

## Market Securities towards Financial Performance of Public Enterprises in Rwanda: A Case of Rwanda Stock Exchange

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### Abstract:

**Background:** Stock markets play a great role in the contribution of economic growth of a country, world over. Through their various operations, they are able to mobilize savings and channel them to more productive activities in the economy. Because of these and many other roles they play, policy makers and government world over are keen on the performance of market securities. The ultimate purpose of this research was to assess the effect of market securities on the financial performance of public enterprises in Rwanda. The specific objectives of this research were, to examine the reliability of market securities as a source of finance to the public enterprises; to examine the contribution of equity distribution towards financial performance of public enterprises and to evaluate motivation of investing in market securities by public enterprises.

**Materials and Methods:** The target population was employees of Rwanda Stock Exchange. These totalled to 99 employees in different departments and then a sample size of 80 respondents was selected using simple random technique. Structured questionnaire was used for data collection. Data was analysed and interpreted by using Statistical Packages for Social Sciences (SPSS version 21).

**Results:** The research findings on objective one revealed that a total of 89.9% of the respondents were in agreement that the reliability of the market security policies is key to increase in intangible assets. In addition, a total of 85.5% of the participants in agreement with the statement that the reliability of market securities improves profitable exchanges. The research findings in relation to objective two evidenced that 52.2% of the participants were in strong agreement on the statement that the equity distribution improves macro-economic growth and financial stability of enterprises. A total of 85.5% of the participants were in agreement that the equity distribution increases the level of savings. In relation to objective three, 47.8% of the respondents strongly agreed and 33.3% agreed with the statement that investing in market securities promotes investment in sustainable development and innovation. The correlation analysis showed that all the Pearson's coefficient of correlations was positive and significant to financial performance. The adjusted R<sup>2</sup> was 0.610 for the overall effect of market securities on financial performance of public enterprises. This implied that 61% of the changes in the financial performance of public enterprises were as a result of market securities reliability, contribution and motivation. The regression model was found to be significant at 5% ( $p < 0.05$ ). The results obtained to investigate the effect of each of the measures of market securities on financial performance showed that all the coefficient were significant since the p-values were less than 0.05.

**Conclusion:** From the findings presented, there is evidence that market securities are drivers of financial performance of public enterprises. The findings showed that there exist positive and significant effect between market securities reliability and the financial performance. The researcher recommends that policy makers and Rwanda Stack Exchange should promote campaign listing through various strategies. Further, the researcher recommends that private firms looking to expand their financial base can do so through listing and active participation in the market securities.

**Key Words:** Market Securities; Stock exchange market; Public Enterprises; Financial performance; Rwanda

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### I. Introduction

Market securities have had a great role in advanced nations such as the US, the UK, Japan and so many others and have significantly much influenced their economic advancement. In Africa, specifically in Rwanda, like other less economically developed countries, exchange market securities face various challenges. These challenges are mainly related to little financial literacy, underdeveloped market infrastructure, few investment options, political instability, and poor disclosure requirements, among others. Despite these challenges, African states more than never seem firmly committed to the path of modernization of their economies, which is necessitated by the context surrounding globalization. One of the pathways by which this can be achieved is

through the development of financial markets that, besides acting as source of capital at firm level, they are a barometer of the economic development of a nation (Larry, 2015). A stock exchange market provides markets where shares and bonds are issued and traded through either exchanges or over-the-counter markets and expected to earn dividend and coupon respectively. Systematically arranged and controlled economic trade where securities are purchased and exchanged at costs monitored by the rules of demand and supply, stock exchange inflicts strict rules, listing requests, and statutory requirements that guide all listed and marketing parties. Furthermore, this market is divided into primary together with the secondary market where the later one is the market for securities sold for the first time.

The secondary one, as stated in McGill (2014) is the trade where already fixed safekeeping are bought and traded through licensed brokers. On the Stock exchange, share costs rise and drop depending, largely, on market information and factors. Subsequently, the development of stock prices in general and that of the stock indices can be a measure of the entire drift within the budget. It plays a big role in national economy; it is a barometer of the economy.

In Rwanda, the process of creating a Rwanda capital market started in 2004 with the Rwanda Stock market starting later in March 2007 following the enactment of the capital market advisory council statute that consequently led to the creation of Rwanda Capital Markets (RCM) body, which is government agency although a majority of its member are selected in private sector (CMA, 2015). Consequently, the banks still dominate the financial system relative to stock exchange market. Stock exchange encourages investment in securities and the overall economic growth of the country.

However, there are nevertheless only a few listed companies in RSE, eight in total and there is for the most part a moderate development of the stock market. Higher listing qualifications are underlined as a basic challenge particularly on the requirement of having at slightest three-years continuous financial statements well monitored. The other highlighted issues involved having a bounded number of speculation examiners, short request for securities, huge exchange costs, needy fundamental offices and small volumes of exchanges. Moreover, some private and family companies may opt not to publicly trade in the stock market due to their need for control and privacy. These have made many companies miss out the opportunities and benefits offered by the security market. To fill this gap, this research aimed at investigating the effect of market securities on the financial performance of public enterprises in Rwanda taking the case of Rwanda Stock Exchange (RSE).

