaian firms with high-payout tend to adopt good corporate governance structures in order to ensure protection of shareholder interest. The findings of this study certainly had important policy implications. The study contributed to the corporate governance literature by looking at the importance of corporate governance in influencing firms' dividend behavior in selected African countries.

Uwalomwa *et al.* (2012) investigated the relationship between the financial performance and dividend payout among listed firms' in Nigeria. Authors also looked at the relationship between ownership structure, size of firms and the dividend payouts. The annual reports for the period 2006-2010 were utilized as the main source of data collection for the 50 sampled firms. The regression analysis method was employed as a statistical technique for analyzing the data collected. They found that there was a significant positive association between the performance of firms and the dividend payout of the sampled firms in Nigeria. The study also revealed that ownership structure and firm's size has a significant impact of the dividend payout of firms too.

Vincent (2011) investigated the effects of ownership structure on performance of listed companies in Kenya using agency theory as an analytical framework. Ownership structure was operationalized in terms of ownership concentration (percentage of shares owned by the top five shareholders) and ownership identity (actual identity of shareholders). Measures of performance were return on assets, return on equity and dividend yield. Forty two (out of fifty four) listed companies were studied using both primary and secondary data. Using Pearson's product moment correlation and logistic regression, the study found that ownership concentration and government ownership have significant negative relationships with firm performance. On the other hand, foreign ownership, diffuse ownership, corporation ownership, and manager ownership were found to have significant positive relationship with firm performance.

## **2.6 Critique of Existing Literature**

The reviewed literature on the determinants of financial performance yielded mixed results. Most of the reviewed studies however did not look at the effect of capital structure, timely rendition of information, dividend payout policy and corporate governance on financial in one study. The studies looked at the variables isolation. The review of literature indicated a positive relationship between dividend policy and financial performance of firms as revealed by studies by Samuel & Edward (2010), Adediran & Alade, (2013), Shisia, and Sirma & Maundu (2014) . On capital structure, different results on its effect on financial performance were obtained, a study by Mwangi, Muathe and Koimbei (2014) found that financial leverage had a statistically significant negative association with performance while a study by Velnampy & Vickneswaran, (2014) found out that there is no significant impact of capital structure and liquidity position on the profitability. Vincent (2011) indicated that ownership concentration and government ownership have significant negative relationships with firm performance. On the other hand, foreign ownership, diffuse ownership, corporation ownership, and manager ownership were found to have significant positive relationships with firm performance. The current study sought to use all the variables and investigate their effect on financial performance of firms listed at Rwanda stock exchange in order to achieve a comprehensive analysis.

## **2.7 Research gaps**

The review of literature indicated that conceptual and contextual research gaps existed. Conceptual research gaps existed because the reviewed studies used either one or two of the variables under the current study but not all the four variables in the same study. An example is the study conducted by Mwangi *et al.* (2014) which used Capital structure only, a study by Vincent (2011) which used corporate governance only, a study by Uwalomwa *et al.* (2012) which used dividend policy only. Conflicting results on the effect of some of the variables used in the current study were also seen. For example a

study by Vincent (2011) found that ownership concentration and government ownership have significant negative relationships with firm performance while a study by Sritharan and Vinasithamby (2014) found otherwise. The review also indicated existence of contextual research gaps because the reviewed studies were conducted in a different context as compared to the current study. A study was conducted by Nikolaus (2015) to examine the determinants of firm performance of Indonesian and Dutch firms over the period of 2009-2013. The study however focused in Netherlands. Kungu *et al.* (2015) conducted a study to analyze the factors affecting the performance of 41 non-financial companies listed on the Nairobi Securities Exchange (NSE) using panel data over the period 2003 to 2013. The study used panel data and looked at Nairobi Securities exchange. A study was conducted by Vintila and Nenu (2015) to analyse the determinants of corporate financial performance of Bucharest Stock Exchange Listed Companies and it presented a contextual research gap because it was conducted in Bucharest.

Furthermore, Mwangi and Murigu (2015) conducted a study to establish the factors that affect the profitability of general insurers in Kenya and the study presented a contextual research gap since it focused on insurance. In Rwanda, Musonera and Safari (2008) conducted a study to establish the challenges facing the Rwandan stock exchange. The study only focused on the challenges and opportunities of Rwandan stock market and not on the determinants of financial performance of firms listed on the stock exchange. A study was also conducted by Muheirwe *et al.* (2013) to assess of the factors affecting the financial Performance of the Cross-Listed Companies in the Rwanda Stock Exchange. The study however focused on the effect of the level of awareness of the market by the public, the regulation framework and technology on performance of cross-listed companies while the current study focused on dividend policy, capital structure, corporate governance and timely rendition of information.

## **2.8 Summary**

The above chapter reviews the various theories that explain the independent and dependent variables of the study. The reviewed theories are then critiqued for relevance to specific variables. The study is hinged on the agency theory, shareholder theory, the stakeholder theory and the stewardship theory. The agency theory helps to clarify the relationship between the agent (Managers of a business) who form the corporate governance and the principals (Shareholders) and the impact of the relationship on financial performance of the firm, the Shareholder theory helps to outline the role of the managers in maximizing shareholders wealth and in so doing; it informs the dependent variable which is financial performance, the stakeholder theory explains the role of corporate governance (which is one of the independent variables) in defining the purpose of the firm beyond the shareholders up to the stakeholders who also affect the performance of the firm, the Stewardship theory explains the role of the corporate governance as stewards on performance of the firm. Empirical literature on both independent and dependent variables was also reviewed. It is from this review that research gaps were highlighted.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design, the population of the study, data collection methods, measurement of variables, the validity and reliability test, data analysis and anticipated limitations of the study.

#### **3.2 Research design**

According to Cooper and Schindler (2007) research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The research design was descriptive survey design. Descriptive design was used because it focuses on complex analysis to bring out the correlation of variables. Causal relationship sought to establish how one variable affects changes in another. This was to focus on understanding, explaining, predicting and controlling relationships between variables. This was consistent with Olusola *et al* (2013) who explains that a descriptive design is described as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals and is appropriate as it answers research questions who, what, where, when and how is the problem. A descriptive research design was well suited for the study as it aimed to answer the 'what' questions concerning the factors influencing financial performance of the firms listed at Rwanda stock market.

### **3.3 Target Population**

The target population for this study was the firms listed at Rwanda Stock Exchange (RSE) as at the year 2014. By the end of the year 2014, there were 6 firms listed at the Rwanda stock exchange. The target population was 21,051 employees of the 6 firms.

### **3.4. Sampling Frame**

The sampling frame of the survey of the six firms listed at Rwanda Stock Exchange was management staff. The listed firms will be easy to collect data from as they are licensed and thus can be reached by ease through the contact information provided to CMA.

### **3.5. Sample and sampling technique**

The unit of analysis was the firms listed at the Rwanda stock Exchange. At this level, all the 6 firms were used in the study. This is a census approach.

Generally, the larger the sample, the more likely the scores on the variables will be representative of the population scores. However researchers have developed a rule of thumb in determining sample size. For example, Gall *et al.* (2007) recommends a minimum number of 15 in experimental research, 30 in correlational research and a minimum of 100 in survey research. In this study, the following formula was used to determine the sample size (Mugenda & Mugenda, 2003).

$$N = \frac{Z^2 pq}{d^2}$$

Where:

**N** = the desired sample size (if the target population is greater than 10,000)

**P** = the proportion in the target population estimated to have characteristics being measured. This is placed at 50% (0.5).

$q = (1-p)$ , that is the proportion in the target population estimated to have characteristics being measured,  $(1-0.5) = 0.5$

$d$  = margin of error

$Z$  = the standard normal deviate at the required confidence level.

In this study, this was placed at 95% confidence interval. Since there was no estimate available of the proportion in the target population, the target proportion that is assumed to have the characteristics of interest (population) will be placed at 50% that is  $p = 0.5$  (Kothari, 2004).

This proportion was based on personal judgment as proposed by among others (Kothari, 1990; Fisher, 1983) and this enabled the researcher to trade-off between cost and benefit of large and small samples in research. The selected margin of error was 5%. According to Mugenda and Mugenda (2003) the following formula for determining sample size as mentioned earlier is recommended;

$$n = \frac{Z^2 pq}{d^2}$$

$$n = \frac{1.96^2(0.5)(0.5)}{0.05^2}$$
$$= 384$$

$n = 384$  sample size for target population greater than 10,000

Since this study had a respondent's population greater than 10, 000, the sample size was 384.

The study purposively sampled the calculated sample size from the six companies. The sample size distribution is as in Table 3.1.

**Table 3.1: Sample size**

<b>COMPANIES</b>	<b>Target population</b>	<b>Sample size proportion</b>	<b>Sample size</b>
Bralirwa	1,031	(1031/21051)*384	19
Kenya Commercial Bank	7,500	(75001/21051)*384	137
Nation Media Group	1020	(1020/21051)*384	19
Bank of Kigali	1000	(1000/21051)*384	18
UCHU	4500	(4500/21051)*384	82
Equity	6000	(6000/21051)*384	109
<b>TOTAL</b>	<b>21,051</b>	<b>(21051/21051)*384</b>	<b>384</b>

### **3.6 Data collection Methods and instruments**

Data collection refers to the process of gathering raw and unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Gall, Gall and Borg, 2007). The study used both primary and secondary data.

#### **3.6.1 Primary data**

The study used quantitative primary data. Primary data was obtained from questionnaires. The study obtained primary data on dividend policy, capital structure, corporate governance and timely rendition of information. The questionnaire used was on a 5 point likert scale. (AppendixI). Drop and pick later method was used.

#### **3.6.2 Secondary data**

Secondary data on capital structure (leverage), dividend policy (EPS), corporate governance (Board size), ROA and ROE was also gathered from the financial statements

and annual reports of the companies. The secondary data was obtained from annual reports of the firms, Rwanda stock exchange reports and financial statements of the 6 firms. The secondary data collected was in panel form. The secondary data was extracted from the financial statements and annual reports of the listed firms. The secondary data collection sheet is as attached in Appendix III.

### **3.7 Pilot study**

To check the validity and reliability of the questionnaires in gathering the data required for purpose of the study, pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis and Thornhill, 2007). A deliberate attempt was made to ensure that all necessary firms' departments and staffs were included. Hence the respondents were deliberately enlarged to 20 although the rule of the thumb is that 1% of the sample (384) is enough.

#### **3.7.1 Validity Tests**

The study relied on instruments developed in other related studies as well as concepts generated from a broad range of appropriate literature. Content validity is based on the extent to which a measurement reflects the specific intended domain of content. This study used content validity to examine whether the content of the research instrument covers representative sample of construct domain to be measured.

The researcher used professional or experts in the strategy field to assess the concept the instrument is trying to measure and also determine whether the set of items or checklist accurately represents the concepts under the study. According to Patton (2002), construct validity seeks agreement between a theoretical concept and a specific measuring device or procedure. Construct validity can be broken into two subcategories: Convergent validity and discriminate validity. Convergent validity is the actual general

agreement among ratings, gathered independently for one another, where measures should be theoretically related. Discriminate validity is the lack of a relationship among measures which theoretically should not be related.

To understand whether this research had construct validity, the researcher followed the following steps. First the theoretical relationships were specified. Second the empirical relationships between the measures of the concepts were examined. Third, the empirical evidence was interpreted in terms of how it clarified the construct validity of the particular measure to be tested.

### **3.7.2 Reliability Test**

Two methods of testing reliability were used in this study: test for equivalence and internal consistency test. Test of equivalence was ensured through questionnaire pretesting with a sample of technically equivalent respondents not participating in the study. Internal consistency of the research instrument used Cronbach's Alpha. Cronbach's Alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003). According to Bryman and Cramer (2005), generally reliability of 0.7 to 1.0 is considered acceptable. For this study an alpha coefficient of 0.7 and above was considered reliable. Reliability was further considered through drawing literature in only tested researches.

### **3.8 Data analysis and presentation**

Descriptive statistics such as, mean and frequencies was used to perform data analysis. The mean scores were used to rate the factors in order of their importance. SPSS was used to produce frequencies, descriptive and inferential statistics which were used to derive conclusions and generalizations regarding the population. The particular descriptive statistics was frequencies, mean scores and standard deviation. The particular inferential statistic was regression and correlation analysis. The analysis of variance

(ANOVA) was checked to reveal the overall model significance. In particular, the calculated F statistic was compared with the tabulated F statistic. A critical p value of 0.05 was also used to determine whether the overall model will be significant or not. The individual regression coefficients was checked to see whether the independent variables significantly affected the financial performance. A critical p value of 0.05 was also used to determine whether the individual variables are significant or not.

