Determinants of investors' participation on the Rwanda stock exchange

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ABSTRACT

The stock exchange contributes significantly to national economic development through stock investments. Thus, more investor participation is critical in achieving this economic outcome. The primary goal of this research is to investigate the factors influencing investor involvement on the Rwanda Stock Exchange (RSE). The study is anchored on Tobin's separation theorem, financial socialization theory, and social network theory. The survey designed research has a population of 25,647 investors from where sample of 219 respondents was drawn from RSE investors. The collected data were analysed using Profile of the Respondents (demographics), correlation and regression analysis on SPSS. This study's respondents were identified via purposive sampling, and responses were collected using a survey questionnaire. Data were collected through a structured questionnaire for investors, semi-directed interviews with brokers, and a documentary review. According to the findings, financial literacy, social network and government support has a significant joint positive effect on investors' participation on the RSE. The study concludes that enhancing investor participation in the RSE depends significantly on a combination of individual knowledge, social influence, and institutional support. The study recommends that; in order to increase participation in the RSE, the Rwandan government broadens its financial literacy initiatives, implement investor-friendly laws, and promote the sharing of information on social media. The current article is unique in that it integrates personal and non-personal traits as important predictors of investor engagement in emerging nations' stock exchanges.

Keywords: Empowering, Performance Contracts, Political Analysis, Social Accountability, Tools

I. INTRODUCTION

Investing in the stock exchange can be beneficial if you make the correct decisions at the right time and choose the proper investments. Stock exchanges are an important part of economic development of any country, world over they help in creating capital gains, they increase investment, and they bring in better liquidity of the market. To date, there are more than 80 large stock markets across the world continentally distributed in North America and Europe, Asia and Africa with more than 55,000 publicly traded companies (World Federation of Exchanges, 2023). New York Stock Exchange (NYSE) is the largest one measured by market capitalization with the markets in the developing economies rapidly growing investor wise, as well as technologically advanced. Divergence in financial literacy, risk tolerance, social influence, availability of information, government incentives and transaction costs are relevant in determining the extent to which investors take part in the markets despite the changes that have been witnessed globally (Statman, 2020; Lusardi & Mitchell, 2017).

There are 29 stock exchanges in 38 countries in Africa, with the prominent among them being Johannesburg Stock Exchange (JSE), Nigerian Exchange Group (NGX) and La Bourse Régionale des Valeurs Mobilières (BRVM) in West Africa on a continental level. Although the African capital markets show constant growth, there are still limited liquidity, low awareness of people, regulatory and investor educational issues (Agyapong & Nduro, 2022). However, regionally stock exchanges have become open-minded to the concept of the stock exchange reforms as a way to spur interest and incorporate technology to facilitate the inclusion of the financial markets.

In the East African Community (EAC), such nations as Kenya, Uganda, and Rwanda have been making concerted efforts to expand their capital markets and attract retail investors. These are cross-listing programs, the liberalization of markets, and government education (EAC Secretariat, 2023). In this regard, Rwanda Stock Exchange (RSE) which was created in 2005 acts as a major financial institution whose mandate is to mobilize long-term consumption, enhance savings and sponsor investment-driven development. Despite the RSE having the milestones of successful initial public offerings (IPO) and increasing interest of regional investors, the number of participants is quite low in comparison with its potential.

There are eight listed firms at RSE, all of them local and cross-listed firms. Since it was established the trading activity and the interest of the people in the market has grown fast in 2011-2013 with capital market activity rising by 141%. Nevertheless, the following years experienced a significant regression where the annual value dropped by the average of 45% statistically that is mostly explained by the lack of awareness among the investors, financial education, and the lack of social authority to shape a trusted market. The stocks investments are limited with the people even though the Rwanda Capital Market Authority has made efforts in financial literacy and sensitization of the people. Parvin and Panakaje (2022) conducted empirical studies and outlined the contribution of social inclusion and financial literacy to the behavior of investors. In the same boat, Mwakabumbe et al. (2022) determined that risk attitudes influence investment on Dar es Salaam Stock Exchange. Most research about the aspects of social sustainability and financial inclusion has been described in broader regions of developing countries (Malik et al., 2022) and enjoyed positive correlations in Asian, Middle Eastern, and African regions (Ozili, 2020), but with opposing results in Europe.

Due to the low level of participation in the capital market of Rwanda, this study aims at examining the major determinants of participation of investors in RSE not only on economic grounds but also on psychological or social and demographical grounds. It is based on the assumption that an investor is a rational decision-maker and joins the stock market with the anticipation of provided long-term returns, gain in capital, and inflation hedge. The overall objective is to produce context-specific research findings that could lead to the creation of policies, education of investors, and the creation of inclusive financial products as a way of encouraging more people to participate in the capital market in Rwanda.

1.1 Statement of the Problem

The Rwanda Stock Exchange was put in place in 2005 with the aim of achieving these objectives with the means, that is, to facilitate long term capital formation and financial inclusion. In spite of these, the investor participation is strikingly low and the retail and individual investors are still to be engaged. Access to Finance Rwanda (2022) states that the number of Rwandans who actively engage in the investments in capital market is around 1 percent of all the adults in the country, with daily volumes also being relatively low in comparison to the other exchanges in the region. Although the RSE has been developing well in the areas of public listing and financial literacy, there has been continuous inequality in buyers and seller thus supplying a lack of secondary market activity that completes the lack of growth and performance of the RSE in terms of supporting national development.