The main objective of this research was to assess the effect of market securities on the financial performance of public enterprises in Rwanda, taking the case of Rwanda Stock Exchange. The specific objectives that guided the research include

- i) To examine the reliability of market securities as a source of finance to the public enterprises.
- ii) To examine the contribution of equity distribution towards financial performance of public enterprises.
- iii) To evaluate motivation of investing in market securities by public enterprises.

### **Theoretical literature**

A stock market provides the stock agents, companies and dealers to purchase or offer shares, bonds, and different securities. Stock trades frequently work like "continuous auction" markets, with buyers and dealers completing exchanges at a crucial area, which include the ground of the business exchange (Lemke & Lins, 2012). Many different countries of Africa have introduced stock exchange securities and it contributed to the economic growth, namely Kenya, Nigeria (Ntim, 2012). In modern cases, most of the countries again have learnt to bring new product of securities to the market.

According to Nassr and Wehinger (2016), the growth and the development of a country's economy are largely influenced by the economic activities carried out by private firms and entrepreneurs. It is of importance to note the contributions that entrepreneurs have on this and thereby increase their growth opportunities. In addition, it is the work of the government and its agents to work out strategies that ensures an enabling environment exists within the country to attract both domestic and foreign investors. It is of important to ensure that enterprises are supported and that their financial performance monitored through various regulatory frameworks.

Companies also provide economic stimuli through resource mobilization and capital formation. Through their various economic production activities, different companies are engaged in different sectors that create wealth and ensure that economic atmosphere is cohesive through interdependence of the various economic sectors. Moreover, the performance of such enterprises is vital for spurring growth. In the same argument, enterprises provide employment to the larger community improving household's access to income. There is a concerted need to embrace the contribution that these enterprises provide for the economy and promote their financial performance.

Market securities play a greater role in the financial performance of enterprises to an extent of providing a vehicle for financial resource mobilization. According to Ogechukwu (2011), the growth of enterprises can be improved through participation in the capital markets where the firms can have unlimited access to funds. Moreover, the financial contribution of the markets to the firms additionally brings efficiency in

the economy. Owino, *et al.* (2013) study revealed that various constraints make organizations especially the small scale firms fail to meet their growth prospective. Such constraints include cost of capital, information costs, capital market regulations and listing requirements among others. The financial constraints that firms face can be reduced through involvement in the market securities. However, SMEs face challenges in entering these markets compared to their large counterparts.

Sidik (2012) in his research assent to this and evidenced that SMEs face more challenges in their operation. In addition, these firms may face more challenges in accessing financial markets and meeting the requirements necessary to operate in the markets. However, financial markets are important to the enterprises in promoting growth and accessibility of financial resources. Enterprises listed in the market are more likely to perform better under an economy where there are efficient markets.

Market securities play a great role in the financial performance of the listed firms. They also contribute to the competitiveness in the market by efficiently allocating financial resources to better use. Through stringent regulatory measures, market securities ensure that the listed companies provide regular and audited financial reports. This ensures that the companies are up to task in their accounting and in their financial reporting. Moreover, these requirements make the companies to better use their resources efficiently in order to account to the shareholders (Paulsen, 2015).

**Theoretical and conceptual framework**

**Market security theory**

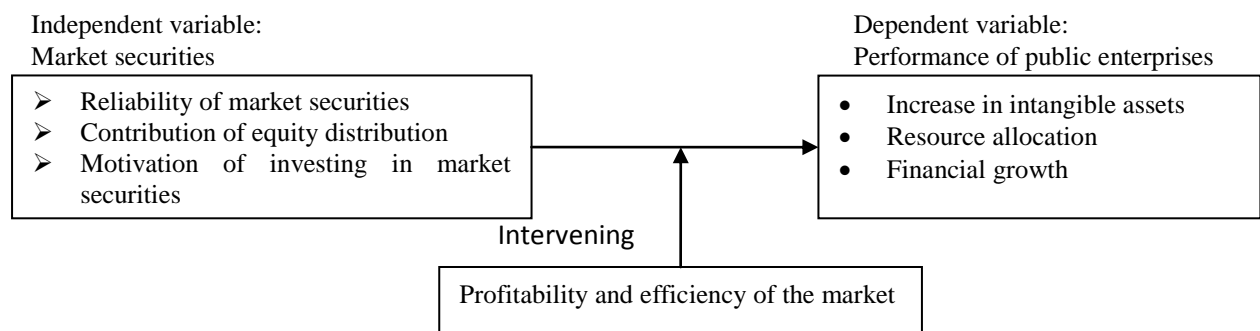
The market securities theory state that efficient markets enable firms to have access to funds from various source. The investors in the market can easily trade their assets and hence the securities even though some are long term, can be regarded as liquid in nature. This in terms of their tradability and in relation to how they exchange hands over time. Different firms listed in the market securities can also be able to raise additional funds through the market mechanisms. The investors within the market are regarded as rational in nature. This implies that the investors are ready to buy financial assets if there is adequate information pointing that there investment will bring sufficient returns. In a similar way, the investors are ready to hold on to their asset portfolio if information indicates that selling them would lead to a loss.

The theory also contributes to the behaviour of investors in the market and their decisions to sell buy or hold a particular financial asset (Dufresne, Goldstein & Martin, 2001). King and Levine (2013) proposed an additional method to distinguishing the network of diffusion between fund and development, and in their representation, they spotted at advancement as the motor of development.

**Neoclassical theory of investment**

This theory, that Jorgenson (1967) made significant contributions, is a theory related to the rate of return expected for any given investment. According to the theory the expected return for a given investment is proportional to the cost of that investment. Investors are ready to part with their money towards a given investment if the expected marginal rate is favourable and can cover the costs incurred in the investment. This is in view that constant involvement in investment should bring outcome to the investors. In addition, investors in the market will be interested in holding portfolios whose risks are diversified enough to cover them in time of financial needs. This argument therefore point that efficient operation of the market securities attract many investors whose goals are to maximize their returns. This theory provides a link between the fluctuations experienced in the returns of a financial asset with other market factors. These factors are key determinant of the cost of funds and the return thereof. For example, they include interest rate, exchange rates in the markets and the market efficiency (Carpentier & Suret, 2006).

**Conceptual framework**



**Figure 1:** Conceptual framework (source: Researcher, 2020)

Market securities are said to be reliable if they provide investors the required returns. In the stock markets, various companies and individual investors meet to issue, buy or sell the financial securities. If the markets are reliable enough, they will safeguard the interest of these investors through provision of information required for decision making. Moreover, reliability and the efficiency of market securities are increased whenever there is sufficient information flow. In addition, the regulations and the procedures involved within the operations of the market securities provide for reliability. In turn this creates investor confidence and eventually improves the performance of the stock markets and the individual enterprises that are listed in the market (Pan & Mishra, 2018).

The concept of risk and return highlight the various reasons why different investors act different when faced with similar financing decisions that involves amount of risk and associated returns. Some investors will take up higher risk portfolio expecting higher returns while others would prefer to take lower risk portfolio even though they know they have lower returns. Whatever, the risk appetite of the investor, the finance market theory holds that investors will seek to maximize their returns through various investments strategies. Due to the variety of risk attitude in the market securities, there tend to be equity distribution among the participating investors. This is evidenced by the fact that different investors will select different investment portfolio given their risk appetite (Covin & Miller, 2014).

Moreover, as noted by Madura (2012) stock markets provides platform for trading a variety of financial instruments. These include equity instruments such as common stock or debt instruments such as bond or debentures. It also facilitates other financial instruments like derivatives. In the recent past, the markets have developed in the mode of delivery as well as in provision of variety of financial instruments. It has therefore increased the distribution of equities and other market securities among the investors.

As Hornuf and Schwiendbacher (2017) point out there are various reasons why enterprises and individuals choose to engage in market securities. Some of the motivation behind investing in the market securities is the need to increase the financial performance of the firm. In addition, firms will trade in the market securities in order to increase their source of finance base. As such, these firms are able to access more finances through issue of stock or bond instruments. Firms are also motivated in listing in stock exchanges because by listing, they have an advantage over other firms in accessing funds. More so, the cost of financing for these firms is much lower since borrowing through the market security increases the sources of financing.

Kim and Purnanandam (2014) hold that the motivation for any equity issuance is triggered by the need for growth and investments. A firm will issue new shares for the first time to attract more capital for growth prospective. The growth prospective could be in regard to a new entry in to market or launching new products that require heavy research and development investments. Whatever the reasons for investment in the market, any listed firm will have better opportunity for growth and performance (Lewis & Tan, 2016).

## **II. Materials and Methods**

**Study design:** Research design can be defined as the comprehensive approach that a researcher adopts from the moment of concept developed to the time of data analysis and discussion. It is especially a means of specifying all the data collection procedures and the analysis thereafter (Grinnel, 2010). Descriptive research design was used in this research. The research used quantitative approach to provide a comprehensive analysis in relation to the study variables.

**Study Location:** The study was carried out in Rwanda Stock Exchange located in Kigali City, Rwanda.

**Study Duration:** The study covered the period between 2014 and 2019.

**Sample size:** The population for this study were the employees (staff) of Rwanda stock exchange who total to 99 employees in different departments. From these, a sample size of 80 respondents was determined using the Yamane formula (1967)

$$n = \frac{N}{1 + N(e)^2} = \frac{99}{1 + 99 * 0.05^2} \approx 80$$

**Subjects & selection method:** The subject for primary data collection was the staff working in RSE. The sample was selected from this using simple random sampling technique.