A multiple linear regression model was used to link the independent variables to the dependent variable as follows:

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

Where:

Y= Financial performance

X<sub>1</sub>= Dividend policy (DP)

X<sub>2</sub>= Capital structure (CS)

X<sub>3</sub>= Corporate governance (CG)

X<sub>4</sub>= Timely rendition of Information (TRI)

B<sub>0</sub>= constant

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub>, β<sub>4</sub> = are regression coefficients to be estimated

e= stochastic term

### 3.9 Variable measurement

**Table 3.2. Variable Measurement**

Variable name	Type	Measurement
Financial performance	Dependent	ROA ROE Profit after tax
Dividend Policy	Independent	Stability
Capital structure	Independent	Debt ratio (Total debt /Total asset)
Corporate governance	Independent	Number of board members
Timely rendition of information	Independent	Sanction level/contents

Table 3.3 shows the statistical test used to test the hypothesis. They include t-test and F-test.

**Table 3.3 statistical test for the hypothesis**

S/N	Hypothesis to be tested	Test statistics used	Decision at 5% level of significance
H1	<p>H<sub>0</sub>: Dividend policy does not affect financial performance</p> <p>H<sub>1</sub>: Dividend policy affects financial performance. OR  <math>H_0 : \beta_1 = 0</math>  <math>H_1 : \beta_2 \neq 0</math></p>	T-test	Reject HO if P-value is greater i.e p-value>0.05
H2	<p>H<sub>0</sub>: Capital structure does not affect financial performance</p> <p>H<sub>1</sub>: Capital structures affect financial performance. OR  <math>H_0 : \beta_1 = 0</math>  <math>H_1 : \beta_2 \neq 0</math></p>	T-test	Reject HO if P-value is greater i.e p-value>0.05
H3	<p>H<sub>0</sub>: Corporate Governance does not affect financial performance</p> <p>H<sub>1</sub>: Corporate Governance affects financial performance. OR  <math>H_0 : \beta_1 = 0</math>  <math>H_1 : \beta_2 \neq 0</math></p>	T-test	Reject HO if P-value is greater i.e p-value>0.05
H4	<p>H<sub>0</sub>: Timely Rendition does not affect financial performance</p> <p>H<sub>1</sub>: Timely Rendition affects financial performance. OR  <math>H_0 : \beta_1 = 0</math>  <math>H_1 : \beta_2 \neq 0</math></p>	T-test	Reject HO if P-value is greater i.e p-value>0.05

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<b>H5</b>	<p><math>H_0</math>: Dividend policy, Capital structure, corporate governance, Timely Rendition, does not affect financial performance</p> <p><math>H_1</math>: Timely Rendition affects financial performance. OR  <math>H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0</math>  <math>H_1 : \text{Atleast one } \beta_i \neq 0</math></p>	F-test	Reject $H_0$ if P-value is greater i.e p-value > 0.05
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## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter provides the presentation of the findings and discussions. The findings are presented in line with the study objectives. Analysis of descriptive statistics and inferential statistics was conducted and the results are presented in form of tables and figures.

#### 4.2 Primary data analysis

##### 4.2.1 Response Rate

The number of questionnaires that were administered was 384. A total of 271 questionnaires were properly filled and returned. The results for the response rate are as presented in Table 4.1.

**Table 4.1: Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Returned	271	70.50
Unreturned	113	29.50
<b>Total</b>	<b>384</b>	<b>100%</b>

The results in Table 4.1 indicated an overall successful response rate of 70.50%. According to Mugenda and Mugenda (2003) and also Kothari (2004) a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good, 70% is very

good while above 80% is excellent. Based on these assertions from renowned scholars, 70.50% response rate is very good for the study.

#### 4.2.2. Pilot Results

The reliability of an instrument refers to its ability to produce consistent and stable measurements. Reliability of this instrument was evaluated through Cronbach Alpha which measures the internal consistency. Cronbach Alpha value is widely used to verify the reliability of the construct. The results are presented in Table 4.2.

**Table 4.2: Pilot Results**

<b>Variable</b>	<b><math>\alpha</math>=Alpha</b>	<b>Comment</b>
Dividend policy	0.702	Reliable
Capital structure	0.730	Reliable
Corporate governance	0.701	Reliable
Timely rendition	0.706	Reliable
Financial performance	0.924	Reliable

The findings on Table 4.2 indicated that dividend policy, capital structure, corporate governance, timely rendition of information and financial performance had Cronbach alpha of 0.702, 0.730, 0.701, 0.706 and 0.924 respectively. All variables depicted that the value of Cronbach's Alpha are above value of 0.7 thus the study was reliable (Kothari, 2004). This represented high level of reliability and on this basis it was supposed that scales used in this study was reliable to capture the variables. Bagozzi (1994) explains that reliability can be seen from two sides: reliability (the extent of accuracy) and unreliability (the extent of inaccuracy). The most common reliability coefficient is Cronbach's alpha which estimates internal consistency by determining how all items on a test relate to all other items and to the total test- internal coherence of

data. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test

### 4.2.3 Multicollinearity Test

Multicollinearity in the study was tested using Variance Inflation Factor (VIF). A VIF of more than 10 ( $VIF \geq 10$ ) indicate a problem of multicollinearity. According to Montgomery (2001) the cut off thresholds of 10 and above indicate the existence of multicollinearity while tolerance statistic values below 0.1 indicate a serious problem while those below 0.2 indicate a potential problem. The results in table 4.3 indicate that the VIF value for Dividend policy, Capital Structure, Corporate Governance, Timely Rendition, ROA and ROE had values below 10 with tolerance values below 0.2. Based on these the assumption of no multicollinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

**Table 4.3 Multicollinearity**

Variables	Collinearity Statistics	
	Tolerance	VIF
Dividend policy	.380	2.635
Capital Structure	.241	4.149
Corporate Governance	.721	1.387
Timely Rendition	.120	8.326
ROA	1.31	0.971
ROE	.656	1.524

### 4.2.4 Factor Analysis

Factor analysis looks at the internal-correlations among data to come up with internally consistent surrogates of the variable (Mugenda, 2010). These correlations helped the researcher to formulate an interpretation of the components (variables). Cooper and Schindler (2008) have indicated 0.7 to be an acceptable loading. Other researchers

suggest that 0.4 is the minimum level for item loading. Costello and Osborne (2005) argues that if an item has loading of less than 0.4 it may either not be related to the other items or suggests an additional factor that should be explored. Hair *et al.*, (2010) highlighted that factor analysis was necessary in research to test for construct validity and highlight variability among observed variables and to also check for any correlated variables in order to reduce redundancy in data.

The study used factor analysis to reduce the number of indicators which do not explain the effect of financial considerations on financial innovation adoption and retain the indicators which are capable of explaining the effect. Exploratory factor analysis was performed to assess construct unidimensional scales and identify the structure of the measurement or outer model for the items in the study. This was performed to achieve measure purification and refine the variables into the most effective number of factors. Only the factors with values of above 0.4 and were used for further analysis as recommended by Hair *et al.*, (1998) and Tabachnick and Fidell (2007) who noted that factors with factor loading above 0.4 shall be retained for further study. Hair *et al.*, (1998) and Tabachnick and Fidell (2007) described the factor loadings as follows: 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent).

The study used the Cronbach's alpha to measure the reliability of the data gathered from the field. Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability (Zinbarg *et al.*, 2005). According to Zinbarg *et al.*, 2005), an alpha coefficient of 0.70 or higher indicated that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population. All constructs depicted that the value of the Cronbach's alpha are above the suggested value therefore reliable and accepted for the study. The results and interpretation of the factor analysis is presented in the summary and sub-sections that follow for each of the study indicators.

The finding in Table 4.4 show the overall summary of the factor analysis for all the variables, the four factors measuring the independent variables and two factors measuring dependent variables; Dividend policy show that all the factor loadings for the five items were above 0.643. All the items were accepted based on the general rule of thumb for acceptable factor loading of 0.40% above. No item was removed. The results of the factor analysis for Capital structure with five items had a factor loading of 0.713. This implies that all items fall within the acceptable threshold based on the general rule of thumb so none of the item was dropped. The factor analysis for Corporate Governance, with five items shows factor loadings above 0.467. Since all the loadings were above 0.40, no factor was dropped because they followed the acceptable threshold. For Timely rendition, there were six items. One was dropped for inconsistency or irrelevance. The factor loadings for the remaining five were above 0.563.

The result of the factors measuring the dependent variable financial performance (ROA, ROE and profit after tax) was also subjected to factor analysis. All the factor loadings were above 0.621 which implies that all items fall within the acceptable threshold as no item was dropped from table 4.4. It indicates that all the factor loading of all the items were above 0.400 and thus all were considered for further statistical analysis. Detailed analysis of the factor analysis on the individual items of the construct can be seen below.

**Table 4.4 Summary of Factor Analysis**

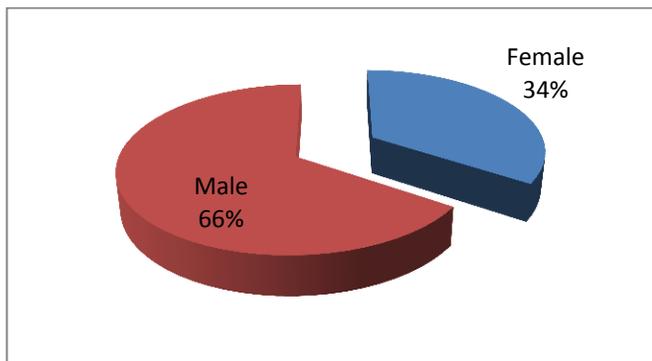
<b>Independent / Dependent Variables</b>	<b>Number of Items</b>	<b>Overall factor loading</b>
<b>Dividend policy</b>	5	0.643 0.713
<b>Capital structure</b>	5	0.467
<b>Corporate Governance</b>	5	0.563
<b>Timely rendition</b>	5	0.621
<b>Financial Performance</b>	5	

#### **4.2.5 Demographic Characteristics**

This section consists of information that describes basic characteristics of the respondents such as gender of the respondent, age, level of education and work experience.

##### **4.2.5.1 Gender**

The respondents were asked to indicate their gender. The results are presented in Figure 4.1.

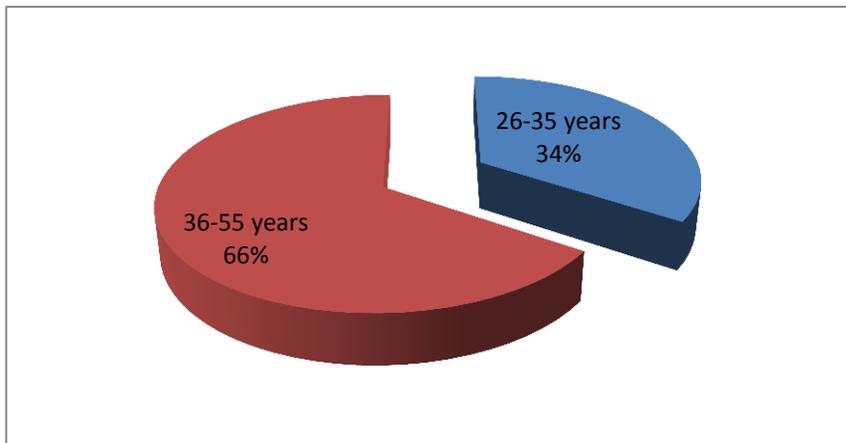


**Figure 4.1 : Gender**

Results in Figure 4.1 indicate that majority of the respondents, 66%, indicated that they were male while only 34% were female. This implies that male employees still dominate in these firms listed under Rwanda stock exchange. The findings also imply a big disparity in gender distribution.

#### 4.2.2.2 Age

Respondents were also asked to indicate their age brackets. The results are presented in Figure 4.2.