This low participation rate is persistent and brings in the deeper questions as to the obstacles which prevent a wider participation in the stock market. Too little financial literacy, the low knowledge that the population had about investment possibilities, the lack of social power or even peer groups, or a weak supportive mechanism on the part of the government have all been commonly postulated as the limiting factors. Besides the economic factors, there is accumulating evidence in existence in connection to the importance of the psychological, social and demographic factors in defining the action of investors especially in the frontier markets such as in Rwanda. Such factors have not been studied sufficiently by local empirical sources

International and regional studies have done significant undertakings regarding this topic, but evidence on Rwanda is minimal. To give just a couple of the examples, Parvin and Panakaje (2022) concluded that financial literacy and social inclusion play a bigger role of influencing investor activities in South Asia, whereas Mwakabumbe,*et al* (2022) explored the role of risk tolerance on investor choices in Tatanzanian stock market. Moreover, Ozili (2020) noticed that the level of social and financial inclusion was strongly correlated in various African, Asian and Middle-Eastern countries. Nevertheless, the contextual, cultural and institutional factors that could also be affecting participation in the capital market in Rwanda have not been given full consideration in these studies.

Thus, the research undertaken is driven by this gap, which should be filled by investigating the factors that promote investor participation in RSE with respect to the role of financial literacy, social networks, and government facilitation. The study will help in policy development and strategic formulation that may add value to the development of Rwanda financial sector in terms of increasing the engagement of investors, capital markets development, and promoting financial sector development by providing empirical information about these factors.

1.2 Research Objectives

The primary goal of this research is to investigate the factors influencing investor Participation on the RSE. Specifically to:

i. Ascertain how financial literacy determines investors' participation on the Rwanda stock exchange
ii. Examine if government support determines investors' participation on the Rwanda stock exchange.
iii. Verify how social network determines investors' participation on the Rwanda stock exchange.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Tobin's Separation Theorem (1958)

The Separation Theorem by Tobin (1958) is a possibility of separating investment decisions into two components, namely, to select the optimal risky portfolio (considering risk-return properties) and to determine the amount to invest in such a portfolio based on the personal risk preference. Every investor, no matter his/her preference, is supposed to have an optimal risky portfolio and instead of changing the portfolio with risky assets do the variation by utilizing risk-free assets. The theory supports the modern portfolio management including CAPM and emphasizes the need of efficient capital markets and risk-return trade-offs. It is relevant to Rwanda in terms of informing the way investors would structure their presence on the capital markets such as RSE through their appetite to risk.

Financial Socialization Theory highlights on the fact that all the financial knowledge, skills, and behaviors learnt are socialized through most especially the family, similar aged persons, education and the media. It emphasizes the financial competence is not a form of nature but it is acquired through direct instruction, modeling, and involvement. Scholars such as John Smetana and Sharon Danes demonstrated that family and community play a consequential role in moulding financial attitudes. The theory applied to Rwanda implies that advancing the role of investors or uptake of fintech among the SMEs has a strong dependence on timely financial education and long-term socialization in positive financial behaviors.

The Social Network Theory (Moreno 1930s) views how relationships (nodes and ties) determine behaviour, attitudes, and decision within it. It reveals how access to financial information, trust and investment actions are defined by social networks. In Rwanda, with possibly a lack of formal financial capital, social networks can play an active role in creating awareness and interest towards RSE due to the impact of peer influence, favorable shared experiences, and pool investing. According to this theory, the community structures and informal groups should be used to expand the financial inclusion of SME and the involvement of the investor. The Social Network Theory presents an excellent approach to the interpretation of relations and interactions that determine investor participation in the RSE. With the power of social networks, the stakeholders will improve on the dissemination of information, create trust, raise financial literacy and eventually attract more members to the stock market. This practice has the potential of growing and maturing the RSE towards a positive economic growth and financial inclusion in Rwanda.

2.2 Empirical Review

2.2.1 Financial Literacy and Investors' Participation on the RSE

According to Menkhoff and Westermann (2024), one of the major mysteries in finance is low stock market participation (SMP). There are a lot of determinants out there. We incorporate these factors into a structure that comes from a typical static portfolio model. Next, we address arguments pertaining to particular SMP determinants and the accompanying empirical data. The focus of their survey is on the identification of a causal impact of determinants on SMP via shocks. They summarized the evidence by suggesting established and likely SMP determinants and providing an outlook for future research and policy.

A comprehensive examination of the corpus of literature from many search engines, such as Google Scholar, Scopus, Research Gate, etc., was carried out by Parvin and Panakaje (2022). These collected data consist of journal articles, working papers, reports, periodicals, books, websites, and other materials on financial literacy, stock market participation, social inclusion, and digital inclusion. The literature was then separated into three categories: theoretical, hypothetical relationship, and conceptual reviews. Several studies have shown that social inclusion and financial literacy are important factors in stock market participation, and that digitization also encourages people to get involved in the financial market. A researcher was directed by the thorough review to focus on low-touch areas related to stock market participation, specifically to ascertain how a person's level of financial literacy and social inclusion might enhance their engagement in the stock market when it is mediated through digital inclusion. This research will offer policy recommendations to the government, financial policy makers, practitioners, and scholars in the field of finance to promote stock market involvement by emphasising the need for sustainable, inclusive growth through socialisation and digitization in order to create wealth, which in turn supports national economic development.

