EXPLORING THE SUPPLY-SIDE DETERMINANTS OF RETAIL INVESTMENT IN THE NAIROBI SECURITIES EXCHANGE, KENYA

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DECLARATION

I declare that this thesis has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

Date: 3rd April 2025

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APPROVAL

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DEDICATION

To God, whose divine guidance and boundless wisdom have illuminated my path, instilling in me the strength and clarity to navigate challenges with grace and purpose. Your presence has been my anchor, reminding me of the importance of faith and perseverance.

To my family, whose unwavering support, unconditional love, and constant encouragement have formed the bedrock of my journey. You have been my greatest champions, celebrating my successes and uplifting me during my struggles. Your belief in me has fueled my ambition and inspired me to reach for my dreams.

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ABSTRACT

The evidence from the stock market shows that retail investment in Kenya remains low despite significant efforts to promote this form of investments. The existing research on low retail investment has often taken a demand-side approach and largely ignored the supply-side approach. Therefore, this research explored the supply-side determinants of retail investment in the NSE, Kenya. Its specific objectives were to: assess influence of regulatory framework on retail investment in the NSE; examine the effects of technological factors on retail investment in in the NSE; determine the influence of information factors on retail investment in the NSE; and assess the influence of product factors on retail investments in the NSE. The research was underpinned on Public Interest Theory, Unified Theory of Acceptance and Use of Technology, Information Asymmetry, and Expected Utility Theory. The positivist research philosophy was adopted and a descriptive correlational research design implemented. The target population of the study were 143 NSE intermediaries as the units of analysis from which 105 respondents was selected as the sample size. A structured questionnaire confirmed for its reliability and validity was administered online via Google forms. The STATA software was used to perform descriptive, correlational, and multiple regression analysis. The findings showed positive and significant association between regulatory framework, information, and product factors with retail investment. However, a positive but insignificant association was observed between technological factors and retail investment. The regression analysis indicated positive and significant effect of regulatory framework and product factors on retail investment while no effect of technology and information factors on retail investment. The study recommends for policy on know your customer (KYC) protocols for NSE intermediaries so as to allow them to better serve their retail investors by matching them with products that meet their level of sophistication. This policy can also provide for mandatory risk assessments of products before making recommendations to their retail investors. For practice, NSE intermediaries should match their clients with products offered in the capital markets by ensuring that products are compatible with clients, products are not complex for their clients to understand and provide products that clients can try before committing themselves to investing in them.

Key words: Supply-side determinants, retail investment, regulatory framework, technological factors, information factors, and product factors

DEFINITION OF KEY TERMS

Supply-side determinants	These are those aspects inherent to the financial market at the point of service delivery that may influence service delivery and uptake of financial retail investments by individuals or households.
Regulatory framework	The is the basic mechanism outside a firm and consists of laws and regulations that govern the establishment and operations of the financial market and NSE intermediaries.
Technological factors	These are internal and external aspects that dictate the adoption of technologies in an organization and are those conditions that may promote or hinder use of these technologies in an organization.
Information factors	These are those pieces of information on financial products offered in capital markets that may influence the uptake of retail investment among individuals and households.
Product factors	These are the attributes of a financial product that may hinder or promote the uptake of retail investment in the capital market.
Retail investment	This describes the ownership of stock listed in financial markets by individuals as opposed to institutional investors like banks and insurers.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CDSC	Central Depository & Settlement Corporation
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CG	Corporate Governance
CIS	Collective Investment Schemes
CMA	Capital Market Authority
COO	Chief Operating Officer
DAX	Deutscher Aktien Index
DOI	Diffusion of Innovation
DSE	Dhaka Stock Exchange
EE	Effort expectancy
EMH	Efficient Market Hypothesis
EU	European Union
EUT	Expected Utility Theory
FC	Facilitating Conditions
ICIFA	Institute of Certified Investment and Financial Analysts
ICT	Information Communication, and Technology
IPO	Initial Public Offering
IRT	Innovation Resistance Theory
KNBS	Kenya National Bureau of Statistics
LMIC	Lower-Middle-Income Country
NACOSTI	National Commission for Science, Technology and Innovation
NSE	Nairobi Securities Exchange
PBC	Perceived Behavioral Control
PE	Performance expectancy
PEOU	Perceived Ease of Use
PIT	Public Interest Theory
PLCC	Pearson Linear Correlation Coefficient
PLS-SEM	Partial least squares structural equation modeling
PU	Perceived Usefulness

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Individual and/or retail investors in capital market have historically purchased smaller number of shares and stocks for their portfolios in comparison to those who purchase wholesale investments and are referred to as institutional investors (Nasage, 2019). Retail investors in capital markets influence the performance of stock markets in different ways. This performance can be in terms of market capitalization (Tueridei & Ogoun, 2023), they provide liquidity, hence decreasing chances of stock price collapses and lessening stock pricing errors (Mogbolu, 2022).

There was a significant drop in the stock market during the COVID-19 pandemic. Nevertheless, the participation of retail investors buoyed the stock market and contributed to the fast recovery by their providing liquidity. Institutional investors were forced into liquidation due to risk management and regulation protocols while retail investors stepped in and bought stocks therefore maintaining stability and liquidity to the market (World Economic Forum [WEF], 2022).

Despite their significant role in stock market, the numbers on retail investors have remained low around the world and this has been defined as the stock holding puzzle (Banyen & Nkuah, 2015). In 2020, approximately 6% of investors in stock market were categorized as retail investors while this was even lower in Turkey (2%), Mexico (1%) and Indonesia (1%) respectively (WEF, 2022). In Sweden, market value of stocks increased from 7,868 billion Swedish Krona (SEK) to 9,619 billion SEK in 2020 from 2019. The number of stock owners in households increased with some 80,000 individuals from 10.4% to 11.1% of its population with the majority being men and younger adults (Erlandsson, 2021).

Investor-base in Bangladesh is dominated by retail investors representing 99.6% of total investors in 2017 and this had increased to 5 million in 2021 (Sochi, 2018; Hasnat, Dağlı, & Kurtaran, 2023). In Australia, about 6.6 million had invested in the stock market with most of these being male with a significant number of female investors representing 45% of new investors in 2020 (Tsiaplias, Zeng, & Lim, 2023). In China, small retail investors contribute the most daily trading volumes representing 80% of total volumes while institutional investors contributed less than 20%. Moreover, retail

investors (small or large) hold only approximately 20% of all shares despite their dominance in trading while Institutions hold less than 20% of all shares, and block holders hold approximately 60% (Tan, Zhang, & Zhang, 2024).

In Nigeria, out of a population of 150 million, only a mere 3 million have invested in the stock market. The trading statistics indicated N618.75 billion for domestic retail investors compared to N820.14 billion for domestic institutional investors indicating the lower participation of retail investors (Tueridei & Ogoun, 2023). The Egyptian Exchange (EGX) is dominated by retail trading and as at 2017 accounted for 84% of trades and for 70% of value traded (World Federation of Exchanges [WFE], 2017).

The Ghana Statistical Service reveals that approximately 1% of households hold shares of stock (Banyen & Nkuah, 2015) while in Tanzania, individual investors represent 1% of total investors in the Dar es Salaam stock market (Mwakabumbe et al., 2022). In South Africa, retail investors stand at 0.8% (Nyakurukwa & Seetharam, 2024). Based on these numbers and statistics, this study contributes to knowledge by examining what factors contribute to retail investment.

1.1.1 Determinants of Retail Investment

There is abundant literature that shows the different determinants of retail investment and this section focuses on the available evidence. Globally, reports indicate that sources of information and news, awareness of services and products, trust in financial markets are a significant determinant for retail investments (WEF, 2022). Islamoğlu et al. (2015) found preference to traditional investment tools such as real estate and gold accounts offered by banks attracted attention of investors. Farrell et al. (2021) found emerging technology and innovations have enhanced retail investments due to the ability to access and share information.

Steenkamp and van Vuuren (2022) agree that regulatory frameworks also are a prominent feature for enhancing retail investments in investment and financial market system. In the European Union (EU), Filippo (2023) found evidence of regulatory changes increased the level of retail investor participation as these rules may facilitate or hinder access to the market or reduce confidence of investors.

In Bangladesh, Chowdhury et al. (2020) individual investors lacked access to quality information and professional services from financial analysts in India. Market

information was an important determinant for retail investment decisions and information from relatives and friends as a reliable source for investment decisions was not preferred. Furthermore, retail investors perceived the security, tradability, and maturity stock market products were important in investment intention (Sochi, 2018; Chowdhury & Salema, 2023)

In India, the lack of retail investors competency and expertise to utilise complex analytical tools in making decisions on their investments (Surendar, 2015). In subsequent research, Wader and Hassani (2022) found that retails investment grew due to technology advancement, investment awareness, desire to improve financial status, and demat accounts (type of product/service). Seth et al. (2020) found that product-side factors include product complexity, compatibility, trialability, and fees charged by capital market intermediaries. Ghosh and Ghosh (2015) found reluctancy in using relevant information in stock trading while Paisarn et al. (2021) found that retail investors employed a number of brokers held more diversified portfolios in Thailand.

In Ghana, awareness was positively related to stock market participation (Banyen & Nkuah, 2015) while Nasage (2019) found individual investors' asymmetry of information contributed to investment decisions. Moreover, mutual funds and public provident funds were determinants for individual investments. In Nigeria, Ikeoba (2015) reported retail investors experienced inefficiencies of capital market intermediaries, lack of information, low returns, high costs of transactions, and lack of transparency.

In South Africa, increased utilization of online applications has provided retail investors with different channels from which they could participate in the stock market (Nyakurukwa & Seetharam, 2024; Nair et al., 2023). Additionally, retail investors were influenced by available information, relying too much on one source of information, classification of new information, and grouping of information (van den Bergh-Lindeque et al., 2023).

In Kenya, Ngahu (2017) found that third parties' opinion had positive effect while access to information had negative effects on decision making of retail investors while Njiru (2019) found that retail investors preferred money market investment over balanced funds that offered higher events. Njiru (2019) further established that risk

perception, reputation of fund manager, fund performance, and management expenses all contributed to investment decision.

This review shows a myriad of factors are associated with retail investor participation in stock markets. These were grouped into regulatory factors, information factors, technology factors, and product factors. Therefore, these were adopted as the independent variables from which participants provided information as perceived determinants of retail investors in the Nairobi Securities Exchange (NSE).

1.1.2 Retail Investment

Retail investing is a term used to describe individual investors who buy and sell securities, such as stocks, bonds, and mutual funds, with their own personal funds (Singh, 2023). According to Singh, retail investment has been around for centuries, but it wasn't until the advent of the internet that it became widely available to the general public. Retail investment has seen growth not only in developing countries like India but also Over the past decade, retail investing has experienced a significant surge, becoming an essential part of the global financial landscape (Singh, 2023).

The retail investment variable has been measured in different forms in the existing literature. There is a myriad of studies (Njuguna, 2016; Mwakabumbe et al., 2023) that have adopted a binary mode of measuring retail investment asking individuals if they had invested in the financial markets with the response options being yes and no. Others, including Njeru and Matanda (2023) have measured retail investment participation by the buying and selling of stock in capital market while frequency of checking prices and duration of investment were used as indicators for retail investment in Rwanda (Barayandema & Ndizeye, 2018).

In their study, Paisarn, Chancharat, and Chancharat (2021) used number of account, type of account, and number of brokers that an individual had in a capital market. Other research (Ngahu, 2017; Zaidi & Tahir, 2019; Sukumaran et al., 2022) have used decision-making as a metric for operationalizing retail investment in capital markets. This evidence indicates there is no agreement on what indicators to use for measuring this variable and the choice of indicators is dependent on the availability of data and rationale for the research.

Taking this into consideration, the study aimed to use subjective measures of retail investment participation. Since the study was focused on supply-side determinants and data was collected from capital market intermediaries. The research used three items that included share of retail investors in the organization's portfolio, demand for investments among sampled organizations, and retention of retail investors among the sampled firms. These measures were included on a five-point Likert scale that asked respondents to show their level of agreement.

1.1.3 Retail Investment in the Nairobi Securities Exchange

In capital markets, total value of shares traded declined by Kshs 6.1 billion to Kshs 88.2 billion in 2023. The NSE 20 Share Index further declined to 1,501 points down from 1,676 points in 2022. Total value of market capitalization declined from Kshs 1,986.1 billion in 2022 to Kshs 1,439.0 billion in 2023 while bond turnover declined to Kshs 644.0 billion from Kshs 741.9 billion (Kenya National Bureau of Statistics [KNBS], 2024) as summarized in Table 1.1.

Table 1.1: Summary of Capital Market Performance (2019-2023)

Equities Market	**2019**	**2020**	**2021**	**2022**	**2023**
Total no. of shares traded (million)	4,832	5,264	4,051	3,081	3,745
Total no. of Deals	247,815	263,907	277,611	272,936	272,481
Total value of shares traded (bn)	153.8	148.7	137.4	94.3	88.2
NSE 20 Share Index	2,654	1,868	1,903	1,676	1,501
Market capitalization (billion)	2,540	2,336	2,592.90	1,986.10	1,439.00

Source: KNBS (2024)

There are ongoing efforts to enhance retail investments in the NSE. For instance, the Capital Market Authority (CMA) developed draft regulations to make certain that there is investor responsiveness needs in line with the most recent international standards and developments. There was support for technological advancements in the bourse to promote financial products via a transparent and regulated structure while using digital technologies in awareness, education, and compliance were promoted (CMA, 2023).

Despite these efforts, retail investments continue to face a multitude of challenges including high transaction costs, inadequate information, inadequate capital, low interest rates, illiquidity and high volatility, negative experiences, poor grievance redress, unprecedented market disruption, limited innovation in product offerings, lack of transparency, multiple regulatory frameworks, limited support from intermediaries, lengthy procedures, lack of clarity on tax issues regarding trading, and no new listed companies (Institute of Certified Investment and Financial Analysts [ICIFA], 2022).

The ICIFA (2022) survey revealed retail investors recommended for more product offerings, allowing borrowing and lending of securities to retails investors, promote investor education, trainings, and workshops, better enforcement, advertisements in local media, do more marketing, increase transparency, make NSE data free, remove investment bureaucracy, enhance investor experience, address grievances timely, lower brokerage fees, lower minimum trading amount, negotiate with the government to lower the taxes on trading (ICIFA, 2022).

1.2 Problem Statement

The participation of retail or individual investors in a capital market contributes to its performance. Studies (Tueridei & Ogoun, 2023; Mogbolu, 2022) show increasing participation of retail investors is associated with higher market capitalization, higher liquidity, higher investment in smaller companies, reducing price collapses, and lessening stock pricing errors thereby stabilizing a nation's financial system. In Kenya, retail investors have remained a minor player in the stock market. In 2021, out of 2.3 million share traders, only 3% were active (CMA, 2021). In 2023, total outstanding corporate bonds amounted to Kshs. 21 billion was held by fund managers at 70.5% whereas the remaining 29.5% was distributed among banks, investment companies, insurance companies, and retail investors (KNBS, 2024). This indicates low retail investment in the financial market.

There is no paucity of studies that have examined determinants of retail investors in the stock market. These determinants include firm reputation, status of the company, anticipated firm earnings, profitability, performance, share price, economy perceptions, and expected dividends (Jagongo & Mutswenje, 2014); anticipated dividends, capital appreciation, share affordability, and changes in market indices (Muchiri, 2015); affordability, information, and third parties' opinion (Ngahu, 2017); subjective

investment knowledge, perceived investment value, perceived behavioral control (PBC), and compatibility (Nguguna, 2017); fund performance, fund manager's reputation, risk perception, investment decisions, and management expenses (Njiru, 2019); and customer awareness, government bond interest rates, and unregulated financial products (Nyamweya, 2023).

There are several emerging gaps in the review of literature. Conceptually, studies on determinants for retail investments have mostly focused on the demand-side perspective collecting their data from retail investors (Muchiri, 2015; Ngahu, 2017; Njiru, 2019; Njuguna, 2017; Gwalani et al., 2025). This study goes further by seeking supply-side factors and how these influence retail investor participation by collecting data from actors in the stock market, that is, NSE intermediaries. Therefore, these factors have been categorized under regulatory, technology, information, and product factors. Contextually, there is limited evidence of studies from the region and domestically in terms of determinants of retail investment participation. Therefore, this research contributes new knowledge on supply-side factors that contribute to retail investor participation in a lower-middle-income country (LMIC).