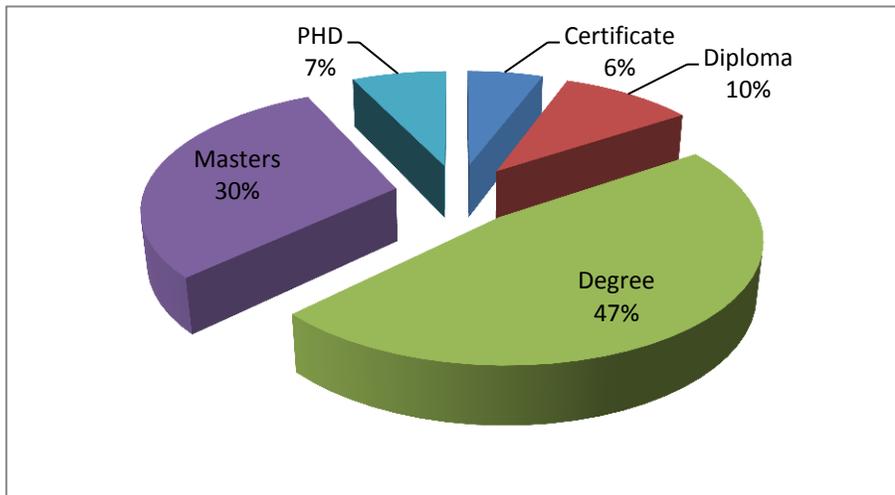


**Figure 4.2: Age Bracket**

The results in Figure 4.2 reveals that majority, (66%), of the respondents were between the age of 36-55years while 34% were in the age bracket 26-35years. The findings imply that majority of the respondents were above 36 years.

### 4.2.5.3 Level of Education

Respondents were asked to indicate their level of education. The results are presented in Figure 4.3.

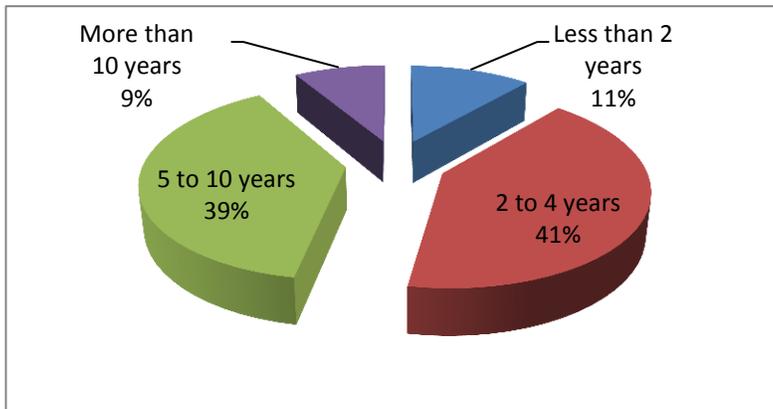


**Figure 4.3: Level of education**

The study findings indicate that majority, forty seven percent (47%), of the respondents had Bachelor's Degree, 30% of the respondents had Masters Degree. Another 10% had Diploma, 7% had PhD, 6% had certificate. The findings imply that majority of employees in firms listed at RSE are literate.

#### 4.2.5.4 Work Experience

The respondents were asked to indicate the duration they have worked in the firms. The results are presented in Figure 4.4.



**Figure 4.4: Work experience**

The results in Figure 4.4 indicates that majority of the respondents who were 41% had worked in these firms for duration 2 to 4years, 39% had worked for 5-10 years, 11% had worked for duration of less than 2 years while only 9% had worked in these firms for more 10 years. This implies that majority of the respondents had not worked in the organization for a long period. The findings can also imply high turnover among the employees.

#### 4.2.6 Descriptive Results

##### 4.2.6.1 Dividend policy

The respondents were asked to rate various statements on dividend policy on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree rated as 1, disagree rated as 2, neutral rated as 3, agree rated as 4 and strongly agree rated as 5. The results are presented in Table 4.5.

**Table 4.5 Attributes of Dividend Policy (in percentage)**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std Dev</b>
The company operates under established and regularly observed dividend policy	10.00%	7.10%	8.60%	35.70%	38.60%	3.86	1.29
The company pays dividends in correlation with its value	4.30%	2.90%	5.70%	44.30%	42.90%	4.19	0.98
Your company prefers to pay dividends to shareholders than interest to debentures holder because of the incidence on profitability	7.10%	4.30%	4.30%	47.10%	37.10%	4.03	1.12
The shareholders subscribe to high gaining	2.90%	4.30%	5.70%	42.90%	44.30%	4.21	0.95
Company performs better because of staff share scheme	2.90%	5.70%	7.10%	58.60%	25.70%	3.99	0.91

<b>Statement</b>	<b>Strongly</b>			<b>Strongly</b>		<b>Mean</b>	<b>Std Dev</b>
	<b>Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>agree</b>		
<b>Average</b>						<b>4.05</b>	<b>1.05</b>

The first objective of the study was to determine the effect of dividend policy to the performance firms listed under RSE. On the question on whether the company operates under established and regularly observed dividend policy, majority 74.3% of the respondents agreed. On the issue whether the company pays dividends in correlation with its value, majority 87.2 % affirmed that the company pays dividends in correlation with its value. Another 84.2% of the respondents indicated that the company prefers to pay dividends to shareholders than interest to debentures holder because of the incidence on profitability. Shareholders subscribing to high gaining indicated that majority 87.2% agreed that this influences financial performance. Further, majority 84.3% agreed that the company performs better because of staff share scheme. On a five point scale, the average mean of the responses was 4.05 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.05 meaning that the responses were clustered around the mean response.

#### **4.2.6.2 Capital structure**

The respondents were asked to rate various statements on capital structure a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree rated as 1, disagree rated as 2, neutral rated as 3, agree rated as 4 and strongly agree rated as 5. The results are presented in Table 4.6.

**Table 4.6: Attributes of Capital Structure (in percentage)**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std Dev</b>
The company relies on loan in order to run	27.10	11.40	22.90	21.40	17.10	2.90	1.46
The company has a huge burden of current liabilities as compared to current assets	28.60	24.30	17.10	17.10	12.90	2.61	1.40
The burden of cost of equity is more than the burden of cost of debentures on Profit and loss account	18.60	18.60	22.90	21.40	18.60	3.03	1.38
The company keeps its leverage level under control	7.10	5.70	11.40	48.60	27.10	3.83	1.12
There are clear working capital management guidelines by the company	4.30	4.30	7.10	48.60	35.70	4.07	1.00
<b>Average</b>						<b>3.29</b>	<b>1.27</b>

The study sought to determine the effect of capital structure on firm's performance. Twenty eight point five percent (28.5% of the respondents disagreed to the statement that the company relies on loan in order to run with another 38.5% agreeing. On the

question of whether the company has a huge burden of current liabilities as compared to current assets, majority 52.9% agreed. On the statement whether the burden of cost of equity is more than the burden of cost of debentures on Profit and loss account, 40% agreed to the statement. Whether the company keeps its leverage level under control, majority 75.7% agreed with this statement. Further when the respondents were asked whether there are clear working capital management guidelines by the company to avoid bankruptcy, majority 84.3% agreed with the statement. On a five point scale, the average mean of the responses was 3.29 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.27 meaning that the responses were clustered around the mean response.

#### **4.2.6.2 Corporate governance**

The respondents were asked to rate various statements on corporate governance on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree rated as 1, disagree rated as 2, neutral rated as 3, agree rated as 4 and strongly agree rated as 5. The results are presented in Table 4.7.

**Table 4.7 Attributes of Corporate governance (in percentage)**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std Dev</b>
Your company has a full functional and experienced board	7.10	2.90	1.40	42.90	45.70	4.17	1.10
Corporate governance is practiced in your company	5.70	4.30	1.40	51.40	37.10	4.10	1.04
The audit committee is effective and alive to its responsibility in check meeting financial report and auditing system	7.10	4.30	2.90	40.00	45.70	4.13	1.14
The budget and commitment on corporate social responsibility of your company is impressive	4.30	2.90	4.30	42.90	45.70	4.23	0.98
The issue of agency problem has been completely resolved by corporate governance	4.30	2.90	4.30	48.60	40.00	4.17	0.96
<b>Average</b>						<b>4.16</b>	<b>1.04</b>

The third objective of the study was to determine the effect of corporate governance on firms performance listed in RSE. The respondents were required to state their level of agreement/disagreement on a likert scale to some statements relating to corporate governance. Majority 88.6% of the respondents affirmed the statement that the company has a full functional and experienced board. On the question of whether the corporate governance is practiced in the company, majority 88.5% agreed that practicing corporate governance influence firms' performance. On the statement whether audit committee is effective and alive to its responsibility in check meeting financial report and auditing system, majority 85.7% agreed with the statement. On the statement, whether budget and commitment on corporate social responsibility of your company is impressive, majority 88.6% agreed. Further, whether the statement the issue of agency problem has been completely resolved by corporate governance, majority 88.6% agreed with the statement. On a five point scale, the average mean of the 4.16 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.04 meaning that the responses were clustered around the mean response.

#### **4.2.6.2 Timely Rendition of Information**

The respondents were asked to rate various statements on timely rendition of information on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree rated as 1, disagree rated as 2, neutral rated as 3, agree rated as 4 and strongly agree rated as 5. The results are presented in Table 4.7.

**Table 4.7 Attributes of Timely rendition of information (in percentage)**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std Dev</b>
Issue of sanction and compliance on rendition of returns is a not a regular characteristics of your company annual financial report				37.10 %	52.90%	4.30	1.03
There is clear distinction and purpose for timely regulatory and statutory returns	5.70%	1.40%	2.90%	44.30 %	44.30%	4.19	1.04
Guidelines on report and returns are often self-explanatory and understood	4.30%	4.30%	2.90%	31.40 %	57.10%	4.33	1.03
Everybody understands the components, constituents and essence of annual financial reports	7.10%	4.30%	5.70%	31.40 %	51.40%	4.16	1.18
Timely and accurate rendition of management and financial report is an evidence of efficiency of the system within the organization	8.60%	2.90%	1.40%	31.40 %	55.70%	4.23	1.19
<b>Average</b>						<b>4.24</b>	<b>1.09</b>

The study further sought to determine the effect of issuance of sanction and compliance on rendition of returns is a regular characteristic of your company annual financial report. Majority 90.0% of the respondents were in agreement with this statement. On the statement whether there is clear distinction and purpose for timely regulatory and statutory returns, majority 88.6% agreed with the statement. With the statement about guidelines on report and returns are often self-explanatory and understood, majority 88.5% agreed. About the statement whether everybody understands the components, constituents and essence of annual financial reports, majority 82.8% agreed with the statement. Further when the respondents were asked whether timely and accurate rendition of management and financial report is an evidence of efficiency of the system

within the organization, majority 87.1% affirmed the statement. On a five point scale, the average mean of the responses was 4.24 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.09 meaning that the responses were clustered around the mean response.

#### **4.2.6.3 Financial performance**

The study sought to establish the rating of attributes of financial performance of firms listed that the RSE. The statements were based on a likert scale ranging from strongly disagree rated as 1, disagree rated as 2, neutral rated as 3, agree rated as 4 and strongly agree rated as 5. The results are as presented in Table 4.8.

**Table 4.8 Attributes of financial performance (in percentage)**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std Dev</b>
There has been an increase in earnings per share in the company for the last 5 years	7.10	5.70	0.00	35.70	51.40	4.19	1.17
There has been an increase in return on equity in the company for the last 5 years	7.10	5.70	7.10	20.00	60.00	4.20	1.23
There has been an increase in return on asset in the company for the last 5 years	8.60	5.70	8.60	18.60	58.60	4.13	1.30
There has been an increase in net profits in the company for the last 5 years	8.60	5.70	10.00	24.30	51.40	4.04	1.28
There has been an increase in return in investments in the company for the last 5 years	7.10	5.70	10.00	22.90	54.30	4.11	1.23
<b>Average</b>						<b>4.13</b>	<b>1.24</b>

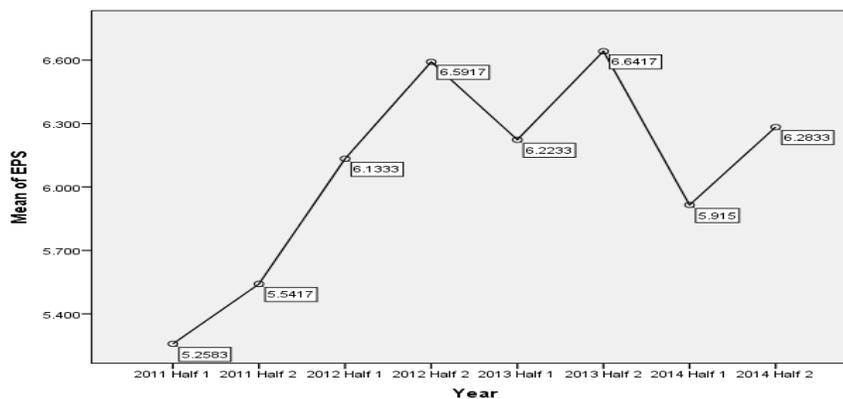
The study further sought to determine the performance of firms listed under RSE. On the statement whether there has been an increase in EPS in the company for the last 4 years, majority 87.1% of the respondents were in agreement that there has been an increase in EPS in the company for the last 4 years. About whether there has been an increase in ROE in the company for the last 4 years, majority 80.0%% agreed. Further on the statement whether there has been an increase in ROA in the company for the last 4 years Organization, majority 77.2% agreed. On the statement whether there has been an increase in profits in the company for the last 4 years, majority 75.7% agreed. Further, whether there has been an increase in return in investments in the company for the last 5 years, majority 77.2% agreed. On a five point scale, the average mean of the responses was 4.13 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.24 meaning that the responses were clustered around the mean response.

