



**CONSUMER BEHAVIOUR REGARDING STOCK MARKET
PARTICIPATION IN SOUTH AFRICA**

BY

WISE MBEWE

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**PROMOTER: PROF. NE MAZIBUKO
CO-PROMOTER: PROF. C ROOTMAN**

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DECLARATION

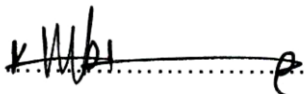
NAME: WISE MBEWE

STUDENT NUMBER: 215117190

QUALIFICATION: DOCTOR OF PHILOSOPHY

TITLE OF PROJECT: CONSUMER BEHAVIOUR REGARDING STOCK MARKET
PARTICIPATION IN SOUTH AFRICA

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned thesis is my own work and that it has not previously been submitted for assessment to another University or for another qualification.

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SIGNATURE

14 April 2020

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DATE

DEDICATION

This thesis is dedicated to my late parents. I hope I have made you proud.

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to the following people for their contribution to making this study a resounding success.

- My supervisor and co-supervisor Prof N.E Mazibuko and Prof C. Rootman for their guidance and unwavering support throughout this entire study.
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ABSTRACT

South Africa (SA) has a highly sophisticated financial services sector that contributes significantly to the economy. A stock market forms a significant component of the financial sector of any economy. While the Johannesburg Stock Exchange (JSE) has managed to arouse interest of many South Africans, there appears to be apathy and inertia when it comes to actual participation in the stock market by South African consumers. Stock market non-participation is considered a “puzzle” in microeconomics and finance literature because it is not easy to explain the reason why many consumers, in spite of high stock returns, do not own listed shares. Thus, the primary objective of this study was to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in SA.

The study presented a theoretical literature review on the factors influencing stock market participation in SA. From the literature review, three sets of variables classified as independent variables, an intervening variable and dependent variables were identified. The independent variables (Demographic characteristics; Financial literacy; Investment risk tolerance; Communication; and Consumer trust) were identified as possibly influencing the intervening variable (Stock market participation) and ultimately the dependent variables (Client satisfaction and loyalty, Financial sustainability and Repurchase intentions). These variables were used to construct a hypothesised model and research hypotheses.

The study further presented the research methodology (following a positivistic paradigm and quantitative research method), and the results of this study. In order to establish the influence of the independent variables on stock market participation, as well as ultimate influences on the dependent variables, an empirical investigation was conducted. Since it was not possible to reach all members of the target population, the population of this study was South African consumers located in four of the nine provinces, namely, Eastern Cape, Western Cape, Kwa-Zulu Natal and Gauteng. A sample of 510 respondents participated in the study.

A measuring instrument in the form of a self-administered, structured questionnaire was compiled from secondary literature sources. Descriptive statistics were calculated to

summarise respondents' biographical and demographical information. In addition, using exploratory factor analyses results, the hypothesised model was updated, and further inferential statistics were computed. These statistics included a reliability analysis, correlation analysis and regression analyses to statistically test the proposed relationships. The empirical results revealed that all the postulated variables are positively and significantly related to consumer behaviour regarding Stock market participation in SA. Although Financial risk tolerance is significantly related to Stock market participation, this relationship is negative. Furthermore, the study revealed that Stock market participation significantly influences the dependent variables, namely, Client satisfaction, Financial sustainability and Repurchase intentions.

The conclusions generated in this study subsequently led to a number of recommendations for policy makers and financial services providers. The study shed light on the limited stock market participation which has been found to have implications on the financial sustainability of consumers. Insights drawn from the study will contribute to the body of knowledge on consumer behaviour regarding participation in the stock market and will benefit financial services providers, policy makers and the investing public at large.

KEY WORDS

Behavioural finance, Consumer behaviour, Financial literacy, Financial planning, Investment risk, Practice management, Shares, Stock market participation.

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CHAPTER ONE

OVERVIEW AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND TO THE RESEARCH

The structure and dynamics of households and families have significantly changed since the dawn of democracy (Cronje & Roux, 2010:27). These changes have ultimately affected overall consumer perceptions of price, quality and value. The middle class in SA is becoming an important factor in the consumer market, more especially in the financial services industry (Prinsloo, 2002:72). Investor behaviour should, therefore, be carefully studied in order to create financial products for each customer type to align with stages in the customer life cycle.

The 2008 financial crisis has led to a much greater awareness of the vulnerabilities to the global financial system due to the interconnectedness of the financial system and the risks created by cross exposures across banks and financial markets (Van Wyk, Botha & Goodspeed, 2016:133). The economic growth of a country depends upon the existence of a well-developed financial system, therefore, understanding consumer behaviour should be a fundamental function of any Financial Services Provider (FSP) such as banks, insurance companies and stock brokers. The stock market is a key driver of this growth, and it plays a fundamental role in the economic development of a country. It allows for a wider ownership amongst South African consumers, thereby distributing risks and wealth amongst small investors. According to the South African Savings Institute (SASI, 2014), the stock market helps the economy to generate more savings and sustainable investments.