Theoretically, the study goes further for using different theories to capture each of the study's variables and is not limited to one theory. Methodologically, most studies have used secondary sources of data while this study will use primary sources of data; additionally, a cross-sectional research design rather than a longitudinal design that has been used in the past were adopted. Moreover, more studies on the supply-side determinants of retail investor participation have used a literature review or desk research approach but this study goes further by collecting data from actors in the NSE.

1.3 General Objective

The main objective was to establish the supply-side determinants of retail investment in the NSE.

1.3.1 Specific Objectives

The study was guided by these specific objectives;

i. To assess the influence of regulatory framework on retail investment in the NSE
ii. To examine the effect of technological factors on retail investment in the NSE

iii. To determine the influence of information factors on retail investment in the NSE
iv. To assess the influence of product factors on retail investments in the NSE

1.3.2 Research Questions

These research questions were answered;

i. What influence does regulatory framework have on retail investment in NSE?
ii. What effect do technology factors have on retail investment in NSE?
iii. What influence do information factors have on retail investment in NSE?
iv. What effect do product-related factors have on retail investments in NSE?

1.4 Scope of the Study

There are several capital market licensed/approved institutions. However, this research was limited to investment banks, stockbrokers, investment advisers, fund managers, collective investment schemes (CIS), and authorized depositories/custodians as its units of analysis. In each of these institutions, a senior manager was selected as the unit of observation. Third, much of the research has focused on behavioural theories to explain retail investors in capital markets. However, this study adopted both behavioural and utility theories to explain determinants of retail investment. Lastly, the study was conducted from February to March 2025.

1.5 Significance of the Study

1.5.1 Policy and Decision Makers

The financial sector is the most regulated sector in Kenya. Therefore, this study is of importance to policy and decision makers at the legislature as recommendations if adopted may contribute to policy that improves retail investor participation.

1.5.2 Capital Market Regulators

The findings and recommendations from the research may prove to be of benefit to the CMA in its role as the regulatory agency of the NSE. The CMA is mandated to enforce policy and guidelines and recommendations from this study may be provide insight into creation of standards, guidelines, and adoption of best practices to improve participation of retail investors in the NSE.

1.5.3 Capital Market Intermediaries

The NSE intermediaries are engaged in engaging investors into the NSE and thus can give information on what supply-side factors contribute to retail investor participation. The participation of retail investors has a competitive advantage in trading in small companies because institutional investors are more focused and follow major equities. Therefore, better understanding of what determinants influence retail investment in stock performance and this information will be useful in promoting products that will motivate smaller companies to list on the bourse. Therefore, recommendations if adopted can be used by intermediaries to push small company stocks to retail investors.

1.5.4 Retail Investors

The rise of retail investors is anticipated to be a main source of raising capital in the investment landscape. Majority research has established what demand-side factors contribute to retail investor decision making. Yet, there is less evidence of supply-side factors and their role in promoting retail investors' participation. Therefore, this study's recommendation if adopted by NSE intermediaries will increase retail investment.

1.5.5 Scholars and Academia

There is abundant literature on determinants of retail investors, however, majority of these studies have adopted the behavioural perspective. This study to existing literature by adopting various theoretical perspectives for each of the independent variables. Secondly, there is less evidence from the supply-side perspective, and this is a contribution to research while making suggestions for future research on retail investors in emerging economies' context.

1.6 Chapter Summary

This chapter highlights low participation of retail investors in stock markets from a global, regional, and local experience. The statement of the problem highlights the lack of knowledge on supply-side factors that influence retail investor participation in the NSE despite a plethora of studies in this area. The research objectives, questions, significance and scope of the study are also presented.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

In this chapter, a theoretical framework followed by empirical review of research is presented. Thereafter, the summary and gaps are identified followed by a conceptual and operational framework.

2.2 Theoretical Framework

Theoretical frameworks are a collection of theories used together to provide guidance to a researcher to better understand their variables and how these are related (Majeed et al., 2023). It can be a theory or a set of theories that a researcher uses to show relationships between variables and offer clarity in understanding research variables. In this case, Public Interest Theory (Pigou, 1938), Unified Theory of Acceptance and Use of Technology **(**Venkatesh et al., 2003), Information asymmetry theory (Akerlof, 1970), and Utility Expected Theory (von Neumann & Morgenstern, 1944). The four theories were used in conjunction to speak to each of the four independent variables.

2.2.1 Public Interest Theory

The public interest theory (PIT) of regulation, first put forth by Pigou (1938), holds that regulators possess the necessary knowledge and authority to promote the public interest. It goes on to explain that this knowledge pertains to various aspects of firm behaviour, such as cost, demand, and quality (Muriuki & Mutugi, 2017). Kimwaki (2023) cites PIT as saying that government regulation is mostly a tool for redistributive social welfare that aims to fix the misallocation of resources caused by market failure or political crises.

Kimwaki (2023) explains that PIT asks regulators to operate as impartial arbiters who address public requests for the correction of unfair or inefficient market behaviors. There are three potential causes for the inability to safeguard and advance public interest. These include bureaucratic incompetence, an inadequate regulatory agency, and complicated technological matters (Curvello et al., 2018). When faced with background risk, micro entrepreneurs often underinvest in high net present value activities (Brau & Merrill, 2011).

PIT has been the target of some critics. One, it is criticized by its assumption that theoretically efficient organisations could be seen to replace or correct inefficient institutions (Short, 2023). Two, agencies have been criticized for being too dependent on individual adjudication to make policies rather than participation in elaborate planning exercises is profoundly superficial as it does not consider the intrinsic difficult for predicting the future. Third, there is also a possibility that policymakers and regulators may have different motivations rather than the public interest (de Lima & da Fonseca, 2021).

Despite these limitations, PIT is adapted for this research in the following way. The government through the Central Bank of Kenya (CBK) and the CMA regulate the NSE. In their mandate, these bodies develop and adopt policy and regulations that govern the stock market in an effort to safeguard the public interest. There are several legislations, policies, and guidelines that are ongoing in an effort to increase retail or individual investment in the NSE. Therefore, PIT is an important theory through which we can examine the role of regulatory framework on retail investment in the NSE.

2.2.2 Unified Theory of Acceptance and Use of Technology

Venkatesh et al. (2003) advanced UTAUT as a framework to better understand acceptance of technology in an organization. The likelihood of adopting technology in the workplace is hypothesized to be dependent on four key constructs namely: performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) (Momani, 2020). Performance expectancy describes the extent to which a person perceives that adopting a technology will enhance their performance.

Second, effort expectancy is the ease of using a technology by an individual (Venkatesh et al., 2003). Third, social influence is the belief from others that an individual should use technology. Lastly, facilitating conditions is an individual's belief that technical and organisation factors are present to provide support the individual to using the technology (Venkatesh et al., 2003). Despite its wide application in the adoption of technologies and systems. It has not been immune to some critiques.

First, UTAUT has been criticized for not being able to explain behavioural intentions in different settings and contexts (Momani, 2019). Secondly, UTAUT has been

criticized for being too much focused on the personal factors and ignores other factors of the organisation (Bayaga & du Plessis, 2024). Third, the component of behavioural intentions represents only one aspect within the adoption of technology and ignores other aspects as usage and subsequent processes (Bayaga & du Plessis, 2024). However, the model remains relevant for this research in the following ways.

In this context, NSE intermediaries have been forced to adapt to the advancements of digital technology to be able to perform their operations. This means that organisations are not able to ignore the adoption of technology to further enhance their overall performance. Therefore, UTAUT is a useful lens by which to examine the adoption of technological advancements so as to promote retail investments in the NSE. The respondents will be asked to give their perceptions on the PE, EE, SI, and FC of digital technology in promoting retail investors.

2.2.3 Information Asymmetry Theory

The information asymmetry theory was advanced by Akerlof (1970) and it describes a setting in which a party in a transaction has better or more information than their counterparts. The party with the most information has the ability to be in a better position than the other counterpart (Eriksson & Molin, 2015). Bergh et al. (2019) explains that information asymmetry is manifested when one party has private or privileged information that is legally protected or proprietary. Information asymmetry can also be manifested by different parties having different information.

One construct of the theory is the moral hazard that arises if the two parties have a conflict of interest where one acts in their self-interest and thus ignores the consequences of their counterparts. The presence of perfect information between the two parties would lead to optimal contracts between them. Thus, imperfect information is widely used to avoid the moral hazard problem (Eriksson & Molin, 2015).

There are some criticisms leveled against information asymmetry theory. One is that the selected agency may also be facing the same information asymmetry that the consumer is facing and there is no way to prove otherwise (Merrill, 2017). Secondly, the theory does not take advantage of other contextual factors such as the size of organisation and the resources that an organisation allocates towards quality of

information. Third, the theory does not consider the due diligence of either party engaged in a transaction.

In the context of retail investments in the NSE, information asymmetry is manifested between the initial investors who are informed on their experience with the transactional relationships with the initial public offering (IPO) firm and the IPO investor. The stockbrokers and NSE intermediaries have more private information that retail investors do not possess. Secondly, an information asymmetry emerges from the lack of uniform information for retail investors and also the different types of information that are available during IPOs.

2.2.4 Expected Utility Theory

The study proposes to adopt the Expected Utility Theory (UET) to better understand the product preferences of retail investors in the stock market. Advanced by von Neumann and Morgenstern (1944), the UET explains decision-making in cases where an individual makes a decision; they have their own preferences. The UET contributes empowerment to the decision making of an investor aligning with their expected returns and risk preferences. It enables a quantification and comparison of utility between risk preferences and investment choices of a person (Rabin & Bazerman, 2019).

The expected utility is calculated by dividing the utility of each possible outcome by the associated probability and is the foundation of utility theory. By taking this approach, investors can contrast and assess different investment choices according to the anticipated utility they provide (Omar, 2023). UET acknowledges that people show different risk preferences influencing their choice of investment by their being risk-seeking, risk neutral, risk averse behaviour (Jia et al., 2023).

Risk aversion is described by the propensity or tendency of persons to prefer choices associated with a low level of loss (uncertainty) over those linked with a higher level of uncertainty (and loss). Risk neutrality is when investors aimed to maximize expected values or what they will get on average. Lastly, risk-seeking behaviour consists of accepting a lower anticipated value by adding risk (Rabin & Bazerman, 2019).

In this context, utility theory becomes useful to understand the risk aversion, risk uncertainty, and risk-seeking behaviour of retail investors towards investment products at the NSE. There is different investment products offered at the NSE including

corporate bonds, government bonds, M-Akiba, green bonds, and company stocks. These products all have different risks and benefits attached to them and therefore may be associated with retail investors preferences.

2.3 Empirical Literature

This empirical review is aligned to the research objectives. In each of the studies, the objective, research methods, and findings are given. The studies are also presented from a global, regional, and local perspective. In each of these studies, their objective, methods, and findings are presented and a critique and relevance for the present study are described.

2.3.1 Regulatory Framework and Retail Investment

In the United States (U.S.), Kozora (2013) was interested in establishing if there were any differences among the investor advisor regulatory regime and broker-dealer regulatory regime may be important to retail investment advice. This was done by performing an examination of the principal transactions of investment grade municipal bonds. It was found that advice afforded to retail investors was dependent on the legal framework governing its position. Specifically, a likely relationship between the standards under which broker-dealers and investments advisers provide information and on the sale of investment grade municipal bonds to retail investors. The research adopted a desk research methodology with no empirical data.

In India, Parida and Vyas (2022) assessed the factors of governance index in relation to the legal and regulatory framework and its effect on investor performance. The sample was 317 respondents with a minimum three years' experience investing in stock market. Good governance system enabled investors make decisions in developing markets to attain high returns, deter them from fraudulent market practices, and money protection. The dependent variable was investor performance and not retail investor participation which is the dependent variable for this research.

Chakraborty et al. (2023) examined how shareholding among retail investors was influenced by corporate governance (CG) of listed firms in India using panel data from 2014 to 2019. Quality of CG positively influenced shareholding level of retail investors while retail investors paid more attention with quality of CG when making investments limited companies compared to subsidiary owned companies. This research used

secondary data while the present study aims to use primary data that can be used to take practical actions for NSE intermediaries to enhance retail investors. Secondary data from the bourse was used to examine relationship between variables; in this research, primary data collected from respondents will be used to determine influence of regulatory factors on individual investor participation.

In Kenya, Ojung'a et al. (2018) research focused on determining how regulatory framework influenced the growth of mutual fund companies listed in the NSE by way of a descriptive research design. The sample consisted of 61 funds operating under 18 listed firms. A positive effect of regulatory framework on mutual fund institutions growth was found. However, the research was not limited on the participation of retail investors which is the motivation for this study. The study focused on growth of mutual fund companies but this study aims to examine how the regulatory factors contribute to participation of retail investors in the NSE.

In Kenya, Nyamweya (2023) evaluated factors influencing product uptake in the capital markets using a descriptive research design among 513 wealthy and 200 institutional investors. There was agreement on unregulated financial products statements. Unregulated financial products explained product uptake while a positive relationship amidst unregulated financial products and product uptake was confirmed. The research was interested on those factors including regulation and how these contribute to product uptake. However, this research aims to examine how regulatory factors contribute to retail investor participation in the NSE.

2.3.2 Technological-related Factors and Retail Investment

Some studies have used a literature review/desk research design. For instance, Brière (2023) identified there were four trends in the behaviour of retail investors' behaviour in terms of their technological change. The different technologies considered were social media platforms, robo-advisors, mobile apps and increasing interest in crypto investment. The emerging technologies in financial and stock markets provide users with easy access to investment at reduced costs and contribute to increased interest from retail investors. social media and trading apps had a negative outcome on the behaviour of investors by amplifying investment bias (disposition effect, return chasing) and increasing turnover. Retail investors were able reduce their errors in investments by using robo-advisors. The research was limited to a literature review and did not gather

information from respondents and this is an approach used in this study by sampling NSE intermediaries.

Similarly, Kiranmayi and Raju (2023) reviewed retail investor behaviour, and it begins by examining determinants that influenced retail investors' decision-making process in India. It emerged that proliferation of online trading platforms, social media, and financial news portals had significantly impacted investors' access to information and their decision-making processes. Additionally, financial literacy and investor education programs have shaped retail investor behaviour. The research was limited to a literature review and did not gather field evidence an approach that will be used in this study to gather information from NSE intermediaries.

Shivani et al. (2022) also used a desk research approach that reviewed existing secondary sources of data including journals, research papers, magazines, newspapers and research websites to examine how mobile applications contributed to participation of retail investors in India's stock market. The review showed that digital technology increases ease of access, reduced transaction costs therefore making stock markets available for individual investors. Overall, financial technologies have led to engagement of more retail than institutional investors. The research was limited to a literature review and did not gather field evidence an approach that will be used in this study to gather information from NSE intermediaries.

Similarly, Naveed, Batool, and Mirza (2020) evaluated how a corporate website influenced investor intention using Signaling Theory and the technology acceptance model (TAM) in Pakistan. The data analysis consisted of Structural Equation Modeling (SEM) and its outcome showed positive effect of corporate websites on behavioural intention of individual investors. furthermore, there was a positive effect of perceived ease of use (PEOU) and perceived usefulness (PU) on the actual use of websites to inform their decisions. This research was limited to corporate websites as a source of information and part of digital technology that has contributed to greater interaction between retail investors and listed companies.

In Indonesia, Aisa (2022) discussed effect of automatic investment technology on intention to invest in the capital market during the early pandemic among youth investors. The research population was students studying economics and finance in

institutions located in Yogyakarta Special Region Province. The sample of 384 respondents was obtained through questionnaires distributed online. To test the impact of automatic investment technology on intention to participate in the capital market, multiple linear regression was used. The researchers found that automatic investment technology affected students' intention to invest in the capital market. The sample was limited to young people while the present study includes all generations in its sample.

Other research has used the longitudinal research design, for example, Ezirim et al. (2019) used data from 1998 to 2007 and applied the modified Gompertz technology diffusion model to assess how information technologies influenced capital market development in Nigeria. The growth indicators of stock market were listed securities, market capitalization, turnover, value traded, public bonds, and private debt. The findings showed market capitalization growth is influenced by the engagement levels between investors and stockbrokers due to information, communication, and technology (ICT) including both mobile and land telephone lines, interact access, and stockbrokers' websites. The study used secondary data which is limited in terms of offering practical solutions for NSE intermediaries' managers to improve retail investors.