### 4.3 Secondary data analysis

In this section, the findings of trend analysis, diagnostic test and regression analysis for secondary data is presented. A multiple regression model is used to link the independent variables to the dependent variable. A simple OLS regression model was the most suitable for the study because of the kind of data as presented in chapter three. Hence the study adopted a simple ordinary least square regression model instead of running panel regressions.

#### 4.3.1 Trend Analysis of Dividend Policy

The study also sought to establish the trends of dividend policy measured in terms of Earning per share. The results are as presented in Figure 4.5.



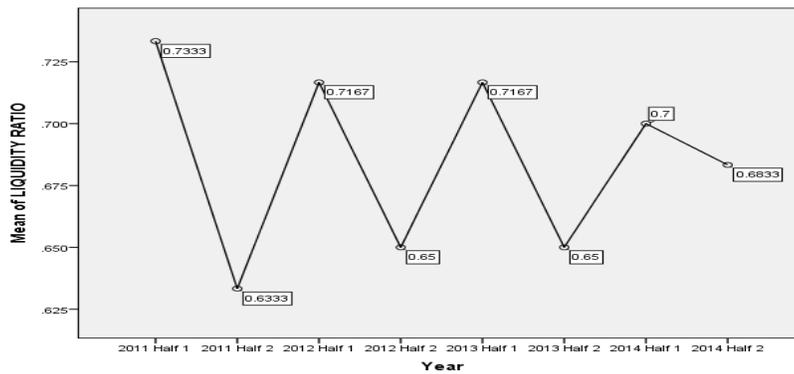
**Figure 4.5 Trend Analysis Dividend Policy**

The results in Figure 4.5 indicates that the mean earnings per share had increasing trends from 5.258 in the first half of the year 2011 up to 6.591 at the end of the year 2012. From the year 2012 the earnings per share was unsteady with increasing and decreasing trends. The mean highest earnings per share was 6.64 which was recorded at the end of the year 2013. The findings of the study are consistent with the findings of a study by Adedirán & Alade (2013) which found out that the pattern of corporate dividend

policies not only varies over time but also across countries, especially between developed, developing and emerging Capital markets.

### 4.3.2 Trend Analysis of Capital Structure

The study also sought to establish the trends of capital structure measured in terms of liquidity ratio. The results are as presented in Figure 4.6.

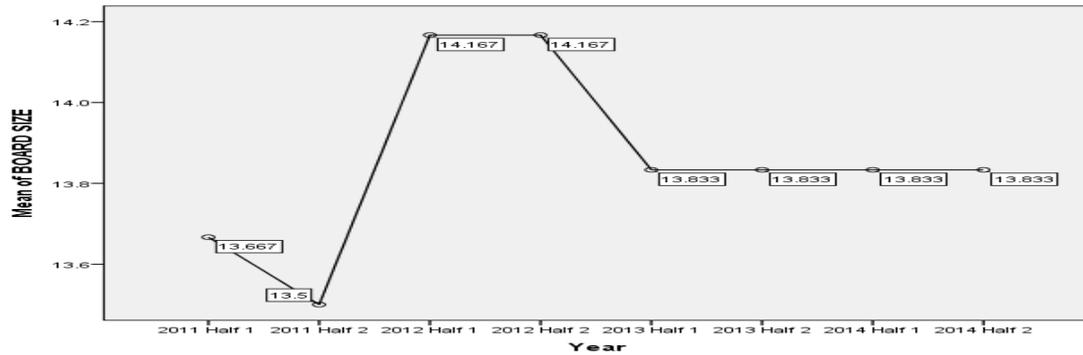


**Figure 4.6: Trend Analysis Capital structure**

The study findings on Figure 4.6 indicates that the liquidity ratio, which captured capital structure, had unsteady trends between the first half of the study period to the end of the year 2014. The highest value of liquidity ratio was 0.733 while the lowest was 0.633 recorded in the same year 2011.

### 4.3.3 Trend Analysis of Corporate governance

The study also sought to establish the trends of corporate governance measured in terms of the board size. The results are as presented in Figure 4.7.

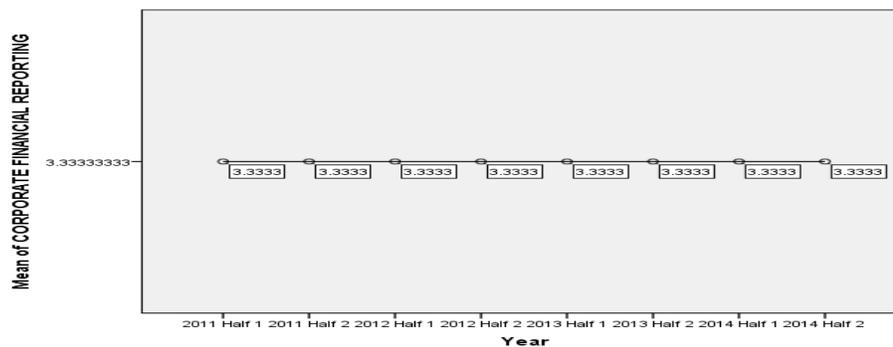


**Figure 4.7: Trend Analysis corporate structure**

The trends of corporate governance in terms of board size showed decreasing trends in the first two halves of the study period and then increased sharply to the highest mean number of 14.167 in the year 2012. In the year 2013, the board size decreased to a mean of 13.833 and remained constant throughout the study period.

#### 4.3.4 Trend Analysis of timely rendition of information

The study also sought to establish the trends of timely rendition of information measured in terms of corporate financial reporting. The results are as presented in Figure 4.8.

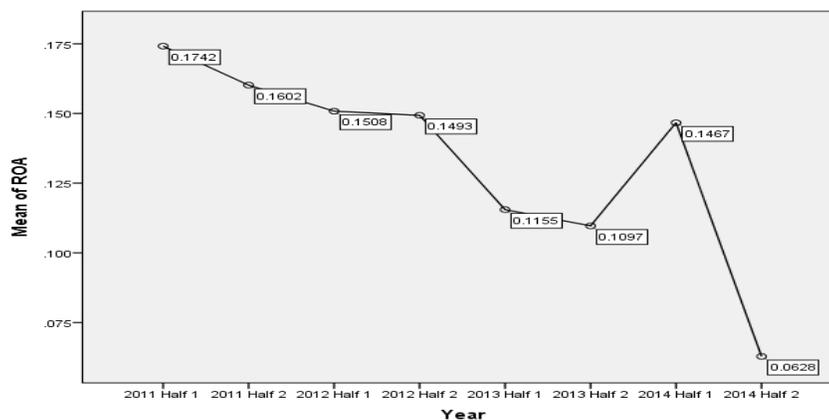


**Figure 4.8 Trend Analysis timely rendition of information**

The results in Figure 4.8 reveal that the trends of mean number of frequency of timely rendition of information remained constant throughout the study period at 3.333 times which means the frequency of financial reporting was respected by every company.

#### 4.3.5 Trend analysis of ROA

The study established the trends of mean half yearly ROA over the study period. The results are as presented in Figure 4.9

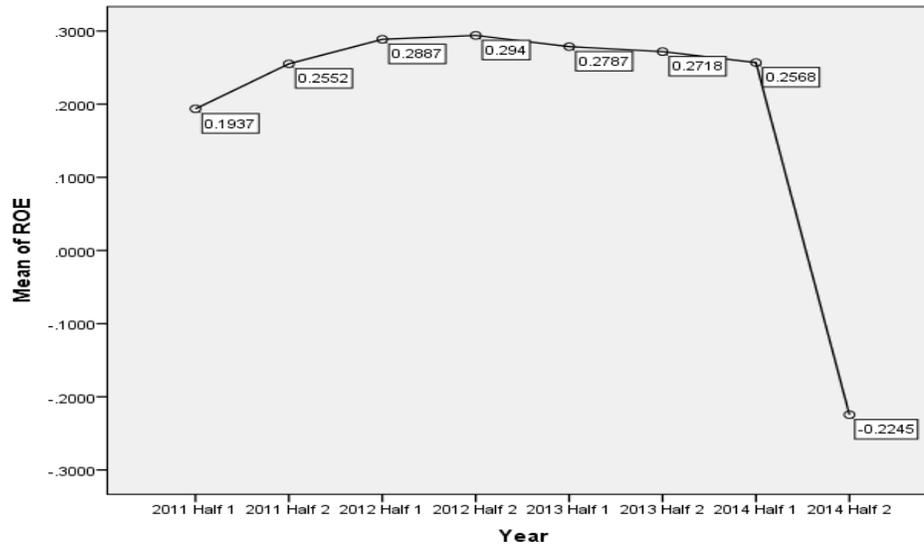


**Figure 4.9: Trend Analysis of ROA**

The results presented in Figure 4.9 indicate that the mean semiannually ROA of firms listed at the RSE was decreasing during the study period. The highest mean semiannual ROA recorded in the study period was 0.1742 in the first half of 2011. The semiannual mean ROA then had decreasing trends until the second half of 2013 after which it increased to 0.1467 in the first half of the year 2014. The lowest semiannual mean ROA recorded in the study period was 0.0628.

### 4.3.6 Trends Analysis of ROE

The study also established the trends of mean half yearly ROA over the study period. The results are as presented in Figure 4.10



**Figure 4.10: Trend Analysis of ROE**

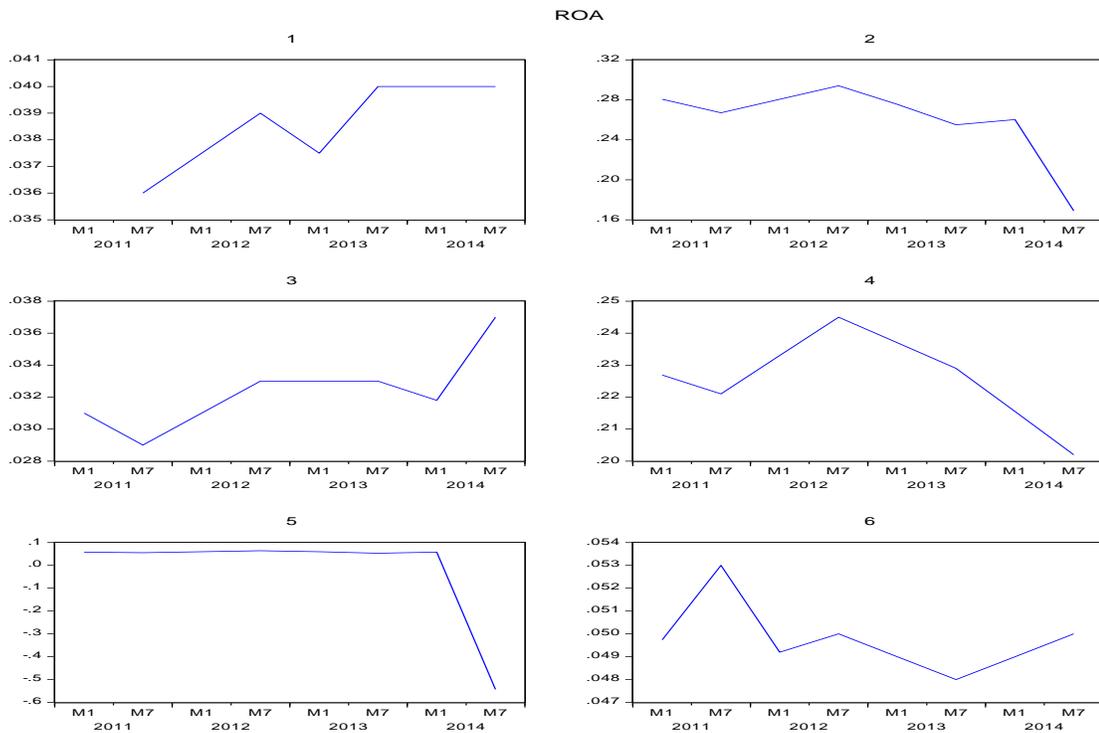
The study findings in Figure 4.10 indicates that the mean ROE recorded half yearly for the firms listed at the RSE had increasing trends from the first half of 2011 up to the second half of the year 2012 which also recorded the highest ROE of 0.294. The ROE then decreased up to a figure of -0.2245 which was the lowest average in the study period.