The risk-taking habits of individual investors on the Tanzanian Dar es Salaam Stock Exchange (DSE) are examined by Mwakabumbe, *et al* (2022). Moreover, its objective is to examine the ways in which risk behaviour characteristics impact the frequency with which people trade shares at the DSE. Cross-section data from a structured questionnaire given to 200 individual investors chosen by a snowball sampling technique are used in the study. Descriptive statistics and multinomial logistic regression (MLR) were also employed to examine the influence of individual investors' risk behaviour on the frequency of share trading. According to the study, an investor's share trading frequency at the DSE is influenced by their share prices, quantity of cash invested, and investment experience, all of which represent their risk aversion behaviour. Nonetheless, the frequency of share trading was not significantly impacted

by people's perceptions of risk. Individual investors were utilised in the study to evaluate risk behaviour in trading frequency. Nonetheless, people use brokers and financial analysts and have little awareness of or expertise with risk assessments. In this article, the risk behaviour of individual investors with respect to DSE share trading was examined for the first time. In order to promote active share trading among individual participants in exchange for better liquidity and a contribution to economic growth, the study suggests that the DSE enhance its policies and training initiatives pertaining to individual trading and risk management.

The goal of Gumbo and Sandada's (2018) study was to determine how individual involvement in the Zimbabuwe stock exchange was impacted by a few key criteria, including trust, awareness, transaction costs, perceptions, cognitive skills, and internet access. The study also looked at whether respondents with varying age and educational backgrounds had statistically different opinions about how the criteria listed above affected their engagement in the stock market. Regression analysis results, using information gathered from stock broking managers, asset managers, fund/investment managers, regulators, and investment/research analysts, indicate that all five factors—trust excluded—are highly significant predictors of individual investors' participation in the stock market. The results also show that there are no significant differences between the opinions of male and female respondents regarding trust, transaction costs, cognitive abilities, and perceptions as important factors influencing their participation in the stock market, but there is a significant difference in their perceptions regarding awareness and internet access. Subsequent investigation reveals that respondents' educational backgrounds have no statistically significant impact on the effects of awareness, transaction costs, or cognitive skills; however, respondents believe that respondents with varying academic backgrounds have different effects on trust, perceptions, and internet access. The study contributes to the body of knowledge about stock market involvement in developing nations. It offers helpful information to stock market professionals so they may create plans that ensure increased involvement.

2.2.2 Government Support and Investors Participation in RSE

In their analysis of 19 European countries' stock market participation, Kaustia et al. (2023) offer a comprehensive picture of the interaction and relative significance of well-known participation variables. They jointly account for almost all significant drivers identified in previous research, which frequently neglect risk-aversion and only introduce one novel variable at a time. Approximately 30% of the total is made up of institutional (country) fixed effects, 50% are traditional individual-level factors, and 20% are more recently found behavioural variables. This results in excellent whole model predictive power. We propose a hierarchical framework in which agents' propensity to participate determines the influence of various circumstances. Additionally, we refute and enhance the ways in which sociability, IQ, trust, and life events are currently interpreted.

Nadeem et al., (2020) sought to understand how investors' financial perspectives affected their decisions regarding stock market participation (SMP). The study's findings indicate that a trader's decision to buy or sell stocks is significantly influenced by their financial beliefs. It was also discovered that risk propensity moderates the relationship between financial beliefs and stock market involvement. The relationship between financial viewpoints and stock market inclusion was also influenced by financial education and financial self-efficacy.

Since 2008, Barayandema and Ndizeye (2018) have investigated the social, psychological, economic, and demographic elements that influence RSE investment decisions. The study uses a survey design in addition to an explanatory approach. A subset of 187 participants was chosen from a pool of 350 active investors involved in RSE. A standardised investor questionnaire, semi-directed broker interviews, and a documentary review were among the methods used to gather data. Utilising a factor analysis and SPSS, the gathered data was examined. According to the research findings, social variables had an average mean of 3.64, psychological factors of 3.96, and economic factors of 4.05, which placed highest, were the most influential, while demographic factors came in last with an average mean of 3.08. Two economic factors (anticipated company earnings and ownership structure) and three psychological aspects (irrational thinking, get-rich-quick mentality, and cognitive bias) accounted for the five most influential components. Four demographic factors (income, education, age, and gender) and one psychological aspect (over-reaction) accounted for the five least influential factors. Therefore, it is advised that the RSE's officials redesign the stock exchange by emphasising psychological and economic elements more than social and demographic ones.

2.2.3 Social Networks and Investors' Participation in RSE

Ozili (2020) investigated the connection between social and financial inclusion. The findings indicate a substantial and favourable link between social and financial inclusion for countries in Asia, the Middle East, and Africa; however, this correlation is negative for countries in Europe. The study also shows that while social and financial inclusion in banking institutions are less prevalent in African & Middle Eastern economies, they are more prevalent in Asian and European ones.