Similarly, Mwambi (2021) investigated effect of technology on the uptake of investments among the youth using a correlational research design anchored on Markowitz Theory of Portfolio Management in Kenya using 1985-2002 data and primary data from questionnaires administered to 204 respondents. The study revealed that artificial intelligence had an effect on better investment choices and respondents were willing to use fund managers to get advice on investment choices. A positive relationship between technology and increase in uptake of investment was observed. The research was dependent on secondary data and therefore lacks in terms of perceptions of individuals working in the stock market to better paint a picture on individual investors.

2.3.3 Information-related Factors and Retail Investment

The research on information-related factors and retail investment have used longitudinal research to examine the relationship. For example, Schroff, Meyer, and Burghof (2016) examined influence of individual investor information demands on their trading in leveraged structured products and bank-issued investments. These are

financial products specifically design for individual investors. The research used secondary data on stock indices listed on Deutscher Aktien Index (DAX) from 2009 to 2012. The outcome indicated a strong influence of market-wide information demand rather than firm-specific information demand on trading activity. The research utilized secondary data and did not include investors to give first-hand information on the influence of information on their retail investor decision. Furthermore, the research was focused on the demand-side factors that influence retail investment.

Similarly, using comprehensive account-level data from 2016 to 2019, Jones et al. (2022) research assessed how the trading behaviour of retail investors in China. The researcher grouped the individual investors into five groups based on their performance, trading dynamics, and account sizes. The findings showed that retail investors with small accounts did not process public news and displayed behavioural properties such as gambling preferences and overconfidence. The variations in processing information capabilities at different individual investors and this contributes to the differences in their powers to predict powers for future returns. The research was limited to secondary data and this study will focus on collecting data from NSE intermediaries as its respondents.

Other research has used a cross-sectional research design. For example, Hee et al. (2019) did an examination into the determinants of retail investor behaviour in their investment decision making in Malaysia. These factors were firm-image, perceived risk, and stock price. The sample consisted of 110 respondents to whom a questionnaire was administered. The regression analysis revealed firm image had a positive and significant effect on retail investor behaviour while stock price did not have any significant effects. The research was limited to image of companies in the stock market and did not focus on the information-related factors influence on retail investor participation in the NSE.

In India, Pallathadka et al. (2022) research sought to determine how the investor behaviour towards the stock market by questioning their perceptions and its impact on investing in the stock market. A questionnaire was administered to 117 small individual investors. The results indicated that seeking market information and identifying the most beneficial portfolio to get accurate information does not have any relationship with investing in the stock market. This infers that the information available was not

adequate for retail investors. The research gathered its information from small retail investors therefore indicating a demand-side approach to examining factors explaining retail investor behaviour. On the contrary, this study includes NSE intermediaries to examine the supply-side factors.

In Malaysia, Zaidi and Tahiri (2019) examined determinants of investment decision making for potential individual investors including firm-image coincidence, personal-financial needs, and accounting-information. The sample consisted of 384 investors that answered to a structured questionnaire. A positive relationship between the three factors and retail investors decision making was established. The sample was limited to potential investors and therefore does not inform on the supply-side factors that influence investment decisions.

In Tanzania, Mwakabumbe et al. (2023) evaluated extent of awareness of individuals and the reduced participation in the Dar es Salaam stock exchange (DSE) among 200 participants and 200 non-participants. The research was anchored on self-awareness theory and group think theory. Descriptive and binary logistic regression indicated that those individuals not participating in the financial markets had low awareness of the financial market in comparison to those individuals who participated in the market. The research adopted a comparative design to explain differences between participants and non-participants. This research aims to engage NSE intermediaries to determine how information-related factors explained individual investor behaviour.

In Uganda, Minani (2019) investigated financial literacy influence on participation in the stock market by way of a cross-sectional correlation research design anchored on efficient market hypothesis (EMH) theory. Seventy-one (71) stockbrokers answered a structured a questionnaire. There was a significant difference between the stock market participation and financial literacy as shown by the low degree of public awareness on the stock market. The social media, electronic media, and print media all contributed positively to participation in the stock market. The research was limited to financial literacy using social media influence, print and electronic media as indicators. However, financial literacy was examined from perspective of stockbrokers who are already assumed to have the knowledge and awareness of the stock market.

In Kenya, Ngahu (2017) research aimed to examine the factors that contributed to investment decisions in equity stock markets by way of a correlational research design. The target population consisted of retail investors from sixteen stock brokerage companies from which 80 respondents were selected into the sample. The analysis revealed that third parties' opinion had a significant positive effect investment decision while information had a negative insignificant role on retail investments' decisions. This research was limited to descriptive statistics and did not examine the relationship between information factors and retail investors behaviour in the stock market. Furthermore, the study examined retail investor behaviour from a demand-side perspective.

2.3.4 Product-related Factors and Retail Investment

Using mixed method research, Faradynawati (2023) examined influence of investment-related perceptions on sustainable investment choices to assess knowledge of investors on sustainable investments in Sweden, Norway, and Finland anchored on Construal Level Theory and Classical Finance Theory. The findings revealed that product literacy was a significant determinant on investor decision making. In their efforts to increase product literacy, stakeholders provided information sheets that fulfilled disclosure requirement and shared information that was easy for individual investors to follow. The research was limited to the demand-side factors that influence retail investor behaviour while this research will examine supply-side factors for retail investor participation in the NSE.

Using a desk research method, Seth et al. (2020) examined unwillingness of retail investors to invest in financial products on offer and their loyalty to specific financial products despite their dissatisfaction with those products in India. The research analysed a total of 41 studies and was able to establish that psychological factors, market-related factors, product features, and individual characteristics did influence decision making of retail investors. The study was able to explain customer resistance and inertia towards financial investments was explained by innovation resistance theory (IRT) and status quo bias (SQB). The study was limited to a literature review and did not confirm its findings from a sample of respondents but contributes significant literature to the supply-side factors.

Most research, however, has adopted a cross-sectional research design. For example, Sharma et al. (2017) did an empirical examination on profiling retail investors behaviour among three classes of investors namely business, salaried, and professional class investors in India. The sample consisted of 330 respondents selected via convenience sampling methods. A questionnaire that contained 11 variables retrieved from the review of literature was administered to respondents. The analysis conducted was the analysis of variance (ANOVA) and post-hoc analysis to compare investment profiling pattern of the three classes. The findings showed age, awareness, education level had a significant effect when making their investment decisions while awareness was the most significant barrier for investing in unconventional financial products. The research was comparative research and did not aim to provide evidence of factors that contribute to individual investors decision and behaviour.

In Bangladesh, Chowdhury and Salema (2023) aimed to identify those factors that influence retail investors willingness in a shariah compliant bond by considering the behavioural features of individual investors and the desired features of a shariah compliant financial product. A structured questionnaire was administered to 250 retail investors out of a population of 302 respondents. Investor awareness was found to be an important factor for likely investment in the product with the perceived security represented by third-party and government guarantees were a persuasive feature of the product. The tenor and tradability of the product also influenced intention to invest in the product while Shariah consciousness had an important role in investment decisions. The research shows the importance of product features but was limited to Shariah compliant products; this research focuses on participation in the NSE among retail investors.

In another research, Sukumaran et al. (2022) examined adoption of cryptocurrencies among Malaysian investors. The research adopted the five dimensions of the diffusion of innovation (DOI) theory while consumer behaviour theory was used to operationalize perceptions of retail investors in terms of perceived risk and value. Purposive sampling was used to select 304 respondents. The output revealed that perceived value, ease of use, trialability, compatibility, and observability influenced intention to invest while perceived risk and relative advantage did not have any

influence. The research was limited to cryptocurrencies but the present research aims to focus on financial and stock products offered in the NSE.

In Ghana, Nasage (2019) adopted exploratory research that incorporated both quantitative and qualitative approaches to examine effects of demographic factors on process of investors' choices and their utmost desired investment portfolios. Using primary and secondary data sources, the analysis revealed that public provident and mutual fund were significant factors for individual investments in the stock market. The study was limited to demographic factors of individual investors and did not examine supply-side factors which will be investigated

In Kenya, Njuguna et al. (2016) investigated effect of compatibility on investment intention of individual investors using a cross-sectional survey and was anchored on the theory of planned behaviour (TPB). Multi-stage sampling was used to select 423 investors that responded to a questionnaire. Compatibility was found to positively influence investment intentions. The research was limited to retail investors as respondents indicating its results were limited to demand-side factors rather than identify supply-side factors that influence retail investment in the NSE.

Subsequently, Kivuti (2022) assessed effect of risk perception on retail investor's investment decision using an exploratory research design. The 397 retail investors were selected by simple random sampling. The research finding revealed there was moderate agreement that retail investors only invested in financial products where retail investors can predict the returns. The research was limited to retail investors as respondents indicating its results were limited to demand-side factors rather than identify supply-side factors that influence retail investment in the NSE.

2.4 Literature Review and Summary of Gaps

Table 2.1 reflects the literature review summary and gap identified in these studies. For each of the empirical studies reviewed, its findings, gaps, and how this research gaps will be filled.

Table 2.1: Literature Review and Summary of Gaps

Author	Methodology	Main findings	Gaps	Study filling gap
Kozora (2013)	A desk research approach	The advice afforded to retail investors was dependent on the legal framework governing its position	The study adopted a literature review design	The study will adopt cross-sectional research that will collect data from NSE intermediaries
Parida & Vyas (2022)	Cross-sectional research design	Good governance system helps investors during their investment decision-making process	The study was focused on performance of retail investors	This study focuses on retail investors intention
Chakraborty et al. (2022)	Longitudinal research design	The firm-level corporate governance quality positively affects retail investors' shareholding level	The dependent variables were retail investors shareholding values	This study focuses on retail investors intention
Ojung'a et al. (2018)	Descriptive research design	The regulatory frameworks constructs had a positive association with return of investments of mutual funds	The dependent variable was growth of mutual fund investments	This study focuses on retail investors intention
Brière (2023)	Literature review/desk research	Digital technologies, helped retail investors to define a strategic allocation, rebalance,	A desk review/literature review approach was used	The study uses empirical research to gather information from respondents

Author	Methodology	Main findings	Gaps	Study filling gap
		and reduce their investment mistakes		
Kiranmayi & Raju (2023)	Literature review/desk research	Digital technologies had significantly impacted investors' access to information and their decision-making processes	A desk review/literature review approach was used	The study uses empirical research to gather information from respondents
Naveed et al. (2020)	Descriptive research design	The corporate website positively influences the retail investor behavioral intention	The study was limited to corporate website as a variable of technology	The study includes different technology variables in its framework
Shivani et al. (2022)	Literature review/desk research	Financial technology has enabled more small investors to enter into the stock market than the large investors	A desk review/literature review approach was used	The study uses empirical research to gather information from respondents
Ezirim et al. (2019)	Longitudinal research design	Growth in market capitalization is affected by interaction between stockbrokers and investors due to ICT	The dependent variable was growth of the stock market	The study's dependent variable is retail investor investment intention
Mwambi (2021)	Mixed method research design	The artificial intelligence (AI) had an effect on better investment choices	The dependent variable was uptake of investments among youth	The study does not describe retail investors by their age

Author	Methodology	Main findings	Gaps	Study filling gap
Jones et al. (2023)	Longitudinal research design	Differences in information-processing abilities of different retail investors contribute to predictive powers for future returns	The sample was distinguished by their performance and size	The retail investors will not be distinguished
Faradynawati (2023)	Mixed method research approach	Product literacy was an important factor on investor decision making.	The research was limited to sustainable investments products	The study uses primary sources of data from retail investors

Source: Researcher (2025)

2.5 Conceptual Framework

Figure 2.1 depicts the assumed relationship between the independent and dependent variables with their corresponding indicators.

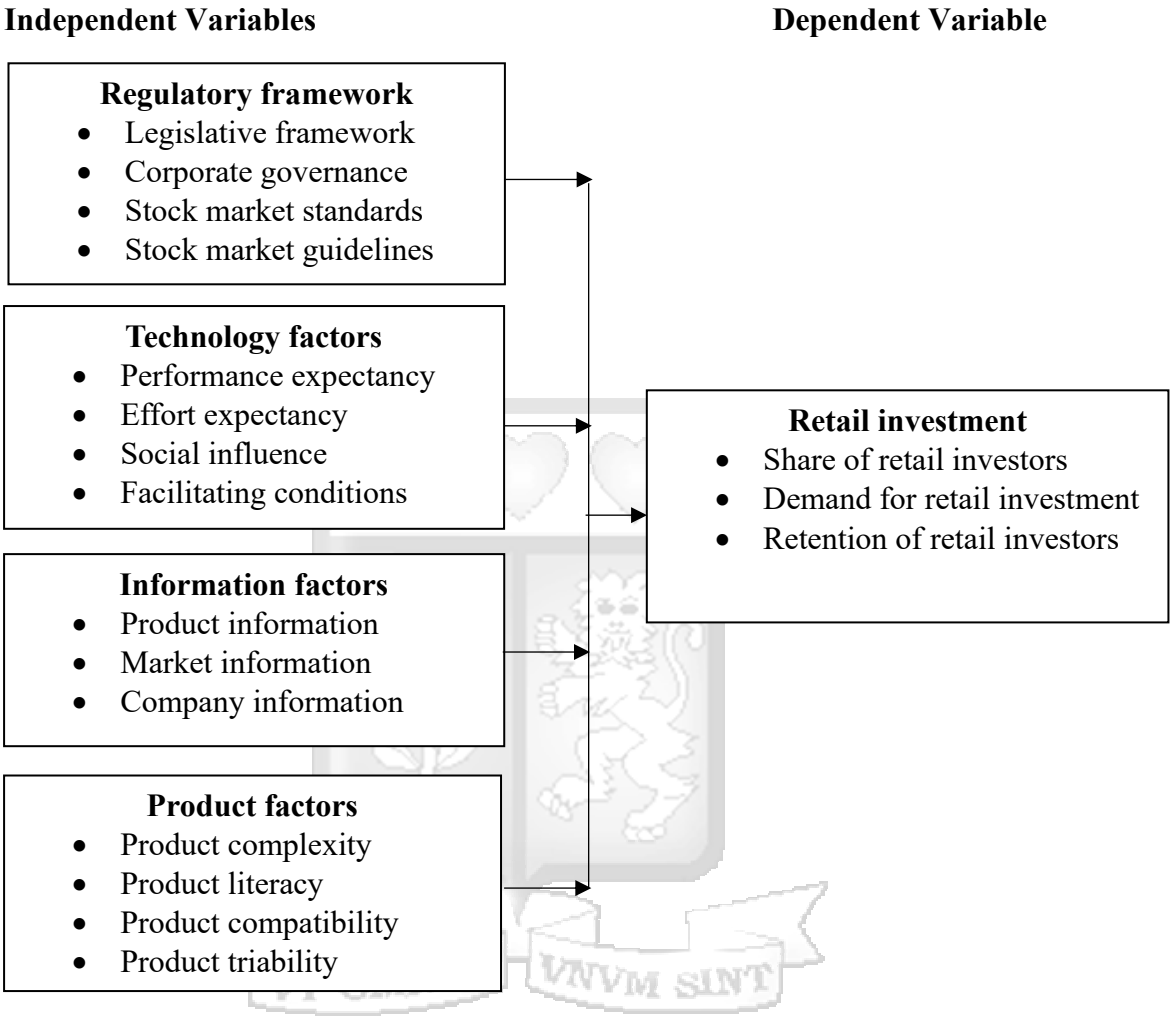

Figure 2.1: Conceptual Framework

Source: Researcher (2025).

2.6 Operationalization of Variables

Table 2.2 shows the operationalization variables identified from the empirical review grouped under the variable, indicators, scale, and source columns.