### 4.3.7 Exploratory Data Analysis

Exploration analysis was conducted to examine the heterogeneity across the firms using trends. The need for exploration analysis was also to determine the most suitable model to use between a pooled effect regression which does not allow for heterogeneity/ individuality among the cross sections(firms) and panel data models (Fixed effect and

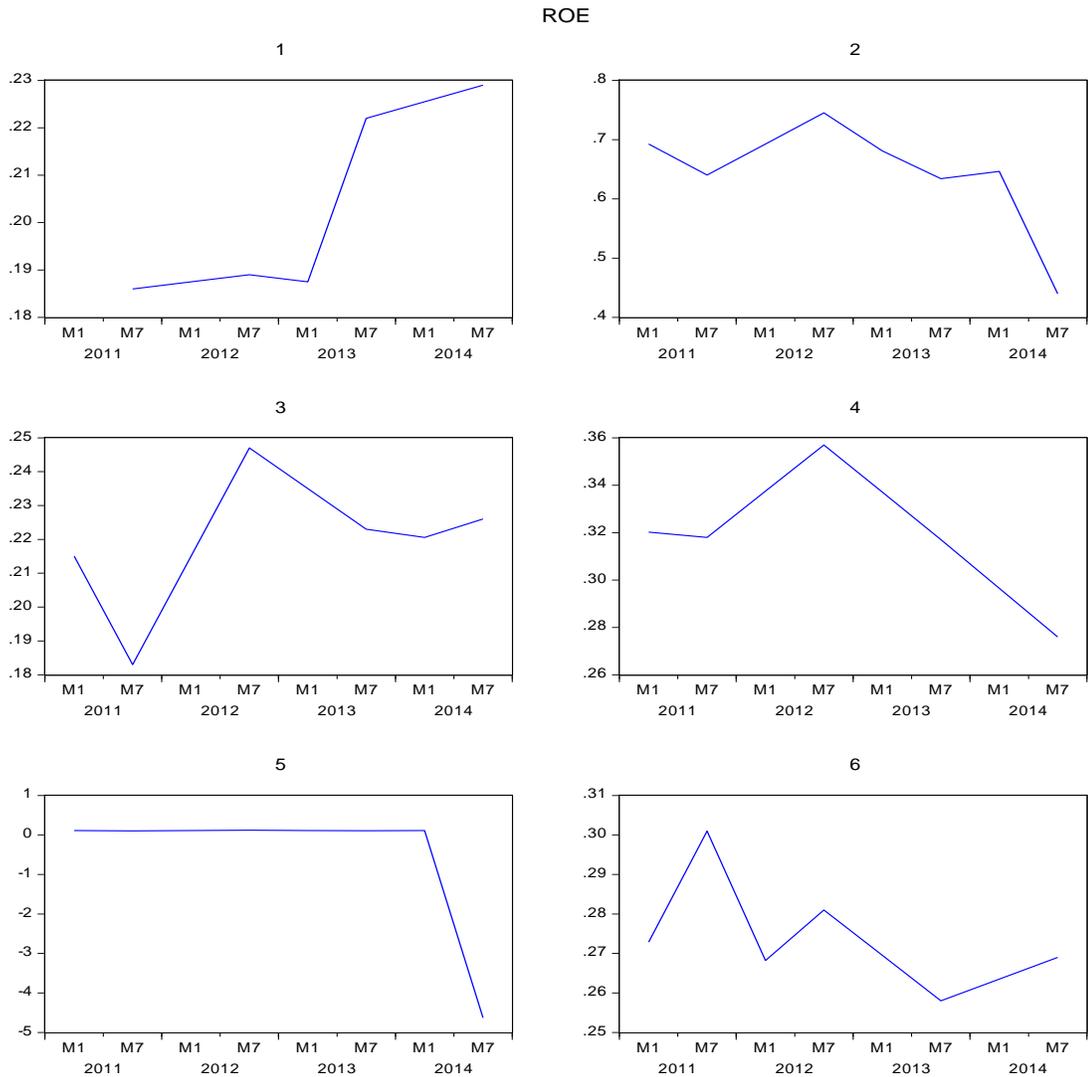
random effect models) which allow for heterogeneity/individuality among the cross sections.

Exploration analysis began by trend analysis to study the within-firm behavior of the dependent variables (ROA, ROE and profit after tax).



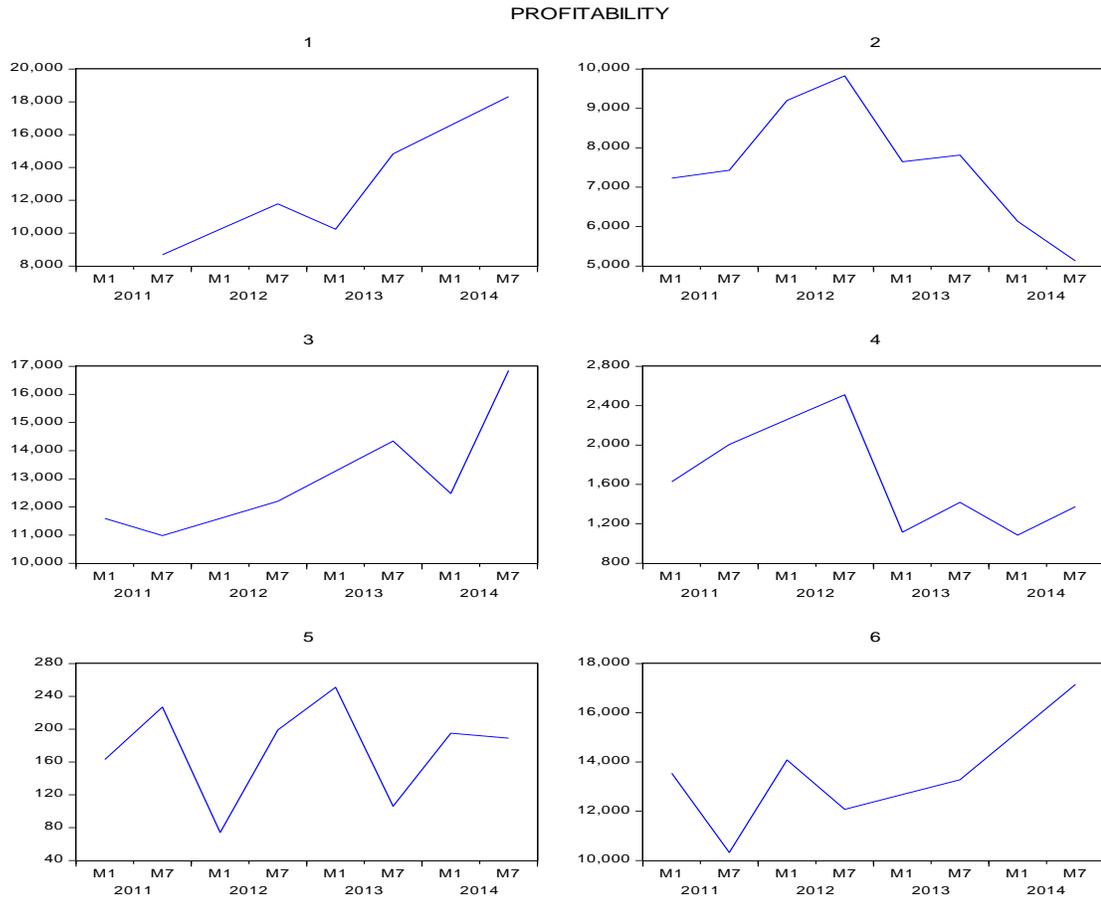
**Figure 4.11: Within Firms Trend analysis for ROA**

The results in Figure 4.11 indicate that ROA was changing with time for all the 6 companies in the study period. All companies indicated increasing and decreasing trends over time. All the companies indicated time related fixed effects.



**Figure 4.12: Within Firms Trend analysis for ROE**

The results in Figure 4.12 indicate that ROE was also changing with time for all the 6 companies in the study period. All companies indicated increasing and decreasing trends over time. All the companies indicated time related fixed effects.



**Figure 4.13 Within Firms Trend analysis for profit after tax**

The results in Figure 3 indicate that Profit after tax was also changing with time for all the 6 companies in the study period. All companies indicated increasing and decreasing trends over time. All the companies indicated time related fixed effects.

#### **4.3.8 Pre analysis**

The study then conducted pre-analysis on the model in order to establish the existence of time related random effects. The most suitable model between an OLS regression model and panel data models was tested.

The study conducted a test to determine the most suitable model between an OLS regression model which and panel regression model. In an OLS regression model, all dummies are zero meaning that there is no requirements to use a dummy to run the model. In a time related fixed effects model, there is a need to create dummies to be used in the model. The study used the Wald coefficients restrictions test to perform the test. The results are presented in Table 4.8

**Table 4.8 Wald Coefficient test**

Wald Test			
Test Statistic	Value	df	Probability
F-statistic	0.366079	(4,206)	0.8326
Chi-square	1.464317	4	0.8329

The null hypothesis for the test is that all the dummies for the five coefficients in the model are equal to zero  $C(1) = C(2) = C(3) = C(4) = 0$ . This implies that in the case of accepting the null hypothesis, a OLS regression model is more suitable. The alternative hypothesis states that the dummies of all the four coefficients is not equal to zero implying that a time related fixed effect model is more suitable. The results in Table 4.8 indicate that the probability chi square value of 1.4643 was not significant (More than 0.05), with a P value of 0.8329, implying that the null hypothesis that a fixed effect regression model is not suitable is not rejected. This implies that a simple OLS regression model is the most suitable for the study and hence the study adopted a simple ordinary least square regression model instead of running panel regressions. The study hence used an OLS regression model.

### **4.3.9 Diagnostic Tests**

As argued by Greene (2002) regression can only be accurately estimated if the basic assumptions of multiple linear regressions are observed. These tests included: normality test, unit root test, heteroscedasticity test and the serial correlation test. In cases where these assumptions are violated, appropriate measures need to be taken. The section hereby presents the results and statistical interpretation of various diagnostic tests carried out on the data. Therefore the data was considered to be good for further analysis.

#### **4.3.9.1 Normality Test**

A normality TEST carried out using skewness and kurtosis. In this test, the test statistic used was chi-square distribution which involves both individual and joint measures of skewness and kurtosis. The null hypothesis tested was that the data was normally distributed. From the finding as illustrated in table 4.9 the chi-square statistic for both individual and joint tests indicates that the variables Dividend policy, Capital structure, Corporate Governance, Timely rendition, ROA, ROE and profitability were normally distributed.

**Table 4.9 Normality test**

Variable	Observation	Statistic	-joint		
			Adj	Chi2(2)	
Dividend policy	48	Skewness	0.0307	-	0.0000
		Kurtosis	0.0443		
Capital structure	48	Skewness	0.0023	-	0.0000
		Kurtosis	0.0003		
Corporate Governance	48	Skewness	0.0034		0.0033
		Kurtosis	0.0006		
Timely rendition	40	Skewness	0.0012		0.0002
		Kurtosis	0.0543		
ROA	48	Skewness	0.7031	-	0.0000
		Kurtosis	0.1542		
ROE	48	Skewness	0.3034	-	0.0100
		Kurtosis	0.0543		

H0: Secondary data is normally distributed; Significance level: 5%

#### 4.3.9.2 Serial Correlation Test

This study used the Wooldridge test for serial correlation to test for the presence of autocorrelation in the linear secondary data. Serial autocorrelation is a common problem experienced in secondary data analysis and has to be accounted for in order to achieve the correct model specification. According to Wooldridge (2002), failure to identify and account for serial correlation in the idiosyncratic error term in a secondary data model would result into biased standard errors and inefficient parameter estimates. The null hypothesis of this test was that the data had no serial autocorrelation. If serial autocorrelation was detected in the study data, then the feasible generalized least square (FGLS) estimation procedure would be adopted. The test for autocorrelation was made by using Durbin and Watson (1951). Durbin--Watson (DW) is a test for first order autocorrelation that tests only for a relationship between an error and its immediately previous value. This study used Durbin Watson (DW) test to check that the residuals of the models were not auto correlated since independence of the residuals is one of the basic hypotheses of regression analysis. The results in the table 4.10 show that there was

no DW statistics that were close to the prescribed value of 2.0 for residual independence; this implied that the data had no autocorrelation.