Malik et al., (2022) scrutinized the potential effect of social sustainability (SS) on financial inclusion (FI) and financial stability (FS) in the region of Asia. Based on the stakeholder theory, this study used a generalized approach of

moment's estimation to examine the relationship between social sustainability, FI, and FS. Investigations into the mediation of FI in the SS–FS link were also conducted. To assure dynamic findings, the research has also examined the diverse substitutions for the relevant constructs. The results suggest a strong correlation between SS, FI, and FS. Additionally, it is seen that FI is playing a partial mediating role between SS and FS.

Ariful et al (2015) conducted research on 125 investors drawn from an unknown population to investigate the elements that capital market investors in Bangladesh carefully evaluated while making investment decisions. Their study identified 25 characteristics divided into seven categories: internal and economic, internal and supportive, internal and regulatory, firm image, market information, and external and market situation. The study uses a factor analysis to provide a statistical assessment of the relevance of the elements being considered. The study, however, does not specify which factors were common. The current study uses a different taxonomy of common factors.

The effect of behavioural elements on investment decision-making was examined by Aisha et al. (2015). They selected 100 equities fund managers and investors in Pakistan's banks, insurance companies, and stock exchanges from a population that was not specified. The study focuses on four behavioural factors: employment of financial tools, risk aversion, heuristics, and corporate governance at the enterprise level. The first two criteria have a positive and significant impact on investment decisions, according to the correlational study, whereas the last criterion has a negative and significant impact. These outcomes agree with those of a related study conducted by Qureshi and Hunjra (2012).putting more of an emphasis on psychological and economic aspects and less on social and demographic ones.

Talal et al (2016) studied the behavioral characteristics influencing individual investors' stock decisions in the Saudi Arabian stock market with a sample of 140 investors drawn from an unidentified population. Their findings revealed that financial attitudes (distrust, overconfidence, and risk perception) significantly influence investors' decision-making processes. With all due respect, the herd's impact on the market is negligible. Gender, age, education, income, and experience all have little influence on business decisions, with the exception of education, which has a big impact. This study excludes economic and social aspects. Our study was based on a specific population and a larger sample, and it included psychometric and demographic factors in addition to these.

Khan et al. (2015) evaluated the factors impacting share investment decisions in Khulna, Bangladesh, using a sample of 270 investors. Thirteen elements in total, broken down into sections for the market, hedging, and economy. Industry attractiveness, share price, financial indicators, historical data, projected dividends, financial statements, and a company's industry rating were shown to be the most significant factors. While our study examines 18 common characteristics categorized into economic, psychological, social, and demographic categories, this study only included 13 criteria in its classification. Reasonable elements with less focus on demographic and social ones.

Given the current literature and empirical investigations, it is clear that stock market investments have been extensively researched. Certain factors influence stock investment decisions, including economic, psychological, social, and demographic considerations. So far, Rwanda's little research in this area has focused on capital market potential (Kerosi et al, 2014), capital markets and SME finance (African Development Bank [ADB], 2012), and RSE problems (Kazarwa, 2015). Given that this evaluation is not thorough, it is possible to conclude that no prior research has been undertaken in Rwanda to investigate the factors influencing RSE investing decisions. As a result, a gap needs to be addressed.

2.3 Conceptual Framework

This conceptualizes the independent variables of the study, which are financial literature, government support and social network, and the dependent variable of Investors' participation. As shown in Figure 1, the dependent variable is the involvement of investors in the stock exchange, whereas financial literacy, social network, and the government support are identified as the variables that impact the involvement of investors in the society. The level of investor participation is determined by how financially educated, socially networked and institutionally empowered people are, how many stocks they own, how frequently and how long they participate in the RSE. Financial literacy encompassing knowledge, skills, attitude and behavior of the investor (with regard to financial decisions) have a direct influence on the confidence and ability of individual to participate in stock market. Similarly, social networks consisting of ties, interaction and interdependence become a source of investment knowledge as well as trust, hence giving people the spirit to take part in the process due to peer pressure and group learning. Other important facilitators supplied by the government are favorable investment environment and capacity building incentives to enhance awareness among the population and lower the barriers of market entry. The three independent variables also interact to play an important role in the behavior of the existing and potential investors which will finally determine the level and sustainability of the behavior.