Table 2.2: Operationalization of Variables

Variables	Indicators	Scale	Source
Regulatory framework	• Legislative framework • Corporate governance • Stock market standards • Stock market guidelines	Ordinal	Parida and Vyas (2022); Kozora (2013); Chakraborty et al. (2022); Ojung'a et al. (2018)
Technology factors	• Performance expectancy • Effort expectancy • Social influence • Facilitating conditions	Ordinal	Venkatesh et al. (2023)
Information factors	• Product information • Market information • Company information	Ordinal	Schroff et al. (2016); Minani (2019); Mwakabumbe et al. (2023)
Product factors	• Product complexity • Product literacy • Product compatibility • Product triability	Ordinal	Seth et al. (2020); Faradynawati (2023)
Retail investment	• Share of retail investors • Demand for retail investments • Retention of retail investors	Ordinal	CMA, NSE, NSE intermediaries

2.7 Chapter Summary

In this chapter, the PIT, UTAUT, information asymmetry, and expected utility theories were adopted as the research theoretical foundation. The empirical review of literature

was used to identify research gaps identified in Table 2.1 and also in identifying indicators for measuring the variables as summarized in Figure 2.1 and Table 2.2.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights research techniques adopted so as to achieve its research objectives. These included its: research philosophy, research design, population, sampling design and sample size, data collection methods, validity and reliability (research quality), data analysis methods, and ethical considerations.

3.2 Research Philosophy

This research subscribes to the positivist research philosophy whose major assumption is that a researcher should be independent of their study and is not affected by the subject and respondents of their inquiry. The positivist philosophy subscribes to the use of reason and observation as a means through which one can understand behaviour. This means that researchers adopting positivism use scientific methods such as those adopted in the natural science to study social phenomenon (Shah & Al-Barghi, 2013).

Suitability of the positivist philosophy for this study was informed by its usage of quantitative data to determine association and relationships between its independent variables (regulatory framework, technological factors, information factors, and product factors) and dependent variable (retail investment). The positivist also calls for its followers to use scientific and objective methods of gaining knowledge. To this extent, the study used a structured questionnaire to gather information while statistical procedures were used to make sense of its data.

3.3 Research Design

The study adopted a descriptive correlational research design that is deployed to test associations among variables from a selected sample without controlling or manipulating them (Wubante, 2020). This design was appropriate as the research sought to determine association between regulatory framework, technology, information, product factors and retail investment in the NSE. The design is implemented by collecting data from a selected group to determine relationships between variables (Wubante, 2020). Thus, this design fit the study as it gathered data independently from NSE intermediaries' employees using questionnaire) to ensure no influence of the researcher on respondents' manipulation of variables.

3.4 Population and Study Setting

Population refers to units that are of interest to a study selected to give information on a selected set of variables. On the other hand, a sample is the representative group from a population and is identified by different sampling techniques.

3.4.1 Target Population

The target population for this study was NSE intermediaries (Appendix 3) as the unit of analysis and its unit of observation was a senior manager selected from each NSE intermediary. Therefore, the target population was 143 respondents. These intermediaries are grouped under NSE, Central Depository and Settlement Corporation (CDSC), investment banks, stockbrokers, investment advisers, fund managers, collective investment schemes (CIS), and authorized depositories/custodians.

3.4.2 Sample Size

Out of the 143 respondents, Yamane's (1967) sampling formula was used to determine 105 respondents as an adequate sample size for the study.

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

Where;

n = sample size

N = study population

e = tolerance at the preferred level of confidence

$$n = 143 / 1 + 143(0.05)^2$$

$$n = 143 / 1 + 143*0.0025$$

$$n = 143 / 1.3575$$

$$n = 105$$

3.4.3 Sampling Methods

In selecting its respondents, simple random method was used by writing down the names of the 143 NSE intermediaries on a piece of paper and placing them into a jar. Thereafter, random selection of a piece of paper representative of a company was selected and a senior manager was administered a questionnaire until the sample size was attained.

Table 3.1: Target Population and Sample Size

Capital Markets, Licensed/approved Institutions	Population	Sample size
Nairobi Securities Exchange	1	1
CDSC	1	1
Investment Banks	16	11
Stockbrokers	10	7
Investment advisers	18	13
Fund managers	40	29
CIS	36	26
Authorized depositories/Custodians	21	17
Total	**143**	**105**

Source: Adapted from KNBS (2024)

3.5 Data Collection Instrument

A structured questionnaire is preferred as a data collection tool based on several factors. First, the sample is relatively large and therefore a questionnaire is efficient in collecting information from many participants. Secondly, the research aimed to collect standardized information that can be quantified so as to be able to conduct statistical procedures. Third, the study used constructs and items adopted by previous empirical studies and incorporated into the questionnaire. The questionnaire consisted of six (6) sections namely: general information, regulatory framework (12 items), technology (12 items), information (12 items), product factors (12 items), and retail investment (3 items). a 5-point Likert scale was used for each of the variable's information.

3.6 Analysis of Data

The study used STATA 13 statistical package for analysis. The data was captured in a Microsoft Excel sheet and was then transferred to the statistical software. The first phase of analysis consisted of employing frequency and counts distribution for the respondent background information while mean scores and standard deviation scores were used to summarize Likert scale data. The Pearson (r) Correlation analysis was done to determine association between variables while linear regression analysis was done to examine the relationship between each of the independent variables and retail investment as follows:

$$Y = ß_0 + ß_1X_1 + \mu i \quad \ldots\ldots 1$$

$Y = ß_0 + ß_2X2 + \mu i$……2

$Y = ß_0 + ß_3X_3 + \mu i$……3

$Y = ß_0 + ß_4X_4 + \mu i$……4

Where:

$ß_0$ = Constant

$\beta_{1-}\ \beta_4$ = Coefficients

Y = Participation of retail investors

X_1 = Regulatory framework

X_2 = Technology factors

X_3 = Information factors

X_4 = Product factors

μi = Error term

3.7 Reliability and Validity

The level to which a questionnaire can be able to provide the same results in different settings is referred to as reliability. On the other hand, validity is explained as the extent that a questionnaire is able to accurately capture what it aims to measure (Taber, 2018). In this section, methods for attaining validity, reliability, and the pilot study are described.

3.7.1 Validity

The validity of the questionnaire was determined by two methods. First, the constructs, items, and variables were adapted from previous studies and these have evidence of being found as valid as shown in Table 2.2. Secondly, the researcher used objective views and opinions of professionals in the stock market to make sure that the wording of variables aligned with the variables and into the context of the NSE. Additionally, input from the defense panel was incorporated into the designing of the questionnaire.

3.7.2 Reliability

The internal consistency method of checking reliability was adopted as it provides information on how well items used in a scale are related to each other. The more the items are related to each other, the more that these items measure the variable under consideration. Cronbach Alpha Coefficient is the statistic used to determine this internal consistency and the closer the value is to 1, the greater the reliability. Therefore,

scholars (Taber, 2018; Nawi et al., 2020) recommend for using a threshold 0.7 as the cut-off point for accepting reliability. This was used for this research.

3.7.3 Pilot Study

A pilot study was done with 12 respondents. These respondents were excluded from the final administration of the questionnaire so as to avoid any bias. The results from the pilot were used to run the Cronbach alpha values. As Table 3.3 shows, the items were found to be reliable as their internal consistency was above the 0.7 threshold.

Table 3.2: Cronbach Alpha Scores

Variables	Cronbach's Alpha	N of Items
Regulatory framework	0.787	12
Technology factors	0.817	12
Information factors	0.752	12
Product factors	0.705	12
Retail investment	0.925	3

3.8 Ethical Considerations

Ethical approval (Appendix 4) was obtained from the Strathmore University Ethics Review Board (SU-ERB) and thereafter a research permit (Appendix 5) from the National Commission for Science, Technology and Innovation (NACOSTI) was obtained. During the data collection, an informed consent form was attached to the Google form administered from which respondents were able to give their consent by including a checkbox for agreement to participate.

3.9 Dissemination and Utilization of Results

Internally, a PowerPoint presentation was used to communicate findings to the defense committee and any other individuals present. Second, the final report in a portable document file (PDF) was uploaded to the Strathmore University Digital Repository where interested parties can access the report. This was facilitated by sharing a link to this file with interested parties. Third, an article from the report was published through a free access journal available on the Internet.

3.10 Chapter Summary

A positivist research philosophy was deemed suitable and was implemented by way of a descriptive correlational research design. The NSE intermediaries were identified as units of analysis while a senior manager from each of the firms represented as the units of observation. A sample size of 105 from a target population of 143 was calculated and 87 respondents answered to the structured questionnaire descriptive, correlation, and regression analysis was used to analyse the data.

CHAPTER FOUR
PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents findings in different sections including its response rates, general information summary, descriptive statistics, correlation, and regression analysis. Tables are used to present findings and these are supported by interpretation and implications.

4.2 Response Rate

There were 105 questionnaires administered and out of these, 87 were returned and subsequently used in the analysis. There was a non-response of 19.1% and this indicates that the response rate was 80.9% as shown in Table 4.1.

Table 4.1: Response Rate

Categories	Number	Percent
Questionnaires administered	105	100.0
Questionnaires returned	87	80.9
Questionnaires non-response	18	19.1

4.3 General Information

The study sought information on gender, education, organization represented, and individual working experience in the capital. The organization's experience in the capital market was also captured.

4.3.1 Gender Distribution

There were more male respondents working in the selected NSE intermediaries and they represented 55.2% of the sample while 44.8% were female. In terms of their educational qualifications, more respondents had a Bachelor's degree representing 54.0% with those with Master's degree representing 46.0%. There were more investment banks represented in the sample accounting for 55.2% followed by stockbrokers (19.5%), fund managers (13.8%), Authorized depositories/Custodians (4.6%), CDSC (3.4%), CIS (2.3%), and a representative of the NSE (1.1%). Thirty percent had 11-15 years' experience with those with 6-10 years' experience accounting for 25.3%. There were 23.0% with more than 16 years' experience with those with less than 5 years' experience accounting for 21.8%. Majority of NSE intermediaries had

experience spanning more than 16 years and this accounted for 50.6%; those with 6-10 experience accounted for 28.7% with 10.3% having 11-15 years and less than 5 years' experience as shown in Table 4.2.

Table 4.2: General Information

Gender	**Frequency (n=87)**	**Percent (%)**
Female	39	44.8
Male	48	55.2
Education		
Bachelor's Degree	47	54.0
Master's Degree	40	46.0
Intermediary		
CDSC	3	3.4
Fund Managers	12	13.8
Authorized depositories/Custodians	4	4.6
Investment Banks	48	55.2
Nairobi Securities Exchange	1	1.1
CIS	2	2.3
Stockbrokers	17	19.5
Experience (in years)		
11 - 15 years	26	29.9
6 - 10 years	22	25.3
Less than 5 years	19	21.8
More than 16 years	20	23.0
Experience (in years)		
11 - 15 years	9	10.3
6 - 10 years	25	28.7
Less than 5 years	9	10.3
More than 16 years	44	50.6

4.4 Descriptive Analysis

This part of the analysis focuses on the descriptive statistics for the variables. These findings are summarized in mean and standard deviations scores.

4.4.1 Regulatory Framework

The respondents were in agreement that firm's corporate governance system helps investors by deterring them from fraudulent market activities as shown by a mean score of 4.07 value as shown in Table 4.3. Corporate governance was a parameter from which performance of a company could be judged and this is dependent on the existing regulatory and legislative environment of a nation. Therefore, the corporate governance of companies in the NSE is an important determinant of retail investment based on the agreement of respondents to this statement.

The NSE intermediaries' employees indicated being in agreement that firm-level corporate governance quality at the stock market has promoted retail investors shareholding level as represented by a mean score of 4.06. Chakraborty et al. (2023) research in India provided evidence to show retail investors considered the quality of corporate governance and this had a positive influence on their shareholding level.

The respondents were in moderate agreement that there was adequate monitoring on compliance with standards of ethical practice to promote retail investments as shown by a 3.93 mean value. According to Bourveau et al. (2025), enhanced regulatory monitoring may contribute to attracting monitoring and attention from individual investors thereby adding to the monitoring from the regulator. This means that there is an opportunity for the CMA to enhance the monitoring of compliance to the existing regulatory framework to attract more retail investment. At the moment, it seems that there is not enough monitoring based on the respondents.

Corporate governance practices comply with relevant laws, regulations, and rules in respect to retail investments in the NSE was found to be moderate as shown by a mean value of 3.68. The moderate agreement suggests that there is a chance to improve on the corporate governance practices of companies listed in the NSE. Muhia (2025) revealed that CG practices had a positive impact on performance and this can in turn contribute to increased interest and participation from retail investors.

The CMA is the primary regulatory body in Kenya established with the objective and power to regulate, promote the creation of an efficient, fair, and orderly bourse in Kenya. The existing regulatory framework's power facilitates research, orderliness, and fairness was found to be moderate as indicated by a 3.54 mean. This result suggests that

there is a chance to improve the extent to which orderliness, fairness, and research can be facilitated in the NSE. Ojung' a et al. (2018) explains that self-regulation can be a gainful method as it allows for the promotion of efficient rules which enact a low regulatory burden on a market. In addition, it is in the self-interest of intermediaries of a bourse to make sure the market is fair and transparent so as to attract individual investors.

The sample was in moderate agreement full compliance with the International Financial Reporting Standards (IFRS) promote retail investments as a mean value of 3.52 was reported. This means that the compliance to IFRS standards and regulations are not fully implemented in the NSE and this could be a hindrance to attract individual investors that are aware of how the stock market works. Therefore, there is need to motivate firms to fully implement the IFRS regulations and this is up to the CMA to enforce the adoption of these standards.

The existing regulatory framework facilitates development of new financial products for retail investors was found to be moderate as shown by a mean score of 3.46. This outcome supports the findings of Okioga (2022) that showed investors and regulators were making sure to comply with global standards so as to ensure that the capital market was in tandem with developed markets. This coupled by new business and product lines are often being established and the CMA is always undertaking a review of present regulations and making amendments to improve regulation efficiency.

The employees were in moderate agreement that there were standards upheld under which investment advisors and brokers provide advice to individual investors as shown by mean value of 3.36. Kalui and Musya (2019) explain the institutional infrastructure is able to provide the working foundation for the market and is associated to intermediaries that give financial investment management services. The findings implied that more can be done to enforce standards in which NSE intermediaries can give advice to individual investors to promote their investment in the capital market.

The respondents moderately agreed that guidelines on prevention of money laundering in the capital markets have promoted retail investments with a mean value of 3.28. The findings suggested that the existing regulatory framework had to some extent instilled confidence in retail investors with the market and there is space to improve by enforcing

the anti-money laundering (AML) regulations in the NSE. In its efforts, the NSE provided training in January 2024 on AML to its intermediaries; however, the high cost of fee may deter participation among intermediaries and denying them the opportunity to gain more knowledge and skills on AML consequences to retail investors.

The respondents were in moderate agreement that existing regulatory framework for capital market development delivers efficiency for retail investments as shown by a mean value of 3.15. This outcome showed that the existing regulatory framework was contributing to an efficient capital market and this is supported by earlier results from Kiptekwei (2019) that found a positive impact of regulatory framework on capital market development as measured by efficiency.

Table 4.3: Regulatory Framework Summary

Regulatory framework	Mean	Std. Deviation
The existing regulatory framework supports creation of new products for retail investors	3.46	1.054
The existing regulatory framework facilitates research, fair, and order practices in the bourse	3.54	0.998
The existing regulatory framework for capital market development delivers efficiency for retail investments	3.15	1.116
The firm-level corporate governance quality at the stock market has promoted retail investors shareholding level	4.06	1.016
The firm's corporate governance system helps investors by deterring them from fraudulent market activities	4.07	0.900
Corporate Governance practices comply with relevant laws, regulations and rules in respect to retail investments	3.68	1.206
The full compliance with the International Financial Reporting Standards (IFRS) promote retail investments	3.52	0.975

There is adequate monitoring on compliance with standards of ethical practice to promote retail investments	3.93	1.087
There are standards upheld under which intermediaries provide retail investors with advice	3.36	1.089
Guidelines on the prevention of money laundering in the capital markets have promoted retail investments	3.28	1.291
The financial resource requirement guideline for intermediaries spurs individual investments	3.53	1.032
Guidelines on management of both internal and external stakeholders has had positive impact on retail investments	3.68	1.186
Overall mean score	**3.60**	**1.079**

4.4.2 Technological Factors

The respondents were in agreement that using digital technologies was useful in my work routine life as shown by a mean value of 4.74. The findings implied that the advancement of technology has enhanced employee dependence on digital technologies in the workplace and this is also true among intermediaries. Moreover, the findings indicated that NSE intermediaries were improving their role and duties to investors by exploiting digital technologies in the workplace as the financial sector remains the leading industry in terms of digital transformation.