### **Procedural methodology**

A structured questionnaire was used together primary data from the sample subjects identified through simple random sampling. A pilot study as discussed by Robson (2010) was used in this research to determine the reliability of the research instruments. The pilot study allowed the researcher to gather data from a small group and determine how the questionnaire could be improved to be more reliable. The testing of data was conducted on some respondents during one week before to test the unwavering quality and legitimacy of the questionnaire. The questionnaires were printed out and distributed at the work station of the respondents. In this

regard, the drop and pick method was used, where the researcher dropped the questionnaire and collected them at a later date. To facilitate this, the researcher identified two key informants within the organization to help distribute and collect the filled questionnaires.

In carrying out this study, the investigator considered various research ethics to set up an understanding with the participants who gave their consent to participate in providing data for this research. The researcher also requested the organization management for permission to carry out research during the work hours and to allow their staff to enthusiastically take part in this exercise. This required an authorization letter as well as some sacrificed time from the participants. Moreover, confidentiality was adhered to throughout the data collection and analysis phase.

**Statistical analysis:**

Once the data was collected, the coding process was used in order to condense data by systematically arranging different responses that were categorized for easy explanation and study. The research focused on traditional areas such as descriptive and statistical inference and also gives special emphasis to establish as well as emerging applied areas. Frequency distribution tables were used after editing and coding of information. The statistical, analytical, descriptive and synthetically research methods for data analysis offered the opportunity to measure and quantifies the results of research. The data were analysed and interpreted by using statistical packages for social sciences (SPSS).

**III. Results**

Out of the 80 questionnaires that were distributed to the respondents, 69 were filled and returned. This represents a return rate of 86.25% which was sufficient enough for the analysis.

**Participants’ information**

Majority of the respondents were male, represented by 55.07% of the respondents while the female respondents were 44.93%. According to the findings, majority of the respondents, that is 46(66.7%) of the respondents have an undergraduate degree followed by those with postgraduate degree who were 14(20.3%) of the respondents. 9(13%) of the respondents said they have diploma. Concerning the age group of the respondents, majority of the respondents (44.93%) were in the age group of between 21 years and 30 years. This was closely followed by 33.33% of the respondents in the age group 31-40 years and by 10.14% of the respondents in the age group 41-50 years. While 5.8% were below 20years and another 5.8% 51 years and above.

**Findings on research objectives**

The research was concerted along three specific objectives. This section presents the findings along these objectives.

**Findings on objective one**

The first objective was to examine the reliability of market securities as a source of finance to the public enterprises. The respondents’ views were sought on how they view the reliability of market securities as a source of finance for public listed companies, in which they selected their responses on a scale of 5=strongly agree, 4=agree, 3=neutral, 2=disagree and 1=strongly disagree.

**Table 1: Respondents’ Views on the Reliability of Market Securities**

Statements	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. The reliability of market security policies offers increase in intangible assets	0	0.0%	3	4.3%	4	5.8%	30	43.5%	32	46.4%
2. The government financial policies enable effective mobilization of domestic and foreign resources for investment in enterprise development and innovation	0	0.0%	2	2.9%	5	7.2%	24	34.8%	38	55.1%
3. The government financial policies promote good governance in business practices	1	1.4%	6	8.7%	6	8.7%	27	39.1%	29	42.0%
4. The reliability of market securities enables provision of products and services to address specific sustainability challenges (e.g. green bonds)	2	2.9%	3	4.3%	11	15.9%	24	34.8%	29	42.0%
5. The reliability of market securities provides investors’ protection on investment	1	1.4%	6	8.7%	4	5.8%	21	30.4%	37	53.6%
6. The reliability of market securities improves profitable exchanges, investors and companies rely on sustainable, healthy and prosperous societies	1	1.4%	6	8.7%	3	4.3%	30	43.5%	29	42.0%
7. The reliability of market securities policies adopts stock exchanges to serve SMEs	6	8.7%	5	7.2%	8	11.6%	25	36.2%	25	36.2%

8. The reliability of market securities policies promotes standards to ensure transparency and well-regulated markets	1	1.4%	4	5.8%	9	13.0%	22	31.9%	33	47.8%
9. The reliability of market securities adopts and implements international standards on stock market	2	2.9%	2	2.9%	10	14.5%	23	33.3%	32	46.4%

SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree

Source: Researcher (2020)

The responses from the participants as recorded in Table 1 showed that 46.4% and 43.5% of the respondents strongly agreed and agreed with the statement that the reliability of market security policies offers increase in intangible assets. This gave a total of 89.9% of the respondents in favour that the reliability of the market security policies is key to increase in intangible assets. The rest of the respondents said they were neutral (5.8%) or disagreed (4.5%) with the statement that the reliability of market security policies offers increase in intangible assets. On whether the government financial policies enable effective mobilization of domestic and foreign resources for investment in enterprise development and innovation, most of the respondents were in strong agreement at 55.1% while 34.8% in agreement with the statement. Only 2.9% disagreed with the statement and 7.2% were neutral. These findings are in harmony with the research findings that Beck *et al.* (2008) pointed out in regard to market reliability.

Table 1 also shows the respondents' view on the statement that the government financial policies promote good governance in business practices. Out of the 69 respondents, 42% strongly agreed and 39.1% agreed bringing the total to 81.1% of those who were in agreement with the statement. In addition, 8.7% said they were neutral, while another 8.7% disagreed and 1.4% strongly disagreed with the statement that the government financial policies promote good governance in business practices. On whether the reliability of market securities enables provision of products and services to address specific sustainability challenges, 42% strongly agreed plus 34.8% agreed with the statement. On the other side of the scale, 4.3% disagreed while only 2.9% strongly disagreed. 15.9% of the respondents were neutral to the statement that the reliability of market securities enables provision of products and services to address specific sustainability challenges. Similar findings by DeAngelo, DeAngelo and Stulz (2010) were pointed in their research. For them, market securities are said to be reliable if they can provide variety of financial products to investors wherever needed.

Further on the statement that the reliability of market securities provides investors' protection on investment, most of the participants indicated they strongly agreed (53.6%) followed by those who agreed (30.4%) with the statement. 5.8% of the respondents indicated that they were neutral, 8.7% disagreed while only 1.4% strongly disagreed that the reliability of market securities provides investors' protection on investment. Table 4.2 also shows the results on whether the reliability of market securities improves profitable exchanges, investors and companies rely on sustainable, healthy and prosperous societies 43.5% agreed with the statement and 42% strongly agreed with the statements showing a total of 85.5% of the participants in agreement. However, 4.3% of the respondents were neutral, 8.7% disagreed and 1.4% strongly disagreed with the statement.

Table 1 further shows the respondents' views about the reliability of market securities policies adopts stock exchanges to serve SMEs where those who strongly agreed and who agreed each attained a 36.2% representation of the respondents. 11.6% of the respondents indicated neutral while 7.2 disagreed and 8.7% strongly disagreed that the reliability of market securities policies adopts stock exchanges to serve SMEs. On whether the reliability of market securities policies promotes standards to ensure transparency and well-regulated markets, 47.8% of the participants said strongly agree and 31.9% said disagree. This totalled to 79.7% of the participants who were in favour with the statement. 13% of the respondents were neutral, 5.8% disagreed while 1.4% strongly disagreed. The last statement in this objective one was concerned on whether the reliability of market securities adopts and implements international standards on stock market. To this 46.4% strongly agreed and 33.3% agreed bringing the total to 79.6%. The rest of the respondents said neutral (14.5%), disagree (2.9%) and strongly disagree (2.9%). Walker and Yost (2008) suggested in their research why regulations and standards of the market securities are of paramount importance especially in improving the reliability of the markets. Fufa and Kim (2018) in their research also found that reliability of market security is a key factor in the promotion of growth and development of business and the overall economy. The market reliability increases investors' confidence and improve the level of savings and investments in a country.

### Findings on objective two

The second object of the research was to examine the contribution of equity distribution towards financial performance of public enterprises. Like in objective one, the participants were required to express their agreement or disagreement based on the statements provided in the questionnaire where 5=strongly agree, 4=agree, 3=neutral, 2=disagree and 1=strongly disagree. Table 2 was used to display the findings.

**Table 2: Respondents' views on equity distribution**

Statements	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. The equity distribution improves macro-economic growth and financial stability of enterprises	2	2.9%	3	4.3%	5	7.2%	23	33.3%	36	52.2%
2. The equity distribution increases enterprises revenues	3	4.3%	3	4.3%	9	13.0%	23	33.3%	31	44.9%
3. The equity distribution increases the level of savings	0	0.0%	3	4.3%	7	10.1%	19	27.5%	40	58.0%
4. The equity distribution addresses to investors some barriers to the use of markets securities	6	8.7%	3	4.3%	8	11.6%	28	40.6%	24	34.8%
5. The equity distribution provides the economic competition of enterprises	2	2.9%	3	4.3%	8	11.6%	20	29.0%	36	52.2%
6. The equity distribution involves in trade policy and entrepreneurship	0	0.0%	4	5.8%	10	14.5%	26	37.7%	29	42.0%

SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree

Source: Researcher (2020)

As shown in Table 2, 52.2% of the participants were in strong agreement on the statement that the equity distribution improves macro-economic growth and financial stability of enterprises. 33.3% of the participants agreed with the statement. 7.2% of the respondents said they were neutral, 4.3% disagreed while 2.9% of the participants strongly disagreed. On whether the equity distribution increases enterprises revenues, 44.9% of the participants strongly agreed and 33.3% agreed with the statement. This gave a total of 78.2% of those who were in agreement with the statement. 13% of the participants however indicated neutral, 4.3% indicated strongly disagree and disagree, apiece, that the equity distribution increases enterprises revenues. On the statement that the equity distribution increases the level of savings, 58% of the respondents strongly agreed, 27.5% agreed bringing the total of those in agreement to 85.5% of the participants. The rest indicated neutral (10.1%) and disagreed (4.3%).

Table 2 also shows the respondents; views on the statement that the equity distribution addresses to investors some barriers to the use of markets securities. According to the findings obtained in the field, out of 69 respondents, 40.6% were in agreement while 34.8% were in strong agreement that the equity distribution addresses to investors some barriers to the use of markets securities. 11.6% of the participants said they were neutral 4.3% disagreed and 8.7% strongly disagreed. On whether the equity distribution provides the economic competition of enterprises, 52.2% of the respondents indicated strongly agree while 29% indicated agree. This clearly gave a total of 81.2% of the participants who were in agreement with the statement. 11.6% of the participants said they were neutral 4.3% disagreed and 2.9% strongly disagreed that the equity distribution provides the economic competition of enterprises. On the last statement about whether the equity distribution involves in trade policy and entrepreneurship, 42% of the respondents strongly agreed while 37.7% of the respondents agreed with the statement. Those who indicated neutral were 14.5% and the rest, 5.8% disagreed with the statement. In their research, Kim and Purnanandam (2014) were in agreement that financial markets provide avenue for the distribution of the financial securities. Hence, different securities are available for the firms whenever they are engaged in the stock market.

**Findings on objective three**

The third objective was to evaluate motivation of investing in market securities by public enterprises. Similar to other two objectives, this was achieved through use of five point Likert scale with 5=strongly agree, 4=agree, 3=neutral, 2=disagree and 1=strongly disagree.

**Table 3: Respondents' views on motivation for investing in market securities**

Statements	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. Investing in market securities improves job creation	1	1.4%	4	5.8%	8	11.6%	19	27.5%	37	53.6%
2. Investing in market securities improves empowerment of capacity building and general infrastructure development	2	2.9%	2	2.9%	8	11.6%	30	43.5%	27	39.1%
3. Investing in market securities decreases brain drain	1	1.4%	9	13.0%	7	10.1%	19	27.5%	33	47.8%
4. Investing in market securities offers a good working environment	3	4.3%	4	5.8%	6	8.7%	21	30.4%	35	50.7%
5. Investing in market securities opportunity of occupation and professionalism	1	1.4%	6	8.7%	9	13.0%	22	31.9%	31	44.9%
6. Investing in market securities promotes economic development with money growth	0	0.0%	3	4.3%	8	11.6%	21	30.4%	37	53.6%
7. Investing in market securities promotes investment in sustainable development and innovation	0	0.0%	6	8.7%	7	10.1%	23	33.3%	33	47.8%
8. The capital market growth rate contributes in meeting the MDGs-SDGs will require massive injections of investment	1	1.4%	3	4.3%	8	11.6%	28	40.6%	29	42.0%

SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree

Source: Researcher (2020)

As shown in Table 3, 53.6% of the participants strongly agreed that investing in market securities improves job creation while 27.5% agreed with the statement. This gave a total of 81.1% of the respondents who were in agreement with the statement. 11.6% of the respondents were neutral, 5.8% disagreed and 1.4% of the respondents strongly disagreed that investing in market securities improves job creation. On whether investing in market securities improves empowerment of capacity building and general infrastructure development, 43.5% agreed and 39.1% strongly agreed with the statement. Those who were neutral were 11.6% while strongly disagree and disagree each got 2.9% of the responses. Adanan, Bustamam and Saidin (2017) found that market securities create jobs for the community and through their operations; they improve the financial performance of the listed companies.

Table 3 also shows the results on the statement that investing in market securities decreases brain drain. To this 47.8% strongly agreed and 27.5% agreed giving a total of 75.3% of the participants who were in agreement. 10.1% of the respondents were neutral to this statement. 13% disagreed and only 1.4% of the respondents strongly disagreed with the statement that investing in market securities decreases brain drain. Further, on the statement that investing in market securities offers a good working environment, 50.7% of the respondent strongly agreed while 30.4% agreed. This gave a total of 81.1% of the participants who were in favour to this statement. However, 8.7% were neutral, 5.8% disagreed and 4.3% strongly disagreed with the statement that investing in market securities offers a good working environment. On whether investing in market securities is an opportunity of occupation and professionalism, 44.9% of the respondents indicated strongly agree and 31.9% of indicated agreed. 13% of the respondents were neutral, 8.7% disagreed and 1.4% strongly disagreed.