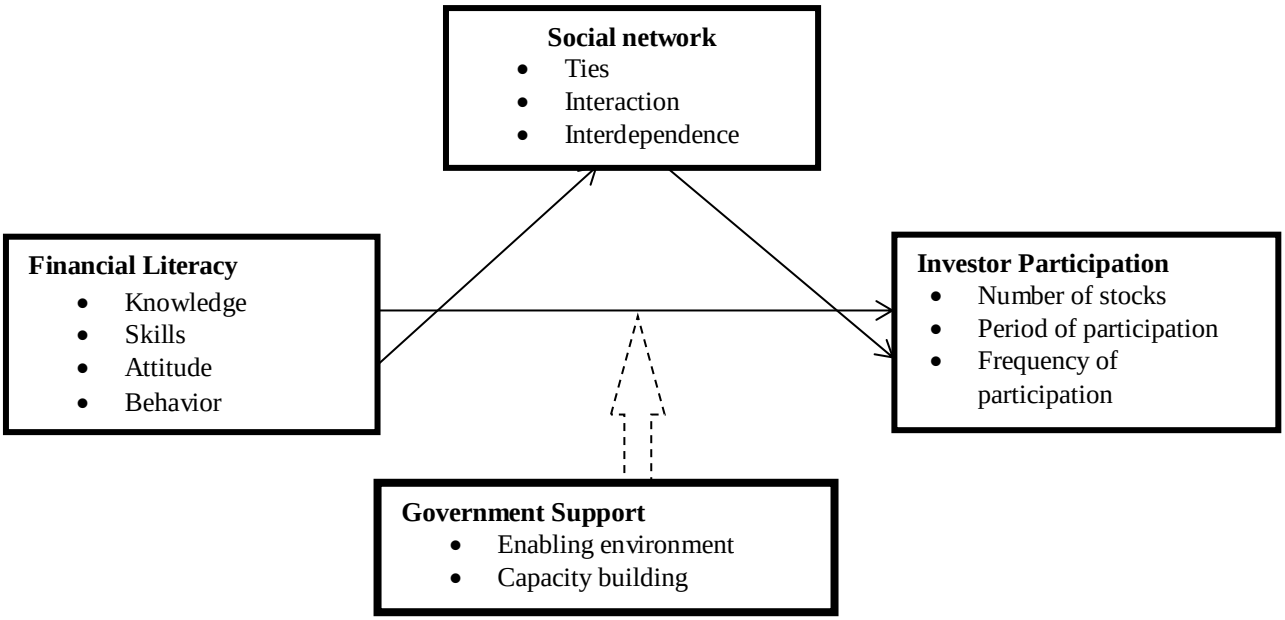

Figure 1
Conceptual Framework

III. METHODOLOGY

The study was undertaken on the determinants of investors' participation in RSE, Rwanda. It followed a descriptive research with mixed-methods research design with a population of 25,647 investors from where sample of 219 respondents was drawn from RSE investors. The mixed-methods research design was appropriate for this study because it allowed the researcher to collect both numerical data (through questionnaires) and detailed opinions and explanations (through interviews and document reviews) and allowed the researcher to capture both the breadth and depth of the phenomenon while enrich with contextual insight (Cartwright,2024). Primary and secondary data were also included in the study. Books, the internet, papers, journals, and government publications that were pertinent to the study question were used to gather secondary data. A sample of 188 participants completed a self-administered questionnaire that was used to collect primary data. Data were gathered from 188 respondents who returned their responses within the research period. The study adopted other methods, including a structured questionnaire for investors, semi-directed interviews with brokers, and a documentary review. The study conducted a Profile of the Respondents, descriptive statistics, correlation and regression analysis. The acquired data was examined with SPSS.

IV. FINDINGS & DISCUSSION

4.1 Findings

4.1.1 Demographic Characteristics

The respondents who participated in this study were categorized according to gender, age, level of education, monthly income, employment sector, duration of investment, Frequency of checking prices and Frequency of buying or selling stocks.

Table 1
Profile of the Respondents

Profile	Item	Frequency	Percent
Gender	Male	133	70.7
	Female	55	29.3
Age	18-25	2	1.1
	26-35	74	40.1
	36-45	44	23.0
	46-55	33	17.6
	Over 55	35	18.2
Level of education	Secondary school	9	4.8
	Undergraduate certificate	11	5.3
	Bachelor Degree	48	25.7
	Master's	102	54.5
	PhD	18	9.6
Monthly income	300,001 - 600,000	22	11.2
	600,001 - 900,000	9	4.8
	900,001-1,200,000	40	21.4
	More than1,200,000	117	62.6
Employment sector	Public sector	51	26.8
	Private sector	59	31.6
	NGOs	21	11.2
	Other	57	30.5
Duration of investment	Less than 1 year	11	5.3
	1-2 years	47	25.1
	2-3 years	27	14.4
	3-4 years	41	21.9
	4-5 years	10	5.3
	Over 5 years	52	27.8
Frequency of checking prices	Daily	94	50.3
	Weekly	48	25.1
	Monthly	28	15.0
	Quarterly	1	0.5
	Semi-annually	17	9.1
Frequency of buying or selling stocks	1 - 2	67	35.8
	3 - 4	91	48.7
	5 - 6	10	5.3
	More than 6	19	10.2

Table 1 shows that men made up 70.6% of the 188 investors who were questioned. According to Babajide and Adetiloye (2012) and Obamuyi (2013), the respondents' demographics and characteristics align with the perception of the capital market as risky, where men are typically perceived as risk-takers and women as risk-averse. The age range of almost 63% of the investors was 26 to 45 years old which implies that People who are most productive, considering saving for the future, and considering stock market investment as a long-term opportunity tend to be around this age. This is in line with the claims made by Hafer and Hein (2007) that the majority of people in the workforce today enrol in retirement plans, whether offered by their employers or through self-directed plans, since they wish to have more financial stability down the road.