The respondents were in agreement that using digital technologies at work improved productivity as indicated by a mean value of 4.70. The findings aligned with previous research that shows there is a positive relationship between utilization of digital technologies and employee productivity. However, there is limited evidence of effect of digital technologies on employee productivity among NSE intermediaries. Notwithstanding the lack of this evidence, it remains important for NSE intermediaries to make efforts towards utilization of digital technologies in their mandates.

There was agreement among respondents that using digital technologies in their work increased the likelihood of achieving important tasks as indicated by a 4.68 mean score.

There is insurmountable evidence of a positive relationship between digital technologies use and better employee performance in different sectors. The findings indicated that this is also the case among NSE intermediaries. The adoption of digital technologies contributes significantly to minimizing administrative financial expenses and speeds task performance so as to enhance task performance of employees (Duan et al., 2023).

Additionally, there was agreement among respondents that they had reasons and resources necessary to use digital technologies in their work as evidence by a mean score of 4.59. The adoption of digital technologies in the workplace was connected to better performance of employees. On the other hand, the extent to which resources are allocated to digital technology is a major factor for the successful adoption of these technologies among employees. Based on the findings, it shows that NSE intermediaries allocates investments towards digital technologies for employees in the workplace.

The mean score of 4.49 revealed an agreement among respondents that it was easy for them possess the skills for utilizing digital technologies in their work. Further, the findings revealed that employees felt that they were capable of exploiting the existing digital technologies in their jobs. This meant that the effort expectancy of NSE intermediary employees to use existing digital technologies was low; high levels of effort expectancy, on the other hand, indicated that employees found it difficult to use digital technologies in their work. Therefore, it was evident that employees had high efficacy to use digital technologies in their job.

Moreover, there was an agreement among respondents that using the digital technologies was understandable and clear with a 4.43 mean value. This statement further supported the argument that NSE intermediary employees had the skills and knowledge to use digital technologies in their everyday work. Indeed, respondents had a moderate agreement that they had knowledge necessary to use digital technologies in their work as shown by a mean score of 3.66. This also means that these firms did not incur costs to provide digital technology training for their staff. This shows that the available digital technologies in the industry were compatible with their jobs.

Furthermore, respondents were in agreement that learning to use digital technologies in their work was easy as shown by a mean score of 4.29. This means that employees had the capacity to learn new technologies as they did their work implying that staff in NSE intermediary firms were open to trying new digital technologies in their work. This may also point to the triability component of financial digital technologies based on the diffusion of innovation (DOI) theory.

The mean score of 4.21 implied that there was an agreement among respondents that using digital technologies in their work was easy. This statement was related to the social influence construct of the UTAUT that explains the ease with which an individual may use a digital technology dependent on support they find around them. This implied that using the digital technologies was easier for staff as they would ask for support from their colleagues if they encountered any challenges.

Additionally, there was an agreement that the use of digital technologies in the stock market has been adopted and welcomed as indicated by a mean score of 4.11. These results suggests that there was widespread adoption of digital technologies in the sector thus providing a safety net or cushion for employee's motivation to attempt using these technologies in their work. The adoption of digital technologies among individuals has been associated with the influence they have in their networks (Venkatesh et al., 2003).

Table 4.4: Technology Factors Summary

Items	Mean	Std. Deviation
I find using digital technologies useful in my work routine life	4.74	0.580
Using digital technologies in my work increases likelihood of achieving important tasks	4.68	0.619
Using digital technologies in my work improves my productivity	4.70	0.593
Learning to use digital technologies in my work has been easy for me	4.29	0.834
My interaction with digital technologies is clear and understandable	4.43	0.640

It is easy for me to become skillful at using digital technologies in my work	4.49	0.568
My use of digital technologies has been influenced by the importance that others in the workplace and industry place on it	4.01	1.051
The use of digital technologies in the stock market has been adopted and welcomed	4.11	0.855
Using digital technologies in my work has been easy	4.21	0.749
I have the reasons and resources necessary to use digital technologies in my work	4.59	0.561
I have the knowledge necessary to use digital technologies in my work	3.66	1.247
It is compulsory to use specific digital technologies in the stock market	4.18	0.843
Overall mean score	**4.34**	**0.762**

4.4.3 Information Factors

The descriptive findings on information factors are presented in Table 4.5 and these indicated respondents were in moderate agreement that NSE intermediaries provide valuable information for retail investors to influence their investment decisions as shown by a mean score of 3.69. The extent to which retail investors have information on the capital market is an important determinant of the decision-making. Therefore, the findings suggested that NSE intermediaries were doing more than enough to provide valuable information and there was need for more efforts to give individual investors valuable information to have an effect on their stock market participation.

The findings revealed a mean score of 3.25 implying that there was a moderate agreement that retail investors were able to benefit from transparent information dissemination in the stock market. The lack of transparent information on the capital market can act as a deterrent to individual investors. In Nigeria, Ikeoba (2015) was able to show evidence that retail investors experienced inefficiencies of capital market intermediaries due to lack of transparency. This means there is need for NSE

intermediaries to enhance retail investment participation by being transparent in their information sharing.

The results elaborate that respondents were in moderate agreement that retail investors have access to information from which they can evaluate financial products in the stock market as shown by a mean score of 3.16. The literature shows that retail or individual investors have lower access to financial information in comparison to institutional investors and this has often limited their participation in capital markets as they have fewer opportunities to evaluate financial products in the process of making a decision. This implies that there is need for NSE intermediaries to provide product information widely to prospective retail investors to motivate their participation in the capital market.

The mean value of 3.06 indicated that respondents were in moderate agreement for retail investors to have access to credible information on financial products in the stock market. The availability and accessibility of accurate information is an important determinant for investment in capital markets. In addition, respondents disagreed that retail investors were able to access accurate information disclosed by companies listed in the stock market as highlighted by a mean value of 2.82. This implied that accurate information on the market was not available for retail investors.

Atuilik and Saila (2018) agreed that having corporate financial information that is reliable and accurate in terms of the organization position and financial performance are a major determinant of the level of development of a bourse. Therefore, improving the quality of financial disclosure of companies in capital markets is a chance for providing reliable and accurate information to the retail investors for their decision-making journey.

The findings showed that respondents were in moderate agreement that retail investors have access to reliable information on the stock market as shown by a mean value of 3.01. Chowdhury et al. (2020) explained that retail investors in many occasions do not possess information and have access to services of professional analysts. Yet, market information was an important determinant for retail investment decision. In India, lack of reliable information meant retail investors used relatives and friends as a reliable

source for investment decisions which is not a preferred option for making investment decisions (Chowdhury et al., 2020).

It was disagreed that retail investors have access to information to develop positive and/or negative emotions towards financial products in the stock market as shown by a mean value of 2.89. These findings showed that retail investors were at a disadvantage in comparison to institutional investors and this could be seen in their low rates of investment in the capital market. According to Njiru (2019), from a theoretical point of view, it is possible for all investors to access information on investments but in reality, this is not practical. However, NSE intermediaries can make efforts to use the advanced technologies in providing access to information for retail investors.

The mean value of 2.80 indicated that respondents disagreed that retail investors receive timely information on the stock market. Investors, institutional or individual, need timely data to help in decision making of efficient investments and effective assessment of managerial actions. Most of the available information are financial statements and although they are valuable sources, they are not timely because they provide confirming information. Therefore, there is a need for NSE intermediaries to provide timely information to their individual clients.

The respondents were in disagreement that retail investors have access to large quantity of information about listed companies in the stock market as shown by a mean value of 2.45. The results implied that retail investors do not have access to huge data quantities from which they can use to improve their decision making towards their investments. This reflects the dependence of information on the capital market from the financial statements of companies listed in the bourse and this may not provide adequate amounts of information to enhance decision making of retail investors.

Moreover, there was a disagreement among respondents that retail investors frequently used balance sheet information, cash flow statements, and income statements shown by a 2.21 mean value. The findings support output that showed the high dependence of information from financial statements was not adequate for decision making among retail investors. Moreover, this source of information is only valuable to those that have a better knowledge or grasp of financial ratios and this further limit the number of retail investors in the bourse.

Table 4.5: Information Factors Summary

Items	Mean	Std. Deviation
Retail investors have access to information from which they can evaluate financial products in the stock market	3.16	1.180
Retail investors have access to credible information on financial products in the stock market	3.06	1.071
Retail investors have access to information to develop positive/negative emotions towards financial products in the stock market	2.89	0.933
Retail investors receive timely information on the stock market	2.80	1.150
Retail investors have access to reliable information on the stock market	3.01	0.994
Retail investors are able to benefit from transparent information dissemination in the stock market	3.25	1.025
Retail investors have access to large quantity of information about listed companies in the stock market	2.45	1.086
Retail investors are able to react quickly in the stock market based on the latest information on listed companies	2.67	0.972
Retail investors are able to access accurate information disclosed by companies listed in the stock market	2.82	0.959
The NSE intermediaries provide valuable information for retail investors to influence their investment decisions	3.69	0.931
Retail investors frequently used information from balance sheets, income statements, and the cash flow statements	2.21	0.929
Retail investors have access to accurate information of stocks listed in the Nairobi securities exchange	2.80	0.963
Overall mean score	**2.90**	**1.016**

4.4.4 Product Factors

Table 4.6 shows there was moderate agreement that retail investors are able to try financial products offered in the stock market before deciding whether to invest as shown by a mean score of 3.69. The ability to try new products offered in capital markets is a strategy that can be used to promote retail investment as capital markets continue to innovate new products. In India for example, Gwalani et al. (2025) noted that there has been an increase in innovations in new investment products introduced for retail investors. Thus, in their decision-making process, it is important for retail investors to be able to try these products to make their investment decision.

The mean score of 3.54 indicated that there was moderate agreement that financial products offered at the stock market present a complex level or uncertain returns/number of scenarios for retail investors. The complexity of a financial product in the capital markets is more likely to yield lower returns as retail investors may find it difficult to understand these products. The findings showed that some of the financial products offered in the NSE were complex for the ordinary retail investor. De Genaro et al. (2024) research in Brazil confers that complex product is only favoured by sophisticated investors and these leaves out the majority of retail investors. This means there is need for great efforts to focus on assessing product suitability for retail investors who may not possess depth of knowledge, experience and sophistication (Koh et al., 2015).

The respondents were in moderate agreement that complexity of financial products offered in the stock market can potentially lead retail investors to make costly errors as represented by a mean value 3.46. There is evidence that retail investors make costly errors in the investment decisions (Brière, 2023) as the increase in structured financial products continue to increase in number, these products cater to naive investors, exploiting their behavioral biases and investment mistakes (Egan, 2019). Therefore, the findings suggested that products offered at the NSE were complex for unsophisticated retail investors and this may be an explanation for their low levels of investments.

Further, the respondents were in moderate agreement that financial products in the stock market are compatible with retail investors' personality traits as revealed by a mean value of 3.26. According to Njuguna et al. (2016), compatibility is the prediction that investor's intention to invest is explained by the belief that investment options are

aligned to their lives. If investors feel there exists an option for wealth allocation compatible with their current needs or situation, then they are more likely to invest in that particular investment (Sukumaran et al., 2022). The findings showed that the products offered in the NSE were compatible with the profile of retail investors to certain extent. Indeed, further evidence would show respondents disagreed financial products offered in the stock market provide investment alternatives that match needs of retail investors as shown by a 2.63 mean value. This means that there is need for greater efforts to design financial products that are compatible with retail investors to promote their participation in the market.

Faradynawati (2023) research was able to show that the extent to which retail investors can understand financial products easily explains their investment decision. There was moderate agreement among respondents that financial products offered in the stock market are easy to understand for retail investors as indicated by a mean value of 3.06. This means that stakeholders should make efforts to provide information sheets that fulfilled disclosure requirement and shared information that was easy for individual investors to follow.

Table 4.6: Financial Products Summary

Financial products	Mean	Std. Deviation
Financial products offered at the stock market present a complex level or uncertain returns/number of scenarios for retail investors	3.54	0.974
The complexity of financial products offered in the stock market can potentially lead retail investors to make costly errors	3.46	0.913
Financial product fees in the stock market are complex for some of the retail investors	2.78	0.933
Retail investors are able to comprehend key investor information documents provided by the NSE intermediaries	2.77	0.949
Financial products offered in the stock markets convey information that is easy to follow by individual investors	2.61	0.957

Financial products offered in the stock market are easy to understand for retail investors	3.06	1.004
Financial products offered in the stock market provide investment alternatives that match needs of retail investors	2.63	0.966
Financial products in the stock market provide options for retail investors that are compatible with their current needs or situation	3.41	1.126
Financial products in the stock market are compatible with retail investors' personality traits.	3.26	1.125
Retail investors have a great deal of opportunity to try financial products available in the stock market	2.33	1.128
Retail investors have opportunity to satisfactorily try out financial products offered in the stock market	3.45	1.032
Retail investors are able to try financial products offered in the stock market before deciding whether to invest	3.69	1.184
Overall mean score	**3.08**	**1.024**

The mean score of 2.77 indicated a disagreement with the statement retail investors are able to comprehend key investor information documents provided by the NSE intermediaries among its respondents. This implied a cognizance among NSE intermediaries that information provided to retail investors was easy to understand other than for the sophisticated investors. This means that there is need for more efforts towards giving information on products that is easy to understand as the mean value of 2.61 indicated a disagreement that financial products offered were easy to follow for individual investors.

The mean score of 2.78 means that respondents disagreed that financial product fees in the stock market are complex for some of the retail investors. The findings suggested that fees charged among NSE intermediaries are adequate for the services provided. This is because most companies are NSE intermediaries. However, retail investors have often expressed that fee charged for accessing information on products in the capital market was high. For example, the ICIFA (2022) survey revealed retail investors recommended for lower brokerage fees.

4.4.5 Retail Investments

Table 4.7 shows the highest ranked item was the demand of stock investments from retail investors in the firm has been on a gradual increase as shown by a mean score of 3.66 which indicates moderate agreement with this statement. The findings indicated that there was a demand from individual investors on products offered in the capital market indicating a moderate appetite for this form of investments. Two, there was moderate agreement among respondents that they had been able to retain majority of their retail investors in their investors' portfolio as indicated by mean score of 3.55 implying that the number of individual investors had remained the same and had not experienced any significant increase or decline. Three, respondents also showed moderate agreement that the share of retail investments in the firm's portfolio had been on a gradual increase as shown by a mean score of 3.47 implying that individual investors were increasing their share of investments in the capital market that further demonstrates appetite of investments in the capital market from retail investors.

Table 4.7: Retail Investment Descriptive Summary

	Mean	Std. Deviation
The share of retail investments in the firm's portfolio has been on a gradual increase	3.47	1.180
The demand of stock investments from retail investors in the firm has been on a gradual increase	3.66	1.283
The firm has been able to retain majority of its retail investors in its portfolio	3.55	1.327
Overall mean score	**3.56**	**1.263**

4.5 Factor Analysis

This section of the chapter presents factor analysis results for regulatory framework, technological factors, information factors, and product factors. The results consist of the Kaiser-Meyer-Olkin (KMO) statistic which is used to determine if factor analysis was applicable for the selected variables and the Bartlett's Test of Sphericity which is used to determine the appropriateness of the factor model as an identity matrix. The rotated component matrix shows the selected constructs that explain the most variance for the selected variable.

4.5.1 Factor Analysis for Regulatory Framework

The KMO statistic was greater than 0.5 (KMO = 702) and this means factor analysis was applicable. Furthermore, the Bartlett's Test of Sphericity was significant as the *p* value was less than 0.05 as seen in Table 4.8.

Table 4.8: KMO and Bartlett's Test for Regulatory Framework

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.702
Bartlett's Test of Sphericity	Approx. Chi-Square	493.987
	df	66
	Sig.	0.000

Table 4.9 shows the results of the rotated component matrix that shows out of the 12 items used to measure regulatory framework, four components met threshold of the factor analysis and these explained 71.7% of variance and thus were used to represent the regulatory framework variable as shown in Table 4.8.

Table 4.9: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.774	39.78	39.78	4.774	39.78	39.78
2	1.457	12.139	51.919	1.457	12.139	51.919
3	1.256	10.469	62.388	1.256	10.469	62.388
4	1.126	9.383	71.771	1.126	9.383	71.771
5	0.703	5.854	77.625			
6	0.656	5.468	83.093			
7	0.628	5.235	88.327			
8	0.514	4.28	92.607			
9	0.374	3.12	95.727			
10	0.253	2.11	97.836			
11	0.151	1.257	99.094			
12	0.109	0.906	100			

Extraction Method: Principal Component Analysis.