**Table 4.10 Serial Correlation Test**

Statistics	Financial performance		
	ROA	ROE	Net profit
R2	0.6872	0.6885	0.6872
Wald-statistic(6)	585.62	590.63	585.60
<i>p-value (Wald)</i>	0.0000	0.0000	0.0000
Rho	0.5263	0.5350	0.5263
DW	1.34266	1.2143	1.8532

From the diagnostic test it was concluded that the data set was good enough for further analysis using the regression model in chapter 3

#### **4.3.10 Regression analysis**

##### **4.3.10.1 Effect of dividend policy on financial performance**

The study sought to establish the effect of dividend policy on financial performance of firms listed on the Rwanda Stock Exchange. The measures of financial performance were ROA, ROE and profit after tax. The results for Model Summary are as presented in Table 4.11.

**Table 4.11: Dividend Policy and Financial Performance (Model Summary)**

<b>Indicator</b>	<b>ROA</b>	<b>ROE</b>	<b>Profit after tax</b>
R	.297	.447	0.132
R Square	.088	.200	0.097
Adjusted R Square	.069	.182	0.040
Std. Error of the Estimate	.142297	.4094731	.5864

The results in Table 4.11 indicate that dividend policy affect both profit after tax, ROA and ROE positively as indicated by and R of 0.132, 0.297 and 0.447 respectively. This implies that an increase in dividend policy in terms of earnings per share is associated with an improvement in financial performance of the firms listed at the RSE.

Furthermore, the results indicate that 9.7%, 8.8% DP explain 88of the change in Profit after tax and 20.0% of the changes in Profit after tax, ROA and ROE respectively is explained by dividend policy as indicated by R square of 0.097, 0.088 and 0.200 respectively. The findings imply that dividend policy explains a larger change in ROE than in both profit after tax and ROA. The fitness of the models was also established and the results are as presented in Table 4.1.

**Table 4.12 Dividend Policy and Financial Performance (Model Fitness)**

<b>Indicator</b>	<b>ROA</b>	<b>ROE</b>	<b>Profit after tax</b>
F	4.466	11.466	7.435
Sig.	.040	.001	0.030

The study findings indicated in Table 4.12 reveal that the F statistic of both the regression model of dividend policy and ROA as well as profit after tax and ROE of

4.466, 7.435 and 11.466 respectively was significant at 5% level of significance which means that the three regression models fit well.

Furthermore, the study established the coefficients of the regression between dividend policy and financial performance. The results are as presented in Table 4.13.

**Table 4.13 Dividend Policy and Financial Performance (Regression Coefficients)**

Dependent variable	Indicator	B	Std. Error	T	Sig.
	(Constant)	0.085	0.031	2.739	0.009
ROA	Dividend policy	0.008	0.004	2.113	0.040
	(Constant)	-0.024	0.089	-0.266	0.792
ROE	Dividend policy	0.037	0.011	3.386	0.001
	(Constant)	7181.231	1281.881	5.602	0.000
Profit after tax	Dividend policy	140.644	157.789	0.891	0.377

**Models**

$$ROA = 0.085 + 0.008 \text{ Dividend Policy}$$

$$ROE = 0.037 \text{ Dividend policy} - 0.024$$

The results in Table 4.13 indicate that dividend policy affects ROA, net profit and ROE positively as shown by a beta coefficient of 0.008, 140.644 and 0.037 respectively. The findings are consistent with the argument by Adediran & Alade (2013) that dividend policy affects financial performance of a company because if the value of a company is the function of its dividend payments, dividend policy will affect directly the firm’s cost of capital hence performance. The findings also agree with the argument by Agrawal and Jayaraman (2004) who argued if a firm’s policy is to pay dividend each year end to shareholders, the level of activity in the organization will increase to obtain more income and have excess retained earnings to meet the standard set. This improves the performance. Furthermore, the findings agree with the findings of a study by Samuel &

Edward (2010) which found out that banks that pay dividend increase their performance.

#### **4.3.10.1.1 Hypothesis Testing**

The study sought to test the null hypothesis that dividend policy does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange. The hypothesis was tested based on the results of an ordinary least square regression model of dividend policy and ROA. A level of significance less than 0.05 leads to the null hypothesis being rejected while a significance level above 0.05 leads to the null hypothesis not being rejected. The findings in Table 4.13 indicates a level of significance of 0.040 which leads to the rejection of the null hypothesis hence the dividend policy affects the financial performance of firms listed on the Rwanda Stock Exchange.

#### **4.3.10.2 Effect of Capital structure on financial performance**

The study sought to establish the effect of capital structure and financial performance of firms listed on the Rwanda Stock Exchange. The measures of financial performance were profit after tax, ROA and ROE. The results for Model Summary are as presented in Table 4.14.

**Table 4.14 Capital Structure and Financial Performance (Model Summary)**

<b>Indicator</b>	<b>ROA</b>	<b>ROE</b>	<b>Profit after tax</b>
R	-.430	-.308	-0.840
R Square	0.185	0.095	0.706
Adjusted R Square	0.167	0.075	0.700
Std. Error of the Estimate	0.134548	0.435455	0.3206

The results in Table 4.14 indicate that capital structure affects both ROA, profit after tax and ROE negatively as indicated by and R of -0.430, -0.840 and -0.308 respectively. This implies that an increase in capital structure, measured as liquidity ratio, is associated with a decrease in financial performance of the firms listed at the RSE.

Furthermore, the results indicate that 70.6%, 18.5% and 9.5% of the changes in net profit, ROA and ROE respectively is explained by capital structure as indicated by R square of 0.706, 0.185 and 0.095 respectively. The findings imply that capital structure explains a larger change in profit after tax than both ROA and ROE. The fitness of the models was also established and the results are as presented in Table 4.15.

**Table 4.15 Capital Structure and Financial Performance (Model Fitness)**

Indicator	ROA	ROE	Profit after tax
F	4.813	10.446	108.154
Sig.	.033b	.002b	0.000

The study findings indicated in Table 4.15 reveal that the F statistic of both the regression model of capital structure and ROA as well as profit after tax and ROE of 4.813, 108.154 and 10.446 respectively was significant at 5% level of significance which means that the three regression models fit well.

Furthermore, the study established the coefficients of the regression between capital structure and financial performance. The results are as presented in Table 4.16.

**Table 4.16 Capital structure and Financial Performance (Regression Coefficients)**

Dependent variable	Indicator	B	Std. Error	Beta	T	Sig.
ROA	(Constant)	0.336	0.065		5.129	0.000
	Capital Structure	-0.295	0.091	-0.43	-3.232	0.002
ROE	(Constant)	0.645	0.212		3.048	0.004
	Capital structure	-0.647	0.295	-0.308	-2.194	0.033
Profit after tax	(Constant)	6941.416	1513.883		4.585	0.000
	Capital structure	-23843.24	2292.68	-0.840	-10.40	0.000

**Models**

$$\text{ROA} = 0.336 - 0.295 \text{ Capital Structure}$$

$$\text{ROE} = 0.645 - 0.647 \text{ Capital Structure}$$

$$\text{Profit after tax} = 6941.416 - 23843.24 \text{ Capital structure}$$

The results in Table 4.16 indicate that capital structure affects both profit after tax, ROA and ROE negatively as shown by a beta coefficient of -23843.24, -0.295 and -0.647 respectively. Furthermore, the relationships are significant at 5% level of significance as indicated by significance levels of 0.000, 0.002 and 0.004 respectively. The study findings imply that a unit increase in capital structure will lead to 23843.24, 0.295 and 0.647 units decrease in profit after tax, ROA and ROE respectively. These study findings not consistent with the findings of Velnampy and Vickneswaran (2014) which revealed that there is no significant impact of capital structure and liquidity position on the profitability.

**4.3.10.2.1 Hypothesis Testing**

The study sought to test the null hypothesis that capital structure does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange. The hypothesis was tested based on the results of an ordinary least square regression model

of dividend policy and ROA. A level of significance less than 0.05 leads to the null hypothesis being rejected while a significance level above 0.05 leads to the null hypothesis not being rejected. The findings in Table 4.16 indicates a level of significance of 0.002 which leads to the rejection of the null hypothesis hence capital structure affects the financial performance of firms listed on the Rwanda Stock Exchange.

#### **4.3.10.3 Effect of corporate governance on Financial performance**

The study sought to establish the effect of corporate governance on financial performance of firms listed on the Rwanda Stock Exchange. The measures of financial performance were profit after tax, ROA and ROE. The results for Model Summary are as presented in Table 4.17.

**Table 4.17 Corporate governance and Financial Performance (Model Summary)**

Indicator	ROA	ROE	Profit after tax
R	.342	.103	0.523
R Square	0.117	0.011	0.274
Adjusted R Square	0.098	-0.011	0.258
Std. Error of the Estimate	0.140069	0.455242	0.5041

The results in Table 4.17 indicate that corporate governance affects both profit after tax, ROA and ROE was positive as indicated by and R of 0.523, 0.342 and 0.103 respectively. This implies that an improvement in corporate governance is associated with an improvement in financial performance of the firms listed at the RSE.

Furthermore, the results indicate that 27.4%, 11.7% and 1.1% of the changes in net profit, ROA and ROE respectively is explained by corporate governance as indicated by R square of 0.117 and 0.011 respectively. The findings imply that corporate governance

explains a larger change in profit after tax than in ROA and ROE. The fitness of the models was also established and the results are as presented in Table 4.17. The fitness of the models was also established and the results are as presented in Table 4.18.

**Table 4.18 Corporate governance and Financial Performance (Model Fitness)**

Indicator	ROA	ROE	Profit after tax
F	6.084	3.492	16.953
Sig.	.0170	0.048	0.000

The study findings indicated in Table 4.18 reveal that the F statistic of both the regression model of corporate governance and ROA as well as net profit and ROE of 6.084, 16.953 and 3.492 respectively was significant at 5% level of significance which means that the three regression models fit well.

Furthermore, the study established the coefficients of the regression between corporate governance and financial performance. The results are as presented in Table 4.19.

**Table 4.19 Corporate governance and Financial Performance (Regression Coefficients)**

Dependent Variable	Indicator	B	Std. Error	T	Sig.
ROA	(Constant)	0.001	0.057	0.017	0.986
	Corporate governance	0.01	0.004	2.467	0.017
ROE	(Constant)	0.079	0.187	0.424	0.673
	Corporate governance	0.009	0.013	0.701	0.487
Profit after tax	(Constant)	-120.10	2112.13	-0.057	0.955
	Corporate governance	583.20	141.64	4.117	0.000

## **Models**

$$\text{ROA} = 0.001 + 0.01 \text{ Corporate Governance}$$

$$\text{ROE} = 0.079 + 0.009 \text{ Corporate Governance}$$

$$\text{Profit after tax} = -120.10 + 583.20 \text{ Corporate Governance}$$

The results in Table 4.19 indicate that corporate governance affects both profit after tax, ROA and ROE positively as shown by beta coefficients of 583.2, 0.01 and 0.009 respectively. Furthermore, the relationship between corporate governance and both net profit and ROA is significant at 5% level of significance as indicated by significance levels of 0.000 and 0.017 respectively while corporate governance is insignificantly related to ROE as indicated by a level of significance of 0.487. The study findings imply that an improvement in corporate governance will lead to 0.01 units improvement in ROA and 583.2 units improvement in profit after tax. The findings agree with Joshua and Vera (2013) as well as Kimie and Pascal (2011) who argued that board composition and board size exhibit significantly positive relationship with earnings and retained earnings of the firm. The findings are however not consistent with Vincent (2011) which found that ownership concentration and government ownership have significant negative relationships with firm performance.

### **4.3.10.3.1 Hypothesis Testing**

The study sought to test the null hypothesis that corporate governance does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange. The hypothesis was tested based on the results of an ordinary least square regression model of dividend policy and ROA. A level of significance less than 0.05 leads to the null hypothesis being rejected while a significance level above 0.05 leads to the null hypothesis not being rejected. The findings in Table 4.19 indicates a level of significance of 0.017 which leads to the rejection of the null hypothesis hence corporate

governance affects the financial performance of firms listed on the Rwanda Stock Exchange.

**. 4.3.10.4 Effect of timely rendition on Financial performance**

The study sought to establish the effect of timely rendition of information on financial performance of firms listed on the Rwanda Stock Exchange. The measures of financial performance were profit after tax, ROA and ROE. The results for Model Summary are as presented in Table 4.20.

**Table 4.20 Timely rendition of information and Financial Performance (Model Summary)**

Indicator	ROA	ROE	Profit after tax
R	.118	.055	0.517
R Square	0.014	0.003	0.268
Adjusted R Square	-0.008	-0.019	0.252
Std. Error of the Estimate	0.148005	0.456986	5062.00

The results in Table 4.20 indicate that timely rendition of information affects both net profit, ROA and ROE positively as indicated by and R of 0.517, 0.118 and 0.055 respectively. This implies that an improvement in timely rendition of information is associated with an improvement in financial performance of the firms listed at the RSE. These findings confirm the argument by Weetman (1999) that financial reporting is an essential component in the process of communication between a business and its stakeholders. The importance of communication increases as organizations become larger and more complex.