Table 3 further reveals that the respondents' views on the statement that investing in market securities promotes economic development with money growth showed that 53.6% of the participants strongly agreed and 30.4% agreed. The rest of the respondents either indicated neutral (11.6%) or disagreed (4.3%). On the statement that investing in market securities promotes investment in sustainable development and innovation, 47.8% of the respondents strongly agreed and 33.3% agreed. Only 10.6% of these were neutral and 8.7% disagreed that investing in market securities promotes investment in sustainable development and innovation. Lastly, the last statement was on whether the capital market growth rate contributes in meeting the MDGs-SDGs will require massive injections of investment. To this 42% of the participants said strongly agree, 40.6% agreed bringing this total to 82.6% of the respondents. On the other hand, 11.6% of the respondents were neutral, 4.3% disagreed and 1.4% strongly disagreed that the capital market growth rate contributes in meeting the MDGs-SDGs will require massive injections of investment. Findings in other research like by Bloom and Van Reenen (2017) showed that market securities promote economic growth and development. Similar findings were also highlighted by Butler *et al.* (2011) in their research work.

**Table 4: Correlation table**

Statements		Performance	Reliability	Contribution	Motivation
Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	69			
Reliability	Pearson Correlation	.743**	1		
	Sig. (2-tailed)	.000			
	N	69	69		
Contribution	Pearson Correlation	.657**	.607**	1	
	Sig. (2-tailed)	.000	.000		
	N	69	69	69	
Motivation	Pearson Correlation	.576**	.598**	.563**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	69	69	69	69

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

Source: Researcher (2020)

To further provide additional input on the main objective of this research, the researcher investigated the relationship between market securities and financial performance of public enterprises in Rwanda. This was done using Pearson's coefficient of correlation and regression analysis. Market securities were measured using the three concepts earlier identified in the conceptual frame work, namely, reliability, contribution of equity distribution and motivation for investing in market securities.

As shown in Table 4, the correlation analysis shows that all the Pearson's coefficients of correlations were positive and significant to financial performance. The reliability of market securities was found to be positively and significantly related to financial performance ( $r=0.743$ ,  $p<0.05$ ), contribution of the market securities was also positive and significant ( $r=0.657$ ,  $p<0.05$ ) and contribution positive and significant ( $r=0.576$ ,



p<0.05). These results attest to earlier results discussed by Hovakimian and Hutton (2010). The performance of enterprises can be positively improved when they are engaged in the stock market. Moreover, market reliability provides the enterprises with variety of securities that can help them raise additional funds for their expansion and operation. This in turn enables the firms to have positive results.

**Table 5: Model summary for financial performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792 <sup>a</sup>	.627	.610	.28440

a. Predictors: (Constant), Motivation, Contribution, Reliability

Source: Researcher (2020)

Table 5 shows the model summary conducted on the regression analysis between market securities and financial performance. According to the results obtained, the R<sup>2</sup> was found to be 0.627 while the adjusted R<sup>2</sup> was 0.610. This implied that 61% of the changes in the financial performance of public enterprises were as a result of market securities reliability, contribution and motivation. There was also significant relationship between markets and financial performance.

**Table 6: Analysis of variance table**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.836	3	2.945	36.414	.000 <sup>b</sup>
	Residual	5.257	65	.081		
	Total	14.093	68			

a. Dependent Variable: Performance

b. Predictors: (Constant), Motivation, Contribution, Reliability

Source: Researcher (2020)

Further, analysis of variance (ANOVA) provided additional useful insight on the significance of the regression model. As shown in Table 6, the regression model was found to be significant (p<0.05) at 5%.

**Table 7: Table for regression coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.699	.357		1.956	.055
	Reliability	.509	.106	.498	4.809	.000
	Contribution	.232	.080	.291	2.894	.005
	Motivation	.113	.097	.115	1.956	.054

a. Dependent Variable: Performance

Source: Researcher (2020)

Table 7 shows the results obtained to investigate the effect of each of the measures of market securities on financial performance. As shown by the column on significance, the entire coefficient was found to be significant since the p-values were less than 0.05. Therefore, the regression model was stated as given in the following equation

$$Perf = 0.699 + 0.509 * Reliability + 0.232 * contribution + 0.113 * motivation + \epsilon$$

Where perf=performance of public enterprises, reliability= the reliability of the market securities, contribution=the contribution of equity distribution and motivation= the motivation for the company to list in the market.

The reliability of market securities was found to have a positive and significant effect on financial performance ( $\beta = 0.509, p < 0.05$ ). Similar findings by Owino, *et al.* (2013). This implied that a one unit change in the reliability of market securities leads to a 0.509 unit change in financial performance. The coefficient on contribution of equity distribution also has a positive and significant ( $\beta = 0.232, p < 0.05$ ) effect on financial performance. This implied that a unit change in the contribution of equity distribution leads to an increase in financial performance by 0.232. Leone, Rock and Willenborg (2017) pointed that equity diversification enable investors to remain safe even when one of the investment fail to give expected returns.

Lastly, the coefficient for motivation for investing in market securities also has positive and significant effect ( $\beta = 0.113, p = 0.05$ ) on financial performance. This implied that a unit change in motivation leads to an increase in financial performance by 0.113. Adanan, Bustamam and Saidin (2017) found that there exist different motivation factors for firms and individual investors to engage in the market securities. This research

found that the motivating factors that make firms list in the stock market relate to the benefits that the firms gains from these markets. These include access to capital, improved financial performance as well as improved reputation in the market.

#### **IV. Discussions**

Access to finance and to financial markets is one of the debated topics in the modern finance and economic literature. Various studies reviewed show that the need for finance has contributed greatly to the developing of the financial markets as well as enabled the innovation of different market securities. Moreover, as discussed in the market security theory, different investors have different financial needs and will behave differently in the market. It is with these factors that the interest in the market securities, the variety of the securities, the reliability as well as the motivational factors to invest in the market has shaped and driven this research. The research has provided more useful insights in regard to the market securities and their influence on the performance of public enterprises.

The study first investigated the market reliability and its influence to the performance of publicly listed companies. To this the research has found that market reliability is a key factor in creating investor confidence and is behind the driving force for enterprises to list in the market. In congruent with the findings of Pan and Mishra (2018), market securities are said to be reliable if they provide the investors the required return, different investing options and at the needed time and in an efficient manner. Similarly, Beck *et al.* (2008) pointed out the need for market reliability for efficient allocation of capital. DeAngelo, *et al.* (2010) and Fufa and Kim (2018) findings are also in harmony with the findings in this research. They pointed out in their research that market securities are said to be reliable if they can provide variety of financial products to investors wherever needed. Further, they also found that reliability of market security is a key factor in the promotion of growth and development of business and the overall economy. The market reliability increases investors' confidence and improve the level of savings and investments in a country.

The study also investigated the contribution of equity distribution as provided by the market securities for the performance of enterprises. This was in line to the various investor financial needs and risk appetite. Hence, market securities should provide variety of financial options in order to meet with such demands. Congruent to the findings by Leone, *et al.* (2017), this research found that there is a significant influence of equity distribution to the performance of listed companies. The research hence pointed out that equity diversification enable investors to have different investment options for the sake of risk diversification as well as improve their investment portfolios. Similarly, in their research, Kim and Purnanandam (2014) were in agreement that financial markets provide avenue for the distribution of the financial securities. Hence, different securities are available for the firms whenever they are engaged in the stock market.

Lastly, the study investigated the motivation for investing in the market. The findings revealed that various entrepreneurs have different motivations that drive them to invest in the markets. Adanan, *et al.* (2017) found that there exist different motivation factors for firms and individual investors to engage in the market securities. This research found that the motivating factors that make firms list in the stock market relate to the benefits that the firms gains from these markets. These include access to capital, improved financial performance as well as improved reputation in the market. To provide further analysis, inferential statistics were conducted and revealed positive and significant effect between market securities and financial performance of public enterprises.

#### **V. Conclusions**

This research project has concentrated in determining the effect of market securities on the financial performance of public enterprises in Rwanda, taking the case of Rwanda Stock Exchange. From the findings presented, there is evidence that market securities are drivers of financial performance of public enterprises. The findings showed that there exist positive and significant effect between market securities reliability and the financial performance. In this regard, there is more need to improve the operational performance of market securities through adequate information flow. Moreover, the literature review pointed out market securities operate more reliably if the investors have adequate information to make financial decisions.

Further, the results evidenced that there is a positive and significant effect between equity distribution in the market securities and financial performance of public enterprises. This is a pointer that market securities can enhance financial performance if there is efficiency in the equity distribution. Lastly, the research findings have pointed out the positive effect of investment in market securities for the financial performance of public enterprises. Firms that have decided to invest by listing in the stock exchanges can leap the positive benefits that arise from this listing. The researcher hence concluded that positive effect of listing in stock exchanges should be enough motivating factor for firms to engage in market securities.

## Recommendations

Following the findings obtained in this research, the researcher recommended that policy makers and Rwanda Stock Exchange should promote company listing through various strategies. RSE is comparatively young in the Africa. However, the time it has been in operation has seen tremendous growth. Yet looking at the few companies listed in the stock exchange points to the fact that more needs to be done to attract more investors and players. In addition, this research has shown that listing in the market can bring positive benefits for enterprises. Hence, key players in the market should increase their sensitising campaign to solicit firms to list in the market.

To the managers and leaders in the market securities, the researcher recommends that they should allow capital market actors to learn from each other's experiences, building on expertise and knowledge. In addition, they should contribute in transparency and accountability of capital market markets and allows for lessons to be shared more easily. Further, the researcher recommends that private firms looking to expand their financial base can do so through listing and active participation in the market securities.

## Suggestions for further studies

The following research areas are suggested for future research

- i) An Assessment of the challenges faced by capital market in Rwanda Stock Exchange.
- ii) The impact of capital market growth on the financial performance of Rwanda Stock Exchange.
- iii) The effectiveness of information flow on the prices of stock in Rwanda Stock Exchange.

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