Figure 4.1 indicates the first four factors have variances (eigenvalues) that are greater than 1. Therefore, the remaining factors account for a very small proportion of the variability and are determined as unimportant.

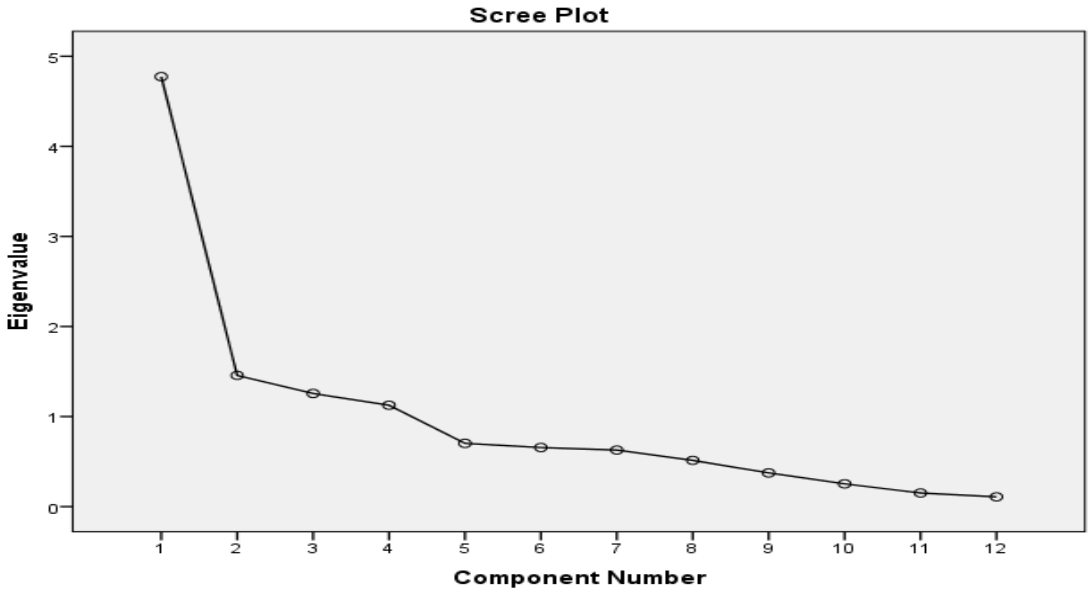

Figure 4.1: Scree plot for Regulatory Framework

Table 4.10 shows the four factor loadings that best described the regulatory factors variable. Therefore, those factor loadings that were closer to 1 that are highlighted in bold were accepted as indicators for each of the four components namely: Financial requirements regulations, stakeholder management regulations, efficient regulatory framework, and corporate governance systems

Table 4.10: Rotated Component Matrix for Regulatory Framework

	Component			
	1	2	3	4
The existing regulatory framework facilitates the development of new financial products for retail investors	**0.662**	-0.284	0.126	0.348
The existing regulatory framework facilitates research, fairness, and orderliness in the capital markets industry	**0.653**	0.081	0.416	0.144
The existing regulatory framework for capital market development delivers efficiency for retail investments	0.247	0.073	**0.890**	-0.046

The firm-level corporate governance quality at the stock market has promoted retail investors shareholding level	0.225	0.116	0.142	**0.805**
The firm's corporate governance system helps investors by deterring them from fraudulent market activities	0.010	0.167	0.088	0.887
Corporate Governance practices comply with relevant laws, regulations and rules in respect to retail investments	0.050	0.096	**0.782**	0.236
The full compliance with the International Financial Reporting Standards (IFRS) promote retail investments	0.218	0.408	0.468	0.312
There is adequate monitoring on compliance with standards of ethical practice to promote retail investments	0.117	**0.716**	0.236	0.283
There are standards upheld under which broker-dealers and investment advisers provide advice to retail investors	0.578	0.596	0.315	0.050
Guidelines on the prevention of money laundering in the capital markets have promoted retail investments	**0.742**	0.442	0.108	0.066
Guidelines on financial resource requirements for market intermediaries have promoted retail investments	**0.864**	0.349	0.045	0.006
Guidelines on management of both internal and external stakeholders has had positive impact on retail investments	0.120	**0.776**	-0.015	0.050

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a Rotation converged in 6 iterations.

4.5.2 Factor analysis for Technology Factors

The KMO statistic was greater than 0.5 (KMO = 750) and this means factor analysis was applicable. Furthermore, the Bartlett's Test of Sphericity was significant as the *p* value was less than 0.05 as shown in Table 4.11.

Table 4.11: KMO and Bartlett's Test for Technology Factors

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.75
Bartlett's Test of Sphericity	Approx. Chi-Square	675.586
	Df	66
	Sig.	0.000

Table 4.12 shows out of the 12 items used to measure technology, four components met threshold and these explained 74.9% of variance and thus were used to represent the technology factors variable in subsequent analysis.

Table 4.12: Rotated Component Matrix for technology factors

Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	5.144	42.868	42.868	5.144	42.868	42.868
2	1.492	12.432	55.3	1.492	12.432	55.3
3	1.233	10.278	65.578	1.233	10.278	65.578
4	1.122	9.353	74.931	1.122	9.353	74.931
5	0.838	6.987	81.918			
6	0.634	5.285	87.203			
7	0.49	4.086	91.289			
8	0.383	3.191	94.48			
9	0.367	3.054	97.534			
10	0.175	1.458	98.992			
11	0.07	0.583	99.575			
12	0.051	0.425	100.0			

Extraction Method: Principal Component Analysis.

Figure 4.2 indicates the first four factors have variances (eigenvalues) that are greater than 1. Therefore, the remaining factors account for a very small proportion of the variability and are determined as unimportant.

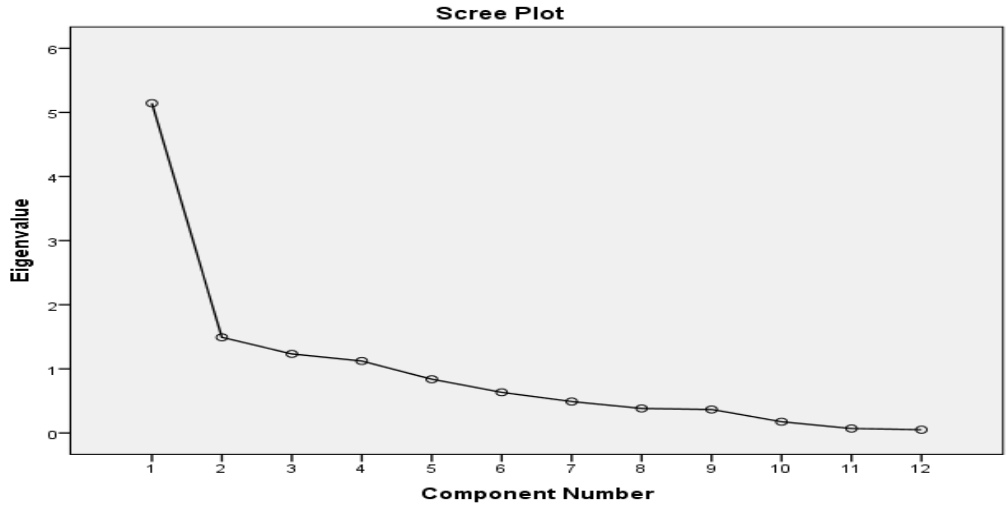

Figure 4.2: Scree Plot for Technology Factors

Table 4.13 shows the four factor loadings for technology factors and the highlighted components represented the highest eigenvalues that were closer to 1 and were thus included for the ease of technology, adoption of technology, technology knowledge, technology productivity components.

Table 4.13: Rotated Component Matrix for Technology Factors

	Component			
	1	**2**	**3**	**4**
I find using digital technologies useful in my work routine life	**0.848**	0.278	0.108	0.002
Using digital technologies in my work increases likelihood of achieving important tasks	**0.849**	0.250	0.119	-0.038
Using digital technologies in my work improves my productivity	**0.868**	0.301	0.031	0.102
Learning to use digital technologies in my work has been easy for me	0.554	-0.131	-0.202	**0.569**
My interaction with digital technologies is clear and understandable	**0.813**	-0.032	0.140	0.185

It is easy for me to become skillful at using digital technologies in my work	**0.855**	-0.009	0.167	0.020
My use of digital technologies has been influenced by the importance that others in the workplace and industry place on it	0.432	**0.664**	-0.012	-0.144
The use of digital technologies in the stock market has been adopted and welcomed	0.070	0.166	**0.903**	0.019
Using digital technologies in my work has been easy	0.432	0.022	**0.561**	0.274
I have the reasons and resources necessary to use digital technologies in my work	**0.664**	-0.401	0.382	-0.228
I have the knowledge necessary to use digital technologies in my work	0.022	**0.852**	0.192	0.083
It is compulsory to use specific digital technologies in the stock market	0.052	-0.049	-0.173	-0.829

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a Rotation converged in 6 iterations.

4.5.3 Factor Analysis for Information Factors

The KMO statistic was greater than 0.5 (KMO = 786) and this means factor analysis was applicable. Furthermore, the Bartlett's Test of Sphericity was significant as the *p* value was less than 0.05 as Table 4.14 shows.

Table 4.14: KMO and Bartlett's Test for Information Factors

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.786
Bartlett's Test of Sphericity	Approx. Chi-Square	666.212
	Df	66
	Sig.	0.000

Table 4.15 shows out of the 9 items used to measure information factors, three components met threshold of the factor analysis and these explained 67.3% of variance and thus were used to represent the information factors variable in subsequent analysis.

Table 4.15: Total Variance Explained for Information Factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.292	53.65	53.65	4.292	53.65	53.65
2	1.097	13.716	67.366	1.097	13.716	67.366
3	0.775	9.683	77.049			
4	0.632	7.896	84.945			
5	0.453	5.661	90.605			
6	0.366	4.579	95.184			
7	0.254	3.179	98.364			
8	0.131	1.636	100.0			

Extraction Method: Principal Component Analysis.

Figure 4.3 indicates the first two factors had variances (eigenvalues) that were greater than 1. Therefore, the remaining factors accounted for a very small proportion of the variability and were thus excluded.

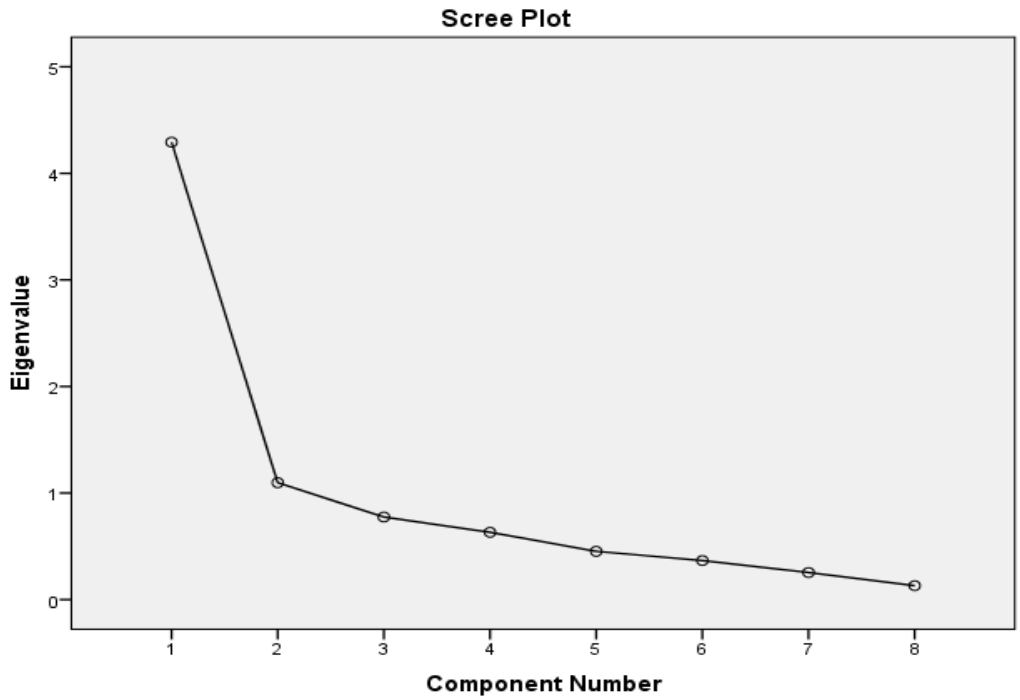

Figure 4.3: Scree Plot for Information Factors

Table 4.16 shows that two components met threshold for being included in the information factors. Those factors highlighted in bold were thus used to construct the access to information and quality of information.

Table 4.16: Rotated component matrix for information factors

	Component	
	1	**2**
Retail investors have access to reliable information on the stock market	**0.732**	0.391
Retail investors are able to benefit from transparent information dissemination in the stock market	0.494	**0.671**
Retail investors have access to large quantity of information about listed companies in the stock market	**0.793**	0.103
Retail investors are able to react quickly in the stock market based on the latest information on listed companies	0.556	**0.594**
Retail investors are able to access accurate information disclosed by companies listed in the stock market	**0.924**	0.086
The NSE intermediaries provide valuable information for retail investors to influence their investment decisions	-0.018	**0.832**

Retail investors frequently used information from balance sheets, income statements, and the cash flow statements	0.225	**0.616**
Retail investors have access to accurate information of stocks listed in the Nairobi securities exchange	**0.767**	0.362

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization[a]

a Rotation converged in 3 iterations.

4.5.4 Factor Analysis for Product Factors

The KMO statistic for product factors was greater than 0.5 (KMO = 654) and this means factor analysis was applicable. Furthermore, the Bartlett's Test of Sphericity was significant as the *p* value was less than 0.05 as illustrated in Table 4.17.

Table 4.17: KMO and Bartlett's Test for Product Factors

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.654
Bartlett's Test of Sphericity	Approx. Chi-Square	384.824
	Df	66
	Sig.	0.000

Table 4.18 shows the results of the total variance explained that shows out of the 12 items used to measure product factors, four components met threshold of the factor analysis and these explained 67.3% of total variance and thus were used to represent product factors variable in subsequent analysis.

Table 4.18: Total Variance Explained for Product Factors

Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.695	30.792	30.792	3.695	30.792	30.792
2	1.953	16.275	47.067	1.953	16.275	47.067
3	1.357	11.307	58.374	1.357	11.307	58.374
4	1.068	8.904	67.278	1.068	8.904	67.278
5	0.919	7.659	74.937			
6	0.823	6.861	81.798			

7	0.615	5.129	86.926
8	0.532	4.434	91.36
9	0.419	3.493	94.853
10	0.257	2.143	96.996
11	0.216	1.796	98.792
12	0.145	1.208	100

Extraction Method: Principal Component Analysis.

Figure 4.2 indicates the first four factors have variances (eigenvalues) that were greater than 1. Therefore, the remaining factors accounted for a very small proportion of the variability and were thus excluded.