Additionally, according to descriptive statistics, 89.8% of investors had at least a bachelor's degree. Put differently, the bulk of RSE investors had advanced degrees, indicating that those with a better understanding of the stock market's operation were more likely to purchase and hold onto stocks. Over 62% of the investors stated that their average monthly household income exceeded RWF 1,200,000. People with more earnings are more likely to invest in RSE since being in the capital market implies making long-term cash commitments. According to an examination of the original data, investors in RSE came from a range of industries, including non-governmental organisations (NGOs), the public sector, the commercial sector, and self-employed individuals. All of these investors had greater return expectations. Owning stock is simply one of many possible investments, and it's one of the riskier ones, as White (2007) makes clear. He cites statistics to support his claim that investments in stocks outpace all other types of investments over time, even real estate.

It also shows that 69.4% of investors have held stocks for longer than two years, even though the RSE is still in its early phases. They possessed some knowledge of stock market operations. The results of Teweles and Bradley (1998) and Hafer and Hein (2007) indicate that stock market investment is optimistic for investors because, although stock ownership is risky, it is done with the goal of financial gain. The idea behind buying stocks today is that, hopefully, their value will increase later on, making it possible to sell them and make a profit.

Clearly, it demonstrates that over 50% of the investors surveyed tracked stock prices on the RSE every day, and over 25% did so at least once every week. This illustrates the importance of capital gains to investors. Last but not least, Table 1 illustrates stock market timing—the capacity of an investor to choose the right times to buy and sell stocks in order to optimise capital gains (White, 2007). It is noteworthy that over 84% of investors surveyed by RSE have bought or sold stock at least once and up to four times since the company started operating in 2011.

The duration of the respondents' trading experience on the RSE was ascertained through the survey. According to the survey, 62.7% of participants had traded on the RSE for one to three years, 22.4% for more than five years, 7.5% for four to five years, and the remaining 7.5% for less than a year. While 14.92% of investors had an average investment for 2022 of more than Rwf 50,000, 14.43% had an average investment for 2022 on the RSE ranging between Rwf 5,001 and 10,000, 10.45% of investors had an average investment for 2018 on the RSE below Rwf 1,000, and the remaining 9.95% had an investment outlay for 2018 between Rwf 10,001 and 50,000. The majority of investors had an average investment for 2022 on the RSE ranging between Rwf 1,001 and 5,000. 4.1.2 RSE Trading Experiential One's degree of proficiency with the topics covered is reflected in their experience on the RSE

4.1.2 Descriptive Statistics

Table 2 presents descriptive statistics for the study variables which were: INVESTPART_GLOBAL (Investor Participation), FINLIT_GLOBAL (Financial Literacy), GOVSUP_GLOBAL (Government Support) and SOCNET_GLOBAL (Social network)

Table 2
Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
INVESTPART_GLOBAL	4.3483	0.27684	188
FINLIT_GLOBAL	3.6341	0.32978	188
GOVSUP_GLOBAL	4.0215	0.44149	188
SOCNET_GLOBAL	3.6175	0.54055	188

The descriptive statistics reveal that investment participation has a mean of 4.34 with a standard deviation of 0.27684, based on a sample of 188 respondents. The financial literacy variable had a mean of 3.634 and a standard deviation of 0.32978. The government support variable had a mean of 4.0215 and a standard deviation of 0.4414, while social networks had a mean of 3.617 and a standard deviation of 0.54055. It is evident that all variables of interest had their mean values less than investment participation which is the dependent variable of the study. This implies that any variable X which surpasses it is overwhelmingly an exceptional determinant of investor's participation on the RSE.

4.1.3 Correlation Analysis

Correlation table presented the Pearson correlation matrix for investment participation for the same period. The results indicated that FINLIT, SOCNET and GOVNET positively correlate with INVSTPART. In addition, it is clear that none of the coefficients is above 0.8, and it implies that there is an absence of multicollinearity.

Table 3
Correlation Matrix

	FINLIT	SOCNET	GOVNET	INVSTPRT
FINLIT	1			
SOCNET	.209**	1		
GOVNET	.401**	.376**	1	
INVSTPRT	.376**	.100**	.114**	1

**. Correlation is significant at the 0.01 level (2-tailed)
**. Correlation is significant at the 0.05 level (2-tailed)

4.1.4 Regression Analysis

Regression analysis was conducted to determine the extent to which the dependent variable can be predicted by the independent variables. The findings are presented in Tables 3 and 4."
Model summary

Table 3
Model Summary

Model Summary										
Model	R	R^2	Adj R^2	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
Financial Literacy	.205[a]	0.042	0.038	0.27159	0.042	9.505	1	217	0.002	
Gov. support	.334[b]	0.112	0.104	0.26211	0.07	16.987	1	216	0	
Social network	.483[c]	0.233	0.223	0.24407	0.122	34.103	1	215	0	1.672

The only variable that was incorporated in Model 1 was the financial literacy and it was found to have significant positive effect on the investor participation (Coefficient 205 and p = 002). Here it was observed that the model could explain only 4.2 percent variance in the investor participation (R2 =.042) which implies that financial literacy alone, provides small, but significant contribution in regard to the prediction of participation behavior.