Correspondingly, Yartey and Adjasi (2007:3) assert that over the past few decades the world stock markets have surged and emerging markets have accounted for a large amount of this boom. In Africa, new stock markets have been established in Ghana, Malawi, Swaziland, Uganda and Zambia. Prior to 1989 there were just five stock markets in sub-Saharan Africa and three in North Africa. There are 29 stock markets in Africa, up from 18 since the year 2000. According to Yartey and Adjasi (2007:3), stock market development has been central to the domestic financial liberalisation programs of most African countries; it seems any program of financial liberalisation in Africa is incomplete without the establishment and development of

stock markets. Consequently, Braunstein and Welch (2002:446) have confirmed that, as knowledgeable consumers demand products that meet their short- and long-term financial needs, providers compete to create products that have the characteristics that best respond to these demands.

Consumer behaviour focuses on how individuals make decisions to spend their available time, money and effort on consumption-related items. According to Cronje and Roux (2010:22), various studies in consumer behaviour seek to better understand how consumers make decisions thereby deriving crucial theoretical and practical implications. By the same token, it is imperative for marketers to want to know why consumers buy in order for them to have a much better chance at creating and promoting products that people want to buy. Al-Jeraisy (2008:87) suggests that seeking easy solutions for marketing problems aggravates matters due to the complexity of consumer behaviour and the intricacy of related factors. This also indicates that consumer behaviour is influenced by external and internal factors. Furthermore, it is important for service providers to understand that a consumer's decision-making process entails a series of steps that ultimately lead to a purchase or non-purchase. For this reason, service providers need to know as much as possible about their consumers in order for them to attract more stock market participants. The focus of this study is on enhancing consumer behaviour regarding stock market participation so as to improve the welfare of society and boost the economy of the country.

1.2 PROBLEM STATEMENT

SA has a highly sophisticated financial services sector that contributes significantly to the economy. The stock market forms a significant component of the financial sector of any economy. While the Johannesburg Stock Exchange (JSE) has managed to arouse the interest of many South Africans, there appears to be apathy and inertia when it comes to actual participation by the South African consumer. Stock market non-participation is considered a "puzzle" in microeconomics and finance literature because it is not easy to explain why many consumers, in spite of high stock returns, do not own equities (Campbell, 2006:153). According to the JSE (2014), SA struggles with a low savings culture. Similarly, a research project jointly conducted by BANKSETA (2012:3) has noted that SA has a low level of savings. This has significant

socio economic consequences as it impacts particularly on the banking industry's capital inflows, as well as on the economy with low levels of liquidity and on individuals who are less able to fund their socio economic needs.

In essence, the link between economic growth and the development of a strong savings culture is of fundamental importance to a developing country such as SA; in this respect, attracting participants to the stock exchange should be a strategic imperative (BANKSETA, 2012:32). According to BANKSETA (2012:32), SA's savings culture relative to that of other developing countries is viewed as poor, whilst its propensity to consume remains very high. According to the International Monetary Fund (IMF, 2005), a country requires at least a total savings of 20% of GDP in order to support real economic growth of over 3% per annum. Gross savings by the household sector as a percentage of gross domestic product remained at 0.2% in both the third and fourth quarters of 2014 (SA Reserve Bank, 2015:17). Conversely, adequate savings, which are important for the generation of capital, have a direct impact on economic growth and are vital to achieving macroeconomic stability. According to Statistics South Africa (Stats SA, 2015), household savings as a percentage of disposable income is running at -2,3%; this poor savings culture has far reaching implications as it can leave people with no liveable income at retirement.

In light of the evidence provided, it is important to note that consumer savings have an effect on the level of stock market capitalisation. Correspondingly, savings at a household level protect consumers from income and spending concerns by providing them with an income in retirement. High levels of gross national savings reduce a country's reliance upon and exposure to the vagaries of global capital markets (South African Savings Institute, 2010:3). Unfortunately, for SA, according to Cronje and Roux (2010:22), the savings levels are rather low; this makes the country dependent on foreign investment in order to finance its capacity for future growth. In the light of overwhelming evidence regarding the relationship between household savings and socio economic development, and the possibility of increased savings for consumers through stock market participation, the questions guiding this study is:

Is the investment environment conducive for consumer participation in the stock market?

What are the stock market participation drivers that influence consumer behaviour?

1.3 RESEARCH OBJECTIVES

1.3.1 Primary research objective

The primary objective of this study is to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in SA.

1.3.2 Secondary research objectives

The following secondary objectives will assist in achieving the primary objective of the study:

- To provide a literature review on consumer behaviour regarding stock market participation.
- To develop a model for the study whereby the antecedents and outcomes relevance to stock market participation will be empirically tested through a set of hypotheses, and reduced into an easily discernible conceptual model.
- To analyse data statistically and present the empirical results of the study.
- To provide guidelines and recommendations on consumer behaviour regarding stock market participation.

1.4 RESEARCH QUESTIONS AND HYPOTHESES

The following research questions and hypotheses have been developed to provide understanding into the research study:

1.4.1 Research questions

- Do demographic characteristics play a role in attracting consumer participation in the stock market?
- Does financial literacy impact financial decisions and participation in the stock market?
- Does consumer attitude to investment risk factors impact participation in the stock market?

- Does communication as an awareness tool impact participation in the stock market?
- Does consumer trust of service providers influence participation in the stock market?
- Does consumer stock market participation promote client satisfaction and loyalty?
- Does consumer stock market participation lead to financial sustainability?
- Does consumer stock market participation increase repurchase intentions?

1.4.2 Research hypotheses