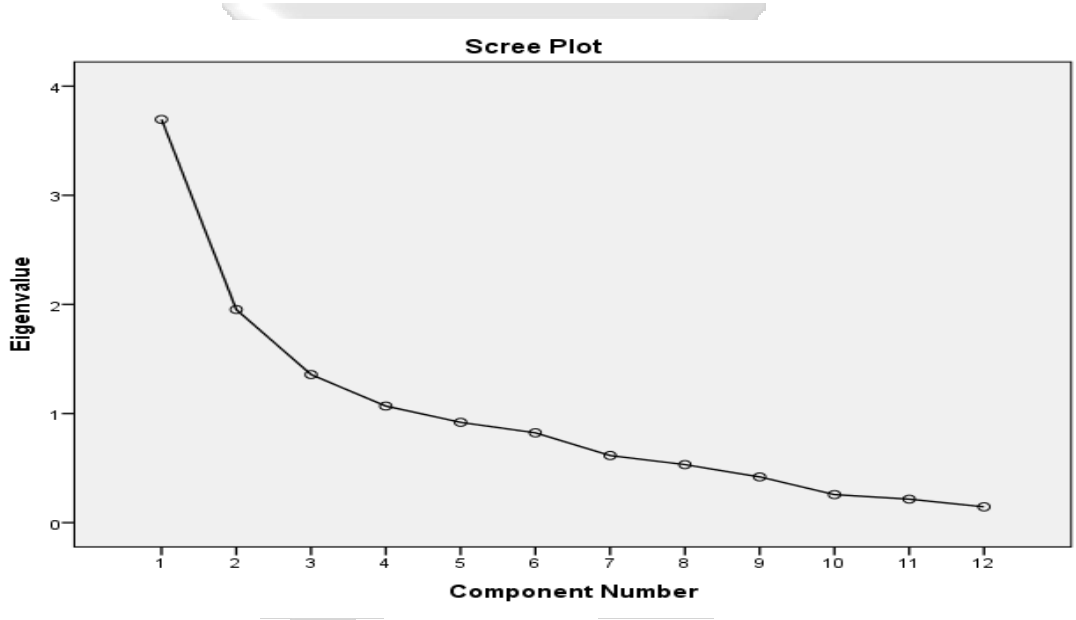

Figure 4.4: Scree plot for Product Factors

Table 4.19: Rotated Component Matrix for Product Factors

	Component			
	1	2	3	4
Financial products offered at the stock market present a complex level or uncertain returns/number of scenarios for retail investors	0.091	0.130	0.831	0.091
The complexity of financial products offered in the stock market can potentially lead retail investors to make costly errors	-0.298	0.044	0.800	-0.062

Financial product fees in the stock market are complex for some of the retail investors	0.816	0.079	-0.158	-0.055
Retail investors are able to comprehend key investor information documents provided by the NSE intermediaries	0.780	0.224	0.050	-0.038
Financial products offered in the stock markets convey information that is easy to follow by individual investors	0.842	0.163	-0.207	0.092
Financial products offered in the stock market are easy to understand for retail investors	0.504	0.363	0.272	0.006
Financial products offered in the stock market provide investment alternatives that match needs of retail investors	0.526	0.509	-0.110	0.136
Financial products in the stock market provide options for retail investors that are compatible with their current needs or situation	0.117	0.860	0.120	-0.095
Financial products in the stock market are compatible with retail investors' personality traits.	0.303	0.730	0.296	0.139
Retail investors have a great deal of opportunity to try financial products available in the stock market	0.148	0.543	-0.417	-0.177
Retail investors have opportunity to satisfactorily try out financial products offered in the stock market	0.053	-0.073	0.091	0.911
Retail investors are able to try financial products offered in the stock market before deciding whether to invest	0.440	-0.347	0.318	-0.386

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a Rotation converged in 6 iterations.

4.6 Correlation Analysis

This section presents the correlation coefficient analysis between the indicators of each of the independent variables and retail investments and these tests were performed at the 95% confidence level.

4.6.1 Regulatory factors and retail investments correlation coefficient

Table 4.12 shows that there was a positive and significant association between regulatory factors and retail investment (r = .338, p < 0.05). Technology factors regulations had a positive and significant association with retail investment (r = .213, p < 0.05). Information factors had a positive and significant association with retail investment (r = .340, p < 0.05). Product factors had a positive and significant association with retail investment (r = .381, p < 0.05). The output implies product factors followed by information factors, regulatory factors, and technology factors.

Table 4.20: Supply-side Determinants and Retail Investment Correlation Results

	Regulatory factors	Technology factors	Information factors	Product factors
Regulatory factors	1			
Technology factors	.265*	1		
Information factors	.378**	0.142	1	
Product factors	.301**	-0.019	.388**	1
Retail investment	.338**	0.135	.340**	.381**
Sig. (2-tailed)	0.001	0.213	0.001	0.000
N	87	87	87	87

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

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

4.7 Regression Analysis

There were four specific objectives and linear regression analysis was performed for each of these variables and their findings are highlighted in this section.

4.7.1 Regulatory Framework and Retail Investment in the NSE

The findings indicate that the regulatory framework explained 19.9% (R^2 = 0.199) on retail investment in the NSE and this was statistically significant as the p value was less than 0.05 (p = 0.001). The coefficients output shows that an increase in financial

requirement regulations would have a 0.040 decrease in retail investment and this was not significant (β = -0.040, p > 0.05). There was a positive and significant effect of stakeholder management regulations (β = 0.342, p < 0.05), efficient regulatory framework (β = 0.245, p < 0.05), and corporate governance systems (β = 0.303, p < 0.05) had a positive and significant effect on retail investment as shown in Table 4.16. This suggests that an increase in stakeholder management regulations, efficient regulatory framework, and corporate governance systems would result in an increase in retail investment.

Table 4.21: Relationship between Regulatory Framework and Retail Investment

Model summary					
R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**		
.446a	0.199	0.16	1.07014		
ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	23.315	4	5.829	5.09	.001[b]
Residual	93.906	82	1.145		
Total	117.221	86			
Coefficients					
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	3.559	0.115		31.024	0.000
Financial requirements regulations	-0.040	0.115	-0.034	-0.348	0.729
Stakeholder management regulations	0.342	0.115	0.293	2.966	0.004
Efficient regulatory framework	0.245	0.115	0.210	2.126	0.036
Corporate governance systems	0.303	0.115	0.260	2.630	0.010

a Dependent Variable: Retail investment

b Predictors: (Constant), Corporate governance systems, Efficient regulatory framework, Stakeholder management regulations, financial requirements regulations

4.7.2 Technology Factors and Retail Investment in the NSE

The results indicate that technology factors explained 7.1% of variation in retail investment in the NSE and this was not statistically significant as the p value was greater than 0.05 ($p > 0.05$). The coefficients showed a positive and statistically significant effect of technology productivity on retail investment ($\beta = 0.251$, $p < 0.05$) while a positive but insignificant effect of ease of technology on retail investment ($\beta = 0.111$, $p > 0.05$). The output indicates that technology knowledge ($\beta = -0.012$, $p < 0.05$) and adoption of technology ($\beta = -0.144$, $p < 0.05$) had a negative but statistically insignificant relationship with retail investment summarized in Table 4.17. This implies that an increase in technology productivity would increase retail investment in the NSE.

Table 4.22: Relationship between Technology Factors and Retail Investment

Model summary					
R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**		
.266a	0.071	0.025	1.15267		
ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	8.271	4	2.068	1.556	.194[b]
Residual	108.95	82	1.329		
Total	117.221	86			
Coefficients					
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	3.559	0.124		28.802	0.000
Technology productivity	0.251	0.124	0.215	2.017	0.047
Technology knowledge	-0.012	0.124	-0.01	-0.098	0.922
Adoption of technology	-0.144	0.124	-0.124	-1.160	0.249
Ease of technology	0.111	0.124	0.095	0.895	0.374

a Dependent Variable: Retail investment

b Predictors: (Constant), Ease of technology, Adoption of technology, Technology knowledge, Technology productivity

4.7.3 Information Factors and Retail Investment in the NSE

Table 4.18 shows that information factors explained 3.9 % ($R^2 = 0.039$) of variation on retail investment and this was not statistically significant as the *p* value was greater than 0.05 ($p = 0.187$). The coefficient results show there was a positive but insignificant relationship between timely information ($\beta = 0.227$, $p > 0.05$) and retail investment. Information credibility had a positive but insignificant relationship with retail investment ($\beta = 0.043$, $p > 0.05$) on retail investment in the NSE. The findings imply that providing individual and households investors with timely information and reliable information on financial products in the capital market may not culminate in their decision to invest.

Table 4.23: Relationship between Information Factors and Retail Investment

Model Summary						
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**		
1	.198a	0.039	0.016	1.15798		
ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.584	2	2.292	1.709	.187[b]
	Residual	112.637	84	1.341		
	Total	117.221	86			
Coefficients						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	3.559	0.124		28.67	0.000
	Timely information	0.227	0.125	0.194	1.816	0.073
	Information credibility	0.043	0.125	0.037	0.347	0.729

a Dependent Variable: Retail investment

b Predictors: (Constant), Information credibility, Timely information

4.7.4 Product Factors and Retail Investments in the NSE

The regression output shows that product factors explained 27.7% (R^2 = 0.277) of change in retail investment in the NSE and this was statistically significant as the p values was less than 0.05 (p = 0.000). The coefficient output indicates that product information (β = 0.569, p < 0.05), had a positive and statistically significant effect on retail investment while positive but statistically insignificant effects of product availability (β = 0.143, p > 0.05), product uncertainty (β = 0.093, p > 0.05), and product triability (β = 0.158, p > 0.05), had positive but statistically insignificant outcomes on retail investment as shown in Table 4.19. The results suggest that product information, availability, uncertainty, and triability did not have any effects on retail investment

among individuals and households. These means that NSE intermediaries may not need to place efforts on products but rather should be focused more on the regulatory framework and information factors.

Table 4.24: Relationship between Product Factors and Retail Investment

Model summary					
R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**		
.526a	0.277	0.242	1.01651		
ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	32.492	4	8.123	7.861	.000[b]
Residual	84.729	82	1.033		
Total	117.221	86			
Coefficients					
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	3.559	0.109		32.661	0.000
Product information	0.569	0.110	0.487	5.192	0.000
Product availability	0.143	0.110	0.122	1.305	0.196
Product uncertainty	0.093	0.110	0.080	0.849	0.398
Product triability	0.158	0.110	0.135	1.438	0.154

a Dependent Variable: Retail investment

b Predictors: (Constant), Product triability, Product uncertainty, Product availability, Product information

4.8 Chapter Summary

This chapter presented descriptive statistics, factor analysis, correlation analysis, and linear regression analysis findings. The major finding was that regulatory factors and product factors explained 19.9% and 27.7% of variation in retail investment in the NSE and this was statistically significant at the 95% confidence level. Technology and information factors did not have any significant effects on retail investment. However, technology productivity component had a positive and statistically significant effect on retail investment. Further discussion of findings are presented in chapter five.

CHAPTER FIVE
SUMMARY, DISCUSSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study, discussions of the findings from existing empirical literature, and conclusions based on each of the objectives are also highlighted. The recommendations of the study are given for policy and practice.

5.2 Summary of the Findings

The research explored the supply-side determinants of retail investment in the NSE, Kenya. Its specific objectives were to: assess influence of regulatory framework on retail investment in the NSE; examine effect of technological factors on retail investment in in the NSE; determine influence of information factors on retail investment in the NSE; and assess influence of product factors on retail investments in the NSE. The research was underpinned on the Public Interest Theory, UTAUT, Information Asymmetry, and Expected Utility Theory. The positivist research philosophy was adopted and a descriptive correlational research design implemented. The target population of the study were 143 NSE intermediaries as the units of analysis from which 105 respondents was selected as the sample size. A structured questionnaire confirmed for its reliability and validity was administered online via Google forms. The major finding was that regulatory factors and product factors explained 19.9% and 27.7% variation of retail investment in the NSE and this was statistically significant at the 95% confidence level. Technology and information factors did not explain variance in retail investment.

5.3 Discussion

The discussion of findings is based on the research objectives and highlights the findings and their agreement and disagreement with existing empirical literature while also connecting findings to the supporting theory.

5.3.1 Influence of Regulatory Framework on Retail Investment in the NSE

The findings showed that regulatory framework did have an effect on retail investment in the NSE. The findings implied that an increase in a regulatory regime that is supportive of retail investment will contribute to increase investments by individuals in the NSE. These findings provide credence to other research that has confirmed that

regulatory environment and frameworks contribute positively to retail investments. Steenkamp and van Vuuren (2022) agree that regulatory frameworks also are a prominent feature for enhancing retail investments in investment and financial market system.

Parida and Vyas (2022) found that good governance system enabled investors make decisions in developing markets to attain high returns and also deterred them from fraudulent market practices, and money protection. Using longitudinal data, Chakraborty et al. (2023) was able to confirm that quality of corporate governance positively influenced shareholding level of retail investors in capital markets. The study provided evidence that retail investors pay more attention with quality of CG when making investments limited companies compared to subsidiary owned companies.

Ojung'a et al. (2018) was able to present evidence that there was a positive effect of regulatory framework on mutual fund institutions growth suggesting that ongoing regulatory reforms on capital market investments provided opportunities for greater capital market participation among individual investors. More recently, Nyamweya (2023) research revealed that unregulated financial products explained product uptake while a positive relationship between unregulated financial products and product uptake was found. This implies that regulation of products in the NSE explained the degree of retail investments.

The findings provided support for the public interest theory (PIT) that advocates those institutions mandated to regulate and enforce regulations in an industry are in a position to create and implement policies, guidelines, and standards for the benefit of all. In this case, the CBK and the CMA give regulations to the NSE intermediaries and these can be employed in a manner in which it promotes or furthers retail investments. The findings showed that introducing regulations that support retail investments among the intermediaries will in the long run contribute to their greater participation in the capital market.

5.3.2 Influence of Technological Factors on Retail Investment in in the NSE

The results indicated that technological factors did not have any significant effect on retail investment in the NSE. The findings implied that existing and emerging technology progression in the capital market has not contributed to any significance

increase in retail investment. This outcome goes against past studies that have found a positive impact of technological advancement on retail investment. Ezirim et al. (2019) suggests that advancements in technology increases the frequency, level, and engagement between investors and capital market intermediaries.

The findings are in disagreement with the body of literature that shows a positive relationship between technology and retail investment. For example, Naveed et al. (2020) SEM analysis showed a positive effect of corporate websites on behavioural intention of individual investors implying that greater technological adoption in capital markets results in increase retail investment participation. Mwambi (2021) revealed that artificial intelligence had an effect on better investment choices among Kenyan youth.

Shivani's et al. (2022) review showed that digital technology increased ease of access, reduced transaction costs therefore making stock markets available for individual investors. This implies that advancements in financial technology contributed to greater participation of retail investors in capital markets. Kiranmayi and Raju (2023) research in India revealed that proliferation of online trading platforms, social media, and financial news portals had significantly impacted investors' access to information and their decision-making processes.

This variable was anchored on Venkatesh et al. (2003) UTAUT framework to better understand acceptance of technology in an organization using its four dimensions (Momani, 2020). The descriptive statistics revealed that all four factors had the highest ranks among respondents. However, the regression analysis showed that these factors did not have any relationship with retail performance. Thus, this finding does not support the tenets of the UTAUT and their effect on retail investment. This implies that acceptance of digital and emerging technologies among staff in NSE intermediaries has no effect on retail investment as these technologies are only used for their jobs.

5.3.3 Influence of Information Factors on Retail Investment in the NSE

The results revealed that information factors had an insignificant positive effect on retail investment in the NSE implying that timely and reliable information may not have any effects on retail investment. available to retail investors, the more likelihood that they will invest in the stock market. Globally, it is accepted that sources of information and

news, awareness of services and products, trust in financial markets are a significant determinant for retail investments (WEF, 2022). The findings thus go against a plethora of studies confirmed a positive relationship between information and retail investment.

These include Jones et al. (2022) research in which retail investors displayed behavioural properties such as gambling preferences and overconfidence and this was explained by their lack of ability to process information capabilities and this contributed to their limited ability to predict powers for future returns. This implies that possessing greater information access and ability to process it has a positive effect on quality of retail investment. Hee et al. (2019) revealed that having access to firm information had a positive and significant effect on retail investor behaviour.

Mwakabumbe et al. (2023) found evidence that individuals not participating in the financial markets had low awareness of the financial market in comparison to those individuals who participated in the market implying a positive relationship between these variables in Tanzania. Minani (2019) investigation in Uganda established a significant difference between stock market participation and financial information as manifested by low degree of public awareness on the stock market.

The findings agree with other research that has found no relationship between information factors and retail investment. For example, Pallathadka et al. (2022) results indicated that seeking market information and identifying the most beneficial portfolio to get accurate information does not have any relationship with investing in the stock market. This evidence can also be found in Kenya, as Ngahu (2017) revealed that third parties' opinion had a significant positive effect investment decision while information had a negative insignificant role on retail investments' decisions.

This variable was anchored on information asymmetry theory that describes a situation in which two parties in a transaction have access to different levels of information. In these scenarios, it is common for one party to have access to more information than the other party and this puts them at an advantage. In this case, NSE intermediaries have more private information than retail investors possess; this relationship is indicative of an information symmetry and it is therefore imperative that NSE intermediaries furnish retail investors with information to support them in their investment decision making.

Therefore, the finding supports this theory as it showed that information factors had a positive effect on retail investments in the capital market.

5.3.4 Influence of Product Factors on Retail Investments in the NSE

The findings indicated that there was a positive and significant effect of product factors on retail investment in the NSE suggesting that an increase in this variable will result in the increase in retail investment. The product factor considered were product complexity, literacy, compatibility, and triability and designing products along these characteristics can contribute to greater retail investment. The results are in agreement with previous research that show a positive relationship between capital market products and retail investment.