Model 2 also supplemented the model input by including the government input, and financial literacy. The explanatory statistic was 11.2 per cent (R 2 = .112) and the other significant predictors were reported to be the government support (beta = 0.354, p = 0.000) and financial literacy (beta = 0.440, p = 0.000). F-change was significant too (p =.000) and it justifies the significant improvement in the fit between this model and the addition of government support.

Model 3 demonstrated the value of social networks as an enhancement in the current increase and R 2 value of .233 and the adjusted R 2 value of .223 which incidentally creates the notion that approximately 23.3 or 223 percent of the dispersion in the participation of the investors is explained by the overall influence of the 3 forecasters. The results indicated that, government support and social networks had a positive and intensely and significantly influencing degree on participation levels of investors (473, p = .000 and 514, p = .000). Financial literacy however had an inconsequential impact in the presence of the other two variables (p=.107) which would mean that they could be a mediator or difference between the predictors.

Table 5
Regression Coefficients

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.723	0.204		18.294	0		
	FINLIT_GLOBAL	0.172	0.056	0.205	3.083	0.002	1	1
2	(Constant)	2.112	0.438		4.826	0		
	FINLIT_GLOBAL	0.37	0.072	0.44	5.127	0	0.557	1.795
	GOVSUP_GLOBAL	0.222	0.054	0.354	4.122	0	0.557	1.795
3	(Constant)	3.644	0.485		7.519	0		
	FINLIT_GLOBAL	0.128	0.079	0.152	1.619	0.107	0.404	2.478
	GOVSUP_GLOBAL	0.297	0.052	0.473	5.729	0	0.523	1.911
	SOCNET_GLOBAL	0.263	0.045	0.514	5.84	0	0.46	2.174

a. Dependent Variable: INVESTPART_GLOBAL

The regression model indicated the ways in which the financial literacy together with the governmental support and social networks were likely to predict the investor participation into the RSE. The three hierarchical models were computed considering that the independent variables had to be entered into the model sequentially to observe how the explanation power varied and whether predictors were statistically significant or not.

In addition, the findings of multicollinearity diagnostics showed that the values of Variance Inflation Factor (VIF) were much lower than the critical values of 10 which implies that there is no danger of multicollinearity. Durbin-Watson = 1.672 as the value of the statistic is between 1.5 and 2.5, so there is no significant autocorrelation of residuals.

Social network was observed as the best predictor of investor participation in the last model with a standardized Beta coefficient of .514, and a t-value of 5.840, and $p < .000$. It equals strong and significant positive correlation, i.e., the higher the interaction in social networks, i.e., peer discussions, common investment experience, and information and advice provided by the financial sources, the higher the probability of being a stock market investor. It ascertains the significance of peer communication, group investment choice, and the position of trust inside the community in financial activity. This is in tandem with the existing literature on behavioral finance because the role of the herd effect, peer pressure effect, and informal financial relationships cannot be underestimated in labor markets.

A positive strong influence was also noted in government support, Beta = .473, $t = 5.729$ and $p < .000$. This further means that an effective system of sensible laws, government measures on the regulation of investors and investor education campaigns contribute highly to motivating people to participate in the capital market. This supports the past studies carried out by Ozili (2020) and Parvin and Panakaje (2022) on the institutional facilitators of financial inclusion.

Financial literacy, by comparison, was conceptually significant but not statistically significant in the final model (Beta = .152, $t = 1.619$, $p = .107$) indicating that increasing financial literacy would not result in statistically significant levels of the addition of an intern. This implies that the importance financial literacy is at minimal levels when other factors like government support and social network effects are put under consideration when it comes to participation of investors. This could be a sign that mere financial knowledge with no external encouragement and without peer pressure cannot initiate a behavior that results in actual investment. This is unlike its original meaning in parsimonious models indicating that its effects could either be indirect or is dependent on external influence like to access networks and policy. It can also imply that although the financial knowledge is needed it should be accompanied with confidence, access, and motivation mostly provided on social and institutional levels.

4.2 Discussion

Findings of our research provided us with enlightening differences between the effects of financial literacy, social networks and the support by the government on the engagement of investors in the RSE. The three variables showed the highest positive and significant effect on investor participation on the social networks (beta = 0.514, $p < .001$). Such an observation can be read as people tend to invest more readily when they belong to social groups that are interactive and can be trusted where aspects of knowledge, experiences, and incitements of investment abound. It is consistent with the work by Ozili (2020) and by Malik et al. (2022), who placed particular stress on the processes by which social inclusion and interactions with peers contributed to the development of financial behavior in Africa and Asia. On the same note, Mwakabumbe et al. (2022) noticed that investors in the Dar es Salaam Stock Exchange used the action and views of their social groups as a reference. The discovery has some good substantiation based on the Social Network Theory advanced by Moreno (1934) which assumes that behaviors in human beings are usually influenced by the interactions within the relational networks particularly in environments where there is low development in formal financial systems. This goes to underscore the vitality of using community networks, and investment clubs, and social platforms as a means of encouraging retail investor participation in Rwanda.

Furthermore, there was a statistically significant and large favourable impact of government support on investor engagement ($\beta = 0.473$, $p < .001$). This suggests that institutional initiatives—like financial regulation, investor education for the general public, advantageous market practices, and access to trustworthy information—are essential for promoting capital market involvement. The result supports research by Kaustia et al. (2023), who discovered that institutional quality accounted for almost one-third of the variation in participation across European nations, and Gumbo and Sandada (2018), who found that government-led initiatives greatly increased stock market engagement in Zimbabwe. This finding is consistent with Tobin's Separation Theorem (1958), which states that investors are more inclined to put money into capital markets when risk is reduced by robust institutional support. Institutional theory, which emphasises how regulatory frameworks affect people's economic behaviour, is also reflected in it. It implies that ongoing investments in investor protection, streamlined trading platforms, and national financial literacy initiatives can significantly raise participation rates in Rwanda.

The final model revealed that, despite its beneficial effect, financial literacy was statistically non-significant ($\beta = 0.152$, $p = .107$). This suggests that while understanding financial ideas is crucial, it might not be enough to influence investor behaviour in Rwanda on its own unless it is combined with supportive systems like institutional trust and social support. In contrast to the findings of Nadeem et al. (2020) and Menkhoff and Westermann (2024), who found financial literacy to be a stand-alone predictor of investment activity, this result partially supports Parvin and Panakaje (2022), who contended that financial literacy is only effective when reinforced by inclusion and access. The findings could be explained by the Financial Socialisation Theory, which contends that experiential learning through social interaction and contextual reinforcement rather than just information is what drives financial behaviour. This finding highlights the necessity of combining financial literacy with community involvement and government outreach in a developing market like Rwanda, where formal investor education is still in its infancy. In other words, the results reveal that investor involvement in the RSE is more about the interaction of institutional confidence and social influence than it is on discrete

financial expertise. Financial education is still a fundamental necessity, but in order to influence real market behaviour, it needs to be integrated within a supportive environment of laws and peer interaction. For financial institutions, regulators, and policymakers looking to support Rwanda's inclusive capital market development, this has significant ramifications.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

In particular, higher financial literacy empowers people to make informed investment decisions; strong social networks encourage information sharing and reduce perceived risks associated with stock market participation; and consistent government support through education programs, policies, and regulatory frameworks creates a conducive environment for retail investment. Therefore, a coordinated effort is required to strengthen these three determinants in order for Rwanda to deepen its capital market and attract more investors. Strategic interventions that improve public understanding of financial products, encourage community-based investment discussions, and sustain government engagement are important for broadening and maintaining investor participation in the country's stock market.

5.2 Recommendations

The study recommends based on the study, that Rwandan government should intensify and deepen outlet/avenues for financial literacy education to citizenry. Again, government should provide enhanced public support through appropriate friendly legislation that will encourage investors to participate in the RSE. Similarly, investors should utilize all the responsible social media to connect with others in order to get updated information and position on stock exchanges.

5.3 Limitations

The execution of this investigation was not without operational difficulties. One of the biggest problems is that investors are not categorised as "big" or "small." Nonetheless, the study combined the traits of the two investor classes, which will address any potential shortcomings.

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APPENDIX I: PROFILE OF THE RESPONDENTS

Profile	Item	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	133	70.7	70.7	70.7
	Female	55	29.3	29.3	100
Age	18-25	2	1.1	1.1	1.1
	26-35	74	40.1	40.1	41.2
	36-45	44	23.0	23.0	64.2
	46-55	33	17.6	17.6	81.8
	Over 55	35	18.2	18.2	100
Level of education	Secondary school	9	4.8	4.8	4.8
	Undergraduate certificate	11	5.3	5.3	10.2
	Bachelor Degree	48	25.7	25.7	35.8
	Master's	102	54.5	54.5	90.4
	PhD	18	9.6	9.6	100
Monthly income	300,001 - 600,000	22	11.2	11.2	11.2
	600,001 - 900,000	9	4.8	4.8	16.0
	900,001-1,200,000	40	21.4	21.4	37.4
	More than1,200,000	117	62.6	62.6	100
Employment sector	Public sector	51	26.8	26.7	26.7
	Private sector	59	31.6	31.6	58.3
	NGOs	21	11.2	11.2	69.5
	Other	57	30.5	30.5	100
Duration of investment	Less than 1 year	11	5.3	5.3	5.3
	1-2 years	47	25.1	25.1	30.5
	2-3 years	27	14.4	14.4	44.9
	3-4 years	41	21.9	21.9	66.8
	4-5 years	10	5.3	5.3	72.2
	Over 5 years	52	27.8	27.8	100
Frequency of checking prices	Daily	94	50.3	50.3	50.3
	Weekly	48	25.1	25.1	75.4
	Monthly	28	15.0	15.0	90.4
	Quarterly	1	0.5	0.5	90.9
	Semi-annually	17	9.1	9.1	100
Frequency of buying or selling stocks	1 - 2	67	35.8	35.8	35.8
	3 - 4	91	48.7	48.7	84.5
	5 - 6	10	5.3	5.3	89.8
	More than 6	19	10.2	10.2	100

Source: Primary data (2023)