Furthermore, the results indicate that only 1.4 % and 0.3% of the changes in ROA and ROE respectively is explained by timely rendition of information as indicated by R square of 0.014 and 0.003 respectively. A larger change in net profit, 26.8%, is explained by timely rendition of information. The findings imply that timely rendition

explains a larger change in profit after tax than in ROA and ROE although it explains the smallest change as compared to the other predictor variables investigated in the study. The fitness of the models was also established and the results are as presented in Table 4.21.

**Table 4.21 Timely rendition of information and Financial Performance (Model Fitness)**

Indicator	ROA	ROE	Profit after tax
F	3.649	3.138	16.457
Sig.	0.045	0.047	0.000

The study findings indicated in Table 4.21 reveal that the F statistic of both the regression model of timely rendition and ROA as well as net profit and ROE of 3.649 , 16.457 and 3.138 respectively was significant at 5% level of significance which means that the three regression models fit well. Furthermore, the study established the coefficients of the regression between timely rendition of information and financial performance. The results are as presented in Table 4.22.

**Table 4.22: Timely rendition of information and Financial Performance (Regression Coefficients)**

Dependent variable	Indicator	B	Std. Error	T	Sig.
ROA	(Constant)	0.073	0.078	0.928	0.358
	Timely rendition of information	0.018	0.023	0.805	0.425
ROE	(Constant)	0.115	0.242	0.476	0.637
	Timely rendition of information	0.026	0.07	0.371	0.712
Profit after tax	(Constant)	-2458.432	2689.3	3	-0.914
	Timely rendition of information	3160.653	779.11	3	4.057

### Models

$$\text{ROA} = 0.073 + 0.018 \text{ Timely Rendition of Information}$$

$$\text{ROE} = 0.115 + 0.026 \text{ Timely Rendition of Information}$$

$$\text{Profit after tax} = -2458.432 + 3160.653 \text{ Timely Rendition of Information}$$

The results in Table 4.22 indicate that the relationship between timely rendition and both profit after tax, ROA and ROE is positive as shown by beta coefficients of 3160.653, 0.018 and 0.026 respectively. Furthermore, the relationship between timely rendition and ROA as well as ROE is not significant at 5% level of significance as indicated by significance levels of 0.425 and 0.712 respectively. The relationship between profitability and timely rendition is however significant at 5% level of significance as indicated by a p-value of 0.000. The study findings imply that changes in financial performance of firms listed at RSE cannot be attributed to timely rendition of information.

#### **4.3.10.4.1 Hypothesis Testing**

The study sought to test the null hypothesis that timely rendition of information does not significantly affect financial performance of firms listed on the Rwanda Stock Exchange. The hypothesis was tested based on the results of an ordinary least square regression model of dividend policy and ROA. A level of significance less than 0.05 leads to the null hypothesis being rejected while a significance level above 0.05 leads to the null hypothesis not being rejected. The findings in Table 4.22 indicates a level of significance of 0.017 which leads to the rejection of the null hypothesis hence timely rendition affects the financial performance of firms listed on the Rwanda Stock Exchange no significance relation with performance

### 4.3.11 Correlation Analysis

The study sought to establish the association among the study variables. The results are as presented in Table 4.23

**Table 4.23 Correlation matrix**

Variables	Indicator	Dividend policy	Capital structure	Corporate governance	Timely rendition	ROA	ROE
Dividend policy	Pearson Correlation	1	-0.257	-.382**	-0.217	.297*	.447*
	Sig. (2-tailed)		0.078	0.007	0.138	0.04	0.001
	N	48	48	48	48	48	48
Capital structure	Pearson Correlation	-0.257	1	0.081	-0.007	.430*	-.308*
	Sig. (2-tailed)	0.078		0.586	0.963	0.002	0.033
	N	48	48	48	48	48	48
Corporate governance	Pearson Correlation	-.382**	0.081	1	.540**	.342*	0.103
	Sig. (2-tailed)	0.007	0.586		0	0.017	0.487
	N	48	48	48	48	48	48
Timely rendition	Pearson Correlation	-0.217	-0.007	.540**	1	0.118	0.055
	Sig. (2-tailed)	0.138	0.963	0		0.425	0.712
	N	48	48	48	48	48	48
ROA	Pearson Correlation	.297*	-.430**	.342*	0.118	1	.775*
	Sig. (2-tailed)	0.04	0.002	0.017	0.425		0
	N	48	48	48	48	48	48
ROE	Pearson Correlation	.447**	-.308*	0.103	0.055	*	1
	Sig. (2-tailed)	0.001	0.033	0.487	0.712	0	
	N	48	48	48	48	48	48

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

\* Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.23 indicate that dividend policy, corporate governance and timely rendition are positively associated with ROA while capital structure is negatively associated with ROA. The results further indicate that the association between dividend policy, corporate governance as well as capital structure with ROA is significant at 5% level of significance while the association between timely rendition of data and ROA is not significant. The implication of the results is that an increase in dividend policy and corporate governance is associated with an improvement in ROA and vice versa while an increase in capital structure is associated with a decrease in ROA. The findings agree with the findings of a study by Charles, Joseph and Jane (2014) which indicated that there was a significant positive relationship between dividend policies of organizations and firm's profitability. Furthermore, the findings agree with findings of a study by Uwalomwa, Jimoh and Anijesushola (2012) which found out that there was a significant positive association between the performance of firms and the dividend payout of the sampled firms in Nigeria. The study also revealed that ownership structure and firm's size has a significant impact of the dividend payout of firms too. This is consistent with the findings of a study by Uwalomwa, Jimoh and Anijesushola (2012) which found out that there was a significant positive association between the performance of firms and ownership structure.

Furthermore, the findings reveal that dividend policy, corporate governance and timely rendition are positively associated with ROE while capital structure is negatively associated with ROE. The results further indicate that the association between dividend policy as well as capital structure and ROE is significant at 5% level of significance while the association between timely rendition of data as well as corporate governance and ROE is not significant. The implication of the results is that an increase in dividend policy is associated with an improvement in ROE and vice versa while an increase in capital structure is associated with a decrease in ROE. These study findings are consistent with the findings of a study by Adediran and Alade (2013) which indicated

that there was a significant positive relationship between dividend policies of organizations and profitability, there was also a significant positive relationship between dividend policy and investments and there was a significant positive relationship between dividend policy and Earnings per Share. The findings are also consistent with the findings of a study by Mwangi, Muathe and Koimbei (2014) which revealed that financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE). However, the findings disagree with the findings by Velnampy and Vickneswaran, (2014) which indicated that the correlation results confirmed that there is no significant relationship between listed telecommunication firms' capital structure, liquidity position and profitability.

#### **4.3.12 Overall Regression Model**

The study sought to establish the determinants of financial performance of firms listed on the Rwanda Stock Exchange by using a multiple regression model. The study established the determinants of ROA as well as ROE.

##### **4.3.12.1 Determinants of ROA**

The study tested the determinants of ROA by using a multiple regression model presented. The results for model summary are as presented in Table 4.24

**Table 4.24 Determinants of ROA (Model Summary)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.684a	0.468	0.418	0.112472

The results indicated dividend policy, capital structure, corporate governance and timely rendition of information are positively correlated with ROA as indicated by an R of 0.648. Furthermore, the results indicated that the predictor variables combined explain

only 46.8% of the changes in ROA while the remaining the remaining 53.2% is explained by other factors not captured in the study. The study also established the model fitness and the results are as presented in Table 4.25.

**Table 4.25: Determinants of ROA (Model Fitness/ANOVA)**

<b>Indicator</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	0.478	4	0.119	9.445	.000
Residual	0.544	43	0.013		
Total	1.022	47			

The findings in Table 4.25 indicate that the model for dividend policy, capital structure, corporate governance and timely rendition of information fit well as the F statistic of 9.445 was significant at 5% level of significance. The study lastly presented the coefficients for the determinants of ROA as presented in Table 4.26.

**Table 4.26 Determinants of ROA (Model Coefficients)**

<b>Indicator</b>	<b>B</b>	<b>Std. Error</b>	<b>T</b>	<b>Sig.</b>
(Constant)	0.076	0.096	0.789	0.434
Dividend Policy	0.011	0.003	3.222	0.002
Capital Structure	-0.257	0.079	-3.254	0.002
Corporate governance	0.016	0.004	4.202	0.000
Timely rendition of information	0.018	0.021	-0.867	0.391

ROA= 0.076+0.011 dividend policy-0.257 capital structure+0.016 corporate governance

The results presented in Table 4.28 reveals that dividend policy, capital structure and corporate governance had a significant relationship with ROA as indicated by P values of 0.002, 0.002 and 0.000 respectively. Furthermore, the findings indicated that dividend

policy and corporate governance were positively related to ROA while capital structure was negatively related to ROA. Timely rendition of information was positively but insignificantly related to ROA. The findings implies that, holding other factors constant, a unit improvement in dividend policy as well as corporate governance leads to a 0.011 and 0.016 unit improvement in ROA respectively while a unit increase in capital structure leads to a 0.257 unit decrease in ROA.

#### **4.3.12.2 Determinants of ROE**

The study also tested the determinants of ROE by using a multiple regression model presented. The results for model summary are as presented in Table 4.27.

**Table 4.27 Determinants of ROE (Model Summary)**

<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
.570a	0.325	0.262	0.388987

The results indicated that dividend policy, capital structure, corporate governance and timely rendition of information, are positively correlated with ROE as indicated by an R of 0.570. Furthermore, the results indicated that the predictor variables combined explain only 32.5% of the changes in ROE while the remaining the remaining 67.5% is explained by other factors not captured in the study. The findings imply that the predictor variables used in the study explain larger change in ROA as compared to ROE. The study also established the model fitness and the results are as presented in Table 4.28.

**Table 4.28 Determinants of ROE (Model Fitness/ANOVA)**

<b>Indicator</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	3.129	4	0.782	5.17	.002
Residual	6.506	43	0.151		
Total	9.635	47			

The findings in Table 4.28 indicate that the model for dividend policy, capital structure, corporate governance and timely rendition of information fit well as the F statistic of 5.17 was significant at 5% level of significance. The study lastly presented the coefficients for the determinants of ROE as presented in Table 4.29.

**Table 4.29 Determinants of ROE (Model Coefficients)**

<b>Indicator</b>	<b>B</b>	<b>Std. Error</b>	<b>T</b>	<b>Sig.</b>
(Constant)	-0.138	0.331	-0.416	0.68
Dividend Policy	0.043	0.012	3.684	0.001
Capital Structure	-0.423	0.273	-1.548	0.129
Corporate governance	0.028	0.014	2.035	0.048
Timely rendition of information	0.004	0.071	-0.052	0.959

$$ROE=0.043DP+0.028CG-0.138$$

The results presented in Table 4.29 reveals that only dividend policy and corporate governance had a significant relationship with ROE as indicated by P values of 0.001 and 0.048 respectively. Furthermore, the findings indicated that capital structure and timely rendition of information were not significantly related with ROE. The findings implies that, holding other factors constant, a unit improvement in dividend policy as well as corporate governance leads to a 0.043 and 0.028 unit improvement in ROE respectively .

#### 4.3.12.3 Determinants of Profit after tax

The study also tested the determinants of net profit by using a multiple regression model presented. The results for model summary are as presented in Table 4.30.

**Table 4.30 Determinants of profit after (Model Summary)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.923a	0.853	0.839	2350.11

The results indicated that dividend policy, capital structure, corporate governance and timely rendition combined, are positively correlated with profitability as indicated by an R of 0.923. Furthermore, the results indicated that the predictor variables combined explain 85.3% of the changes in profitability while the remaining the remaining 14.7% is explained by other factors not captured in the study. The findings imply that the predictor variables used in the study explain larger change in profit after tax than both ROA and ROE. The study also established the model fitness and the results are as presented in Table 4.31.

**Table 4.31 Determinants of profit after tax (Model Fitness/ANOVA)**

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	1,342,800,754.68	4	335700188.67	60.782	.000
Residual	231966654.1	43	5523016		
Total	1574767409	47			

The findings in Table 4.31 indicate that the model dividend policy, capital structure, corporate governance and timely rendition fit well as the F statistic of 60.782 was significant at 5% level of significance. The study lastly presented the coefficients for the determinants of profitability as presented in Table 4.32.

**Table 4.32 Determinants of net profit (Model Coefficients)**

Indicator	B	Std. Error	T	Sig.
(Constant)	-14323.483	1607.906	-8.908	0.000
Timely rendition	1422.242	443.367	3.208	0.003
Dividend policy	291.82	69.644	4.19	0.000
Capital structure	-19153.673	1853.521	-10.334	0.000
Corporate governance	274.757	88.441	3.107	0.003

$$\text{Net profit} = 291.82\text{DP} - 19153.673\text{CS} + 274.757\text{CG} + 1422.242\text{TR} - 14323.483$$

The results presented in Table 4.32 reveals that all the independent variables that is dividend policy, corporate governance, timely rendition and corporate governance had a significant relationship with net profit as indicated by P values of 0.000, 0.003, 0.003 and 0.000 respectively. The findings also indicated that only capital structure is negatively related to net profit.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter deals with the summary of the findings, the conclusion and recommendations. This was done in line with the objectives of the study. Areas of further research were suggested.

#### **5.2 Summary**

The findings of the study revealed that the combined effect of independent variables influenced financial performance. The study findings indicated that dividend policy, corporate governance and timely rendition are positively associated with ROA while capital structure is negatively associated with ROA. These findings were both supported by the frequencies of the responses from the respondents which were presented in the form of percentages.

##### **5.2.1 Dividend Policy**

The first objective of the study was to determine the effect of dividend policy on financial performance of firms listed on the Rwanda Stock Exchange. The findings of the study revealed that the association between dividend policy and both net profit, ROA and ROE is positive and significant implying that an increase in dividend policy in terms of earnings per share is associated with an improvement in financial performance of the firms listed at the RSE. Further study findings revealed that dividend policy explains a larger change in ROE than in both net profit and ROA. Furthermore, the relationship between dividend policy and both ROA and ROE is positive and significant at 5% level of significance implying that an improvement in dividend policy leads to an

improvement in both ROA and ROE. The relationship between dividend policy and profitability was not significant.

### **5.2.2 Capital Structure**

The second objective of the study was to identify the effect of capital structure on financial performance of firms listed on the Rwanda Stock Exchange. The study findings indicated that the association between capital structure and both net profit, ROA and ROE is negative implying that an increase in capital structure, measured as liquidity ratio, is associated with a decrease in financial performance of the firms listed at the RSE. Furthermore, the results indicated that capital structure explains a larger change in profitability than in both ROA and ROE. The regression results indicated that the relationship between capital structure and both net profit, ROA and ROE is negative and significant at 5% level of significance implying that an increase in capital structure leads a decrease in financial performance.

### **5.2.3 Corporate governance**

The third objective of the study was to evaluate the effect of corporate governance and social responsibility on financial performance of firms listed on the Rwanda Stock Exchange. The study findings indicated that the association between corporate governance and both net profit, ROA and ROE is positive implying that an improvement in corporate governance is associated with an improvement in financial performance of the firms listed at the RSE. Further study findings indicated that corporate governance explains a larger change in profitability than in both ROA and ROE. The regression results indicated that the relationship between corporate governance and both net profit, ROA and ROE is positive however the relationship between corporate governance and both profitability as well as ROA is significant while corporate governance is insignificantly related to ROE implying that an improvement in corporate governance leads an improvement in ROA and profitability.

#### **5.2.4 Timely rendition of information**

The fourth objective of the study was to determine the effect of timely rendition of information on financial performance of firms listed on the Rwanda Stock Exchange. The findings indicated that the association between timely rendition of information and both net profit, ROA and ROE was positive implying that an improvement in timely rendition of information is associated with an improvement in financial performance of the firms listed at the RSE. The study findings also indicated that timely rendition of information explains a larger change in net profit than in both ROA and ROE although it explains the smallest change as compared to the other predictor variables investigated in the study. The regression results indicated that the relationship between timely rendition and both net profit, ROA and ROE is positive. The relationship is however not significant with both ROA and ROE implying that changes in financial performance of firms listed at RSE cannot be attributed to timely rendition of information.

### **5.3 Conclusions**

#### **5.3.1 Dividend Policy**

Based on the study findings, the study concluded that dividend policy is positively and significantly associated with both net profit, ROA and ROE and that dividend policy explains a larger change in ROE than in ROA and profitability. Furthermore, the study also concluded that dividend policy is positively and significantly related to both ROA and ROE but not significantly related to profitability.

#### **5.3.2 Capital Structure**

Another conclusion made by the study is that, the association between capital structures and both net profit, ROA and ROE is negative and capital structure explains a larger change in profitability than in both ROA and ROE. Furthermore, the relationship between capital structure and both profitability, ROA and ROE is negative and

significant. Generally, the study concluded that capital structure is negatively and significantly related to financial performance of firms listed at the RSE.

### **5.3.3 Corporate governance**

Based on the findings, the study further concluded that corporate governance is positively associated with net profit, ROA and ROE and that corporate governance explains a larger change in net profit than in both ROA and ROE. Another conclusion is that the relationship between corporate governance and both ROA and ROE is positive however the relationship between corporate governance and both net profit and ROA is significant while corporate governance is insignificantly related to ROE.

### **5.3.4 Timely rendition of information**

The last conclusion made by the study based on the study findings is that the association between timely rendition of information and net profit, ROA and ROE is positive and that timely rendition of information explains a larger change in net profit than in ROA and ROE although it explains the smallest change as compared to the other predictor variables investigated in the study. The study also concluded that the relationship between timely rendition and both ROA and ROE is positive but insignificant but significant with net profit. Generally, the study concluded that timely rendition of information is insignificantly related to financial performance of firms listed at the RSE.

## **5.4 Recommendations**

The study recommendations are in line with the objectives, findings and conclusions of the study.

### **5.4.1 Dividend policy**

The study recommends that firms listed at the RSE should improve their dividend policy as it leads to improved financial performance. The firms should operate under established and regularly observed dividend policy and also pay dividends in correlation with its value.

### **5.4.2 Capital structure**

The study recommends that firms listed at the RSE should improve their capital structure and implement strategies that lead to a reduction in liquidity ratio as it leads to improved financial performance. The firms should keep its leverage level under control and have clear working capital management guidelines to avoid bankruptcy.

### **5.4.3 Corporate Governance**

The study recommends that firms listed at the RSE should improve their corporate governance as it leads to improved financial performance. Having a larger board size is associated with diversified opinion which helps to improve the financial position of the firm. The firms should have a full functional and experienced board as well as a budget and commitment on corporate social responsibility.

### **5.4.4 Timely rendition of information**

The study recommends that firms listed at the RSE should have better mechanisms which allow for timely rendition of information as it leads to improved financial performance. The firms should have a clear distinction and purpose for timely regulatory and statutory returns and guidelines on reports and returns should often be self-explanatory and understood.

### **5.5 Areas for Further research**

The study assessed the determinants of financial performance of firms listed on the Rwanda Stock Exchange. Further studies can be conducted to assess other factors not investigated in this study for instance resource availability and firm size and external factors like macroeconomic volatility that can also determine financial performance of firms. Furthermore, a similar study can be conducted on non-listed firms. For comparison purposes, a study can be conducted using the same variables under study but in a different context so as to compare the findings.

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## APPENDICES

### Appendix I: Questionnaire

This questionnaire is divided into 4 short sections that should take only a few moments of your time to complete. Please respond appropriately in the blanks provided. This is an academic exercise and all information collected from respondents will be treated with strict confidentiality.

#### **SECTION A: BASIC INFORMATION**

1. What is your gender?

- a) Female
- b) Male

2. How old are you?

- a) 18-25 years
- b) 26-35 years
- c) 36-55 years
- d) Above 55 years

3. What is your level of Education?

- a) Certificate
- b) Diploma
- c) Degree
- d) Masters
- e) PHD

4. For how long have you worked in the company?

Less than 2 years

2 to 4 years

5 to 10 years

More than 10 years

**Section B: Dividend policy**

This subsection is concerned with investigation of the effect of dividend policy on performance of the company. Please respond to the questions accordingly. Please mark (x) in the box which best describes your agreement or disagreement with the statements

No	Statement	Strongly agree	agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
1	The company operates under established and regularly observed dividend policy					
2	The company pays dividends in correlation with its value					
3	Your company prefers to pay dividends to shareholders than interest to debentures holder because of the incidence on profitability					

No	Statement	Strongly agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4
4	The shareholders subscribe to high gaining				
5	Company performs better because of staff share scheme				

**Section C: Capital structure**

This subsection is concerned with investigation of the effect of capital structure on performance of the company. Please respond to the questions accordingly. Please mark (x) in the box which best describes your agreement or disagreement with the statements

No	Statement	Strongly agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4
1	The company relies on loan in order to run				

No	Statement	Strongly agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4
2	The company has a huge burden of current liabilities as compared to current assets				
3	The burden of cost of equity is more than the burden of cost of debentures on Profit and loss account				
4	The company keeps its leverage level under control				
5	There are clear working capital management guidelines by the company to avoid bankruptcy				

**Section D: Corporate governance**

This subsection is concerned with investigation of the effect of corporate governance on performance of the company. Please respond to the questions accordingly. Please mark (x) in the box which best describes your agreement or disagreement with the statements

No	Statement	Strongly agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4
1	Your company has a full functional and experienced board				
2	Corporate governance is practiced in your company				
3	The audit committee is effective and alive to its responsibility in check meeting financial report and auditing system				
4	The budget and commitment on corporate social responsibility of your company is impressive				
5	The issue of agency problem has been completely resolved by corporate governance				

**Section E: Timely rendition of information**

This subsection is concerned with investigation of the effect of timely rendition of information on performance of the company. Please respond to the questions accordingly. Please mark (x) in the box which best describes your agreement or disagreement with the statements

No	Statement	Strongly agree	Neutral	Disagree	Strongly Disagree	
		1	2	3	4	5
1	Issue of sanction and compliance on rendition of returns is a regular characteristics of your company annual financial report					
2	There is clear distinction and purpose for timely regulatory and statutory returns					
3	Guidelines on report and returns are often self-explanatory and understood					
4	Everybody understands the components, constituents and essence of annual financial reports					
5	Timely and accurate rendition of management and financial report is an evidence of efficiency of the system within the organization					

**Section F: Financial performance of the company**

This subsection is concerned with investigation of the financial performance of the company. Please respond to the questions accordingly. Please mark (x) in the box which best describes your agreement or disagreement with the statements concerning

No	Statement	Strongl y agree	agree	Neutral	Disagre e	Strongl y Disagre e
		1	2	3	4	5
1	There has been an increase in Earnings Per Share in the company for the last 5 years					
2	There has been an increase in Return on Equity in the company for the last 5 years					
3	There has been an increase in Return on Asset in the company for the last 5 years					
4	There has been an increase in profits in the company for the last 5 years					
5	There has been an increase in return in investments in the company for the last 5 years					

**Thank you very much**

**Appendix II: Secondary data collection sheet**

Name of company \_\_\_\_\_

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<b>Year</b>	<b>Return on Asset</b>	<b>on Return on equity</b>	<b>Profit after tax</b>	<b>Dividend payout ratio</b>	<b>Debt ratio</b>	<b>Board size</b>	<b>Frequency of financial reporting</b>
June 2011							
December 2011							
June 2012							
December 2012							
June 2013							
December 2013							
June 2014							
December 2014							

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### **Appendix III: Listed Firms on Rwanda Stock Exchange**

<b>N</b>	<b>LISTED FIRMS</b>
1	Bralirwa
2	Kenya Commercial Bank
3	National Media Group
4	Bank of Kigali
5	UCHU
6	Equity
<b>TOTAL : SIX FIRMS</b>	

(Source: Rwanda Stock Exchange book, Feb.2014)

**Appendix IV. Approval letter**



**JOMO KENYATTA UNIVERSITY  
OF  
AGRICULTURE AND TECHNOLOGY**

**DIRECTOR, BOARD OF POSTGRADUATE STUDIES**

P.O. BOX 62000  
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24<sup>th</sup> MARCH, 2016

MAUWA JEANNINE  
C/o SEPM  
JKUAT

Dear Ms Mauwa,

RE: APPROVAL OF PhD RESEARCH PROPOSAL AND SUPERVISORS

Kindly note that your research proposal entitled: "Determinants of Financial Performance of Firms Listed on the Rwanda Stock Exchange", has been approved. The following are your approved supervisors:-

1. Prof. Gregory Namusonge
2. Prof. Silas Onyango

  
PROF. MATHEW KINYANJUI  
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Copy to: Dean, SEPM

/sn



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