Sharma et al. (2017) found that awareness level had a significant effect on retail investors when making their investment decisions in terms unconventional financial products. Faradynawati (2023) findings revealed that product literacy was a significant determinant on investor decision making while Chowdhury and Salema (2023) established that investor awareness was found to be an important factor for likely investment in products; perceived security represented by third-party and government guarantees were a persuasive feature of investment products as well as its triability.

Sukumaran et al. (2022) revealed that perceived value, ease of use, trialability, compatibility, and observability influenced intention to invest implying a relationship with actual retail investment. Nasage (2019) revealed that public provident and mutual funds received greater investments indicating product compatibility was a factor for individual investments. In Kenya, Njuguna et al. (2016) confirmed that product compatibility positively influenced investment intentions while Kivuti (2022) found moderate agreement among retail investors was based on their product literacy.

This variable was anchored on the expected utility theory that to better understand the product preferences of retail investors in the stock market. The EUT explains decision-making in cases where an individual makes a decision; they have their own preferences; in the capital markets, retail investors will have preferences for specific products not all. Therefore, it is imperative for NSE intermediaries to match their retail investors with specific products in the stock market ensuring that they are compatible with their lifestyle, they are not complex for them to understand it, easy to understand and also

try it at a small scale before making a full commitment. The finding supports the EUT as product factors were found to have a positive effect on retail investment.

5.4 Conclusion

The first objective assessed the influence of regulatory framework on retail investment in the NSE and there was a positive and significant relationship observed between these variables. Therefore, it is the study's conclusion that continuous reforms to the regulatory framework will increase retail investment. The second objective examined the effect of technological factors on retail investment in in the NSE and there was no significant relationship between these variables. Therefore, it is the study's conclusion that technological advancements in the stock market may not yield greater retail investment.

The third objective aimed to determine influence of information factors on retail investment in the NSE and there was a positive but insignificant relationship between the variables. Thus, the study concludes that timely and reliable information may not result in increased retail investment. The fourth objective sought to assess influence of product factors on retail investments in the NSE and a positive and significant relationship between product factors and retail investment. Therefore, the research concludes that product design, compatibility, literacy, and triability contribute to increase retail investment.

5.5 Recommendations

The study makes the following recommendations for policy and practice.

5.5.1 Recommendations for Policy

The study makes the following recommendations for policy based on its findings;
There is need continuously reviewing existing policies on retail investments in the NSE to better address the changing preferences of retail investors; this can be achieved by undertaking surveys among existing retail investors to identify their preferences and expectations of the stock market.

The study recommends for disclosure requirements that are aligned to the different characteristics of retail investors such as their sophistication as some retail investors are able to process information better than others. This calls for a tiered levelled approach

of disclosing information to retail investors where plain language can also be incorporated into communication and information materials.

The study recommends for policy on know your customer (KYC) protocols for NSE intermediaries so as to allow them to better serve their retail investors by matching them with products that meet their level of sophistication. This policy can also provide for mandatory risk assessments of products before making recommendations to their retail investors.

5.5.2 Recommendations for Practice

The study makes the following recommendations for policy based on its findings;
The study recommends for NSE intermediaries to improve on the enforcement of regulations from the CBK and the CMA to enhance retail investments by providing training and sensitization to their employees to better implement compliance to existing regulatory framework.

The research recommends for NSE intermediaries to match their clients with products offered in the capital markets by ensuring that products are compatible with clients, products are not complex for their clients to understand, and provide products that clients can try before committing themselves to investing in them. This means that NSE intermediaries should implement KYC practices as a major component of their operations.

5.6 Limitations of the Study

The research design adopted was cross-sectional which implies the data was collected once and may thus not be reflective or able to show changes in patterns of retail investment. Another limitation to the study was the reliance on self-reported data that is vulnerable to threats of validity as respondents give their opinion by their memory which may not always be accurate. Lastly, the factors considered in the study as supply-side determinants may be different and unique for the different groups of intermediaries and this was not captured in the survey.

5.7 Suggestions for Future Research

There is a need for future research to examine the influence of specific regulatory mechanisms that have been introduced in the NSE to support retail investment. There is also a need for future research to examine the information dimensions used in this

study further to determine how product, market, company, and stock information and how this is related to retail investments. There is also need for future research to examine the extent to which products offered in the NSE are compatible and complex to retail investment; such a study would collect its information from retail investors.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Principal Investigator,

Stella Wambugu

Strathmore Business School

Ole Sangale Road, P.O. Box 59857 – 00200 City Square,

Nairobi, Kenya

Email: muthoni.wambugu@strathmore.edu

RE: Request to participate in academic research

Dear respondent,

My name is Stella Wambugu, a student at Strathmore University's School of Business. In partial fulfillment for an award of a Master of Business Administration for Executives, I am undertaking research on ***EXPLORING THE SUPPLY-SIDE DETERMINANTS OF RETAIL INVESTMENT IN THE NAIROBI SECURITIES EXCHANGE, KENYA***

You, as a member of senior management in your organization, have been randomly selected as a respondent for this study. Therefore, I kindly request you to fill the attached questionnaire. If you need any further information, you may get in touch with me as the principal investigator.

Thank you in advance,

Stella Wambugu

APPENDIX 2: QUESTIONNAIRE FOR MANAGERS

Part A: General information

1. Please indicate your gender

Male ( )

Female ( )

2. Please indicate your highest educational level

Certificate ( )

Diploma ( )

Bachelor's Degree ( )

Master's Degree ( )

Doctorate Degree ( )

3. Please indicate your organisation category

NSE ( )

CDSC ( )

Investment Banks ( )

Stockbrokers ( )

Investment advisers ( )

Fund managers ( )

CIS ( )

Authorized depositories/Custodians ( )

4. Please indicate the number of years you have worked in the stock market industry

Less than five years ( )

6 – 10 years ( )

11 – 15 years ( )

More than 16 years ( )

5. Please indicate the number of years the organisation has been an actor

Less than five years ( )

6 – 10 years ( )

11 – 15 years ( )

More than 16 years ( )

Part B: Regulatory framework

In the following section, please indicate to what extent you agree with the following statements on a scale of 1-5 where: 1-Strongly disagree, 2-Disagree, 3-Moderately agree, 4-Agree, and 5-Strongly agree

Regulatory framework Items		**1**	**2**	**3**	**4**	**5**
Legislative framework	The existing regulatory framework facilitates the development of new financial products for retail investors	o	o	o	o	o
	The existing regulatory framework facilitates research, fairness, and orderliness in the capital markets industry	o	o	o	o	o
	The existing regulatory framework for capital market development delivers efficiency for retail investments	o	o	o	o	o
Corporate governance	The firm-level corporate governance quality at the stock market has promoted retail investors shareholding level	o	o	o	o	o
	The firm's corporate governance system helps investors by deterring them from fraudulent market activities	o	o	o	o	o
	Corporate Governance practices comply with relevant laws, regulations and rules in respect to retail investments	o	o	o	o	o
Stock market standards	The full compliance with the International Financial Reporting Standards (IFRS) promote retail investments	o	o	o	o	o
	There is adequate monitoring on compliance with standards of ethical practice to promote retail investments	o	o	o	o	o
	There are standards upheld under which broker-dealers and investment advisers provide advice to retail investors	o	o	o	o	o

Stock market guidelines	Guidelines on the prevention of money laundering in the capital markets have promoted retail investments	o	o	o	o	o
	Guidelines on financial resource requirements for market intermediaries have promoted retail investments	o	o	o	o	o
	Guidelines on management of both internal and external stakeholders has had positive impact on retail investments	o	o	o	o	o
Technology factors		**1**	**2**	**3**	**4**	**5**
Performance expectancy	I find using digital technologies useful in my work routine life	o	o	o	o	o
	Using digital technologies in my work increases likelihood of achieving important tasks	o	o	o	o	o
	Using digital technologies in my work improves my productivity	o	o	o	o	o
Effort expectancy	Learning to use digital technologies in my work has been easy for me	o	o	o	o	o
	My interaction with digital technologies is clear and understandable	o	o	o	o	o
	It is easy for me to become skillful at using digital technologies in my work	o	o	o	o	o
Social influence	My use of digital technologies has been influenced by the importance that others in the workplace and industry place on it	o	o	o	o	o
	The use of digital technologies in the stock market has been adopted and welcomed	o	o	o	o	o
	Using digital technologies in my work has been easy	o	o	o	o	o
Facilitating conditions	I have the reasons and resources necessary to use digital technologies in my work	o	o	o	o	o
	I have the knowledge necessary to use digital technologies in my work	o	o	o	o	o

	It is compulsory to use specific digital technologies in the stock market	o	o	o	o	o
Information factors		**1**	**2**	**3**	**4**	**5**
Product information	Retail investors have access to information from which they can evaluate financial products in the stock market	o	o	o	o	o
	Retail investors have access to credible information on financial products in the stock market	o	o	o	o	o
	Retail investors have access to information to develop positive/negative emotions towards financial products in the stock market	o	o	o	o	o
Market information	Retail investors receive timely information on the stock market	o	o	o	o	o
	Retail investors have access to reliable information on the stock market	o	o	o	o	o
	Retail investors are able to benefit from transparent information dissemination in the stock market	o	o	o	o	o
Company information	Retail investors have access to large quantity of information about listed companies in the stock market	o	o	o	o	o
	Retail investors are able to react quickly in the stock market based on the latest information on listed companies	o	o	o	o	o
	Retail investors are able to access accurate information disclosed by companies listed in the stock market	o	o	o	o	o
Stock information	The NSE intermediaries provide valuable information for retail investors to influence their investment decisions	o	o	o	o	o
	Retail investors frequently used information from balance sheets, income statements, and the cash flow statements	o	o	o	o	o

	Retail investors have access to accurate information of stocks listed in the Nairobi securities exchange	o	o	o	o	o
Product Items		**1**	**2**	**3**	**4**	**5**
Product complexity	Financial products offered at the stock market present a complex level or uncertain returns/number of scenarios for retail investors	o	o	o	o	o
	The complexity of financial products offered in the stock market can potentially lead retail investors to make costly errors	o	o	o	o	o
	Financial product fees in the stock market are complex for some of the retail investors	o	o	o	o	o
Product literacy	Retail investors are able to comprehend key investor information documents provided by the NSE intermediaries	o	o	o	o	o
	Financial products offered in the stock markets convey information that is easy to follow by individual investors	o	o	o	o	o
	Financial products offered in the stock market are easy to understand for retail investors	o	o	o	o	o
Product compatibility	Financial products offered in the stock market provide investment alternatives that match needs of retail investors	o	o	o	o	o
	Financial products in the stock market provide options for retail investors that are compatible with their current needs or situation	o	o	o	o	o
	Financial products in the stock market are compatible with retail investors' personality traits.	o	o	o	o	o
Product triability	Retail investors have a great deal of opportunity to try financial products available in the stock market	o	o	o	o	o
	Retail investors have opportunity to satisfactorily try out financial products offered in the stock market	o	o	o	o	o

	Retail investors are able to try financial products offered in the stock market before deciding whether to invest	o	o	o	o	o
Retail investment participation		**1**	**2**	**3**	**4**	**5**
The share of retail investors in the firm's portfolio has been on a gradual increase		o	o	o	o	o
The demand of stock investments from retail investors in the firm has been on a gradual increase		o	o	o	o	o
The firm has been able to retain majority of its retail investors in its portfolio		o	o	o	o	o

APPENDIX 3: LIST OF NSE INTERMEDIARIES

INVESTMENT BANKS

1. Drummond Investment Bank
2. Dyer & Blair Investment Bank Ltd
3. Francis Thuo & Partners Ltd (Under Statutory Management)
4. Nyaga Stockbrokers Ltd.
5. Ngenye Kariuki & Co. Ltd.
6. Suntra Investment Bank Ltd
7. Reliable Securities Ltd.
8. CFC Financial Services
9. Kingdom Securities Ltd
10. Afrika Investment Bank Ltd
11. ABC Capital Ltd
12. Sterling Securities Ltd
13. ApexAfrica Investment Bank Ltd
14. Faida Investment Bank Ltd.
15. NIC Capital Securities Ltd.
16. Genghis Capital Securities Ltd.
17. Standard Investment Bank Ltd
18. Kestrel Capital (EA) Limited
19. Discount Securities Ltd.
20. African Alliance Kenya Securities
21. Renaissance Capital (Kenya) Ltd

STOCKBROKERS

1. AIB-AXYS Africa
2. Equity Bank Kenya Ltd
3. KCB Bank Kenya Ltd
4. KCB Investment Bank Ltd
5. NCBA Investment Bank Ltd

INVESTMENT ADVISERS

1. Bora Capital Limited
2. Burbidge Capital Limited

3. Citidell Company Limited
4. Cititrust Kenya Limited
5. Co-op Consultancy & Insurance Agency Limited
6. Deloitte Financial Advisory Limited
7. Emerging Africa Capital Limited
8. J W Seagon & Company Limited
9. Lifestyle Management Limited
10. Orchid Capital Limited
11. PricewaterhousecCoopers Associates
12. Raya Limited
13. Regnum Consultants Limited
14. The Profin Group (K) Limited
15. VFS International (K) Limited
16. MTC Capital Advisor Limited
17. Stratagem Capital Management Limited

COLLECTIVE INVESTMENT SCHEMES

1. ABSA Asset Management Limited
2. African Diaspora Asset Managers Limited
3. Altree Capital Kenya Limited
4. Amana Capital Limited
5. Apollo Asset Management Company Limited
6. Britam Asset Managers (Kenya) Limited
7. CIC Asset Management Limited
8. Co-op Trust Investment Services Limited
9. Cytonn Asset Managers Limited
10. Dry Associates Limited
11. Fusion Investment Management Limited
12. Genafrica Asset Managers Limited
13. Globetec Asset Management Limited
14. ICEA Lion Asset Management Limited
15. Investcent Partners Limited
16. Jubilee Asset Management Limited
17. KCB Asset Management Limited

18. Kenindia Asset Management
19. Kuza Asset Management Limited
20. Lofty Corban Investments Limited
21. Madison Investment Managers Limited
22. Mayfair Asset Managers Limited
23. Nabo Capital Limited
24. NCBA Investment Bank Limited
25. Old Mutual Investment Group Limited
26. Orient Asset Managers Limited
27. Sanlam Investments East Africa Limited
28. Star Capital Management Limited
29. VCG Asset Management Limited
30. Zimele Asset Management Company Limited

APPROVED CENTRAL DEPOSITORIES AGENTS

1. Absa Bank Kenya Plc
2. Absa Financial Services Ltd
3. Access Bank Kenya
4. African Banking Corporation Ltd
5. APA Insurance Ltd
6. Bank of Africa Kenya Ltd
7. Co-Operative Bank of Kenya Plc
8. Credit Bank PLC
9. EFG Hermes Kenya Limited
10. Equity Bank Group Plc
11. Equity Investment Bank Ltd
12. HFC Limited
13. I&M Bank Plc
14. National Bank of Kenya Plc
15. NCBA Bank Group Plc
16. Prime Bank Limited
17. SBG Securities Ltd
18. SBM Bank (Kenya) Ltd
19. Securities Africa Kenya Limited

20. Spire Bank
21. Stanbic Bank Ltd
22. Standard Chartered Bank Plc
23. The National Treasury
24. Transnational Bank Ltd
25. UAP Old Mutual Securities Ltd

Source: Capital Markets Authority (2024)

APPENDIX 4: ETHICAL APPROVAL

Strathmore UNIVERSITY

11th February 2025

Ms Wambugu Stella,
muthoni.wambugu@strathmore.edu

Dear Ms Wambugu,

RE: Exploring Determinants of Retail Investment in the Nairobi Securities Exchange, Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** proposal. Your application reference number is **SU-ISERC2541/24.** The approval period is from **11th February 2025 to 10th February 2026.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC

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Email admissions@strathmore.edu www.strathmore.edu

APPENDIX 5: RESEARCH LICENSE

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **145839**

Date of Issue: **21/February/2025**

RESEARCH LICENSE

This is to Certify that Ms.. Stella Wambugu of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EXPLORING DETERMINANTS OF RETAIL INVESTMENT IN THE NAIROBI SECURITIES EXCHANGE, KENYA for the period ending : 21/February/2026.

License No: **NACOSTI/P/25/416095**

145839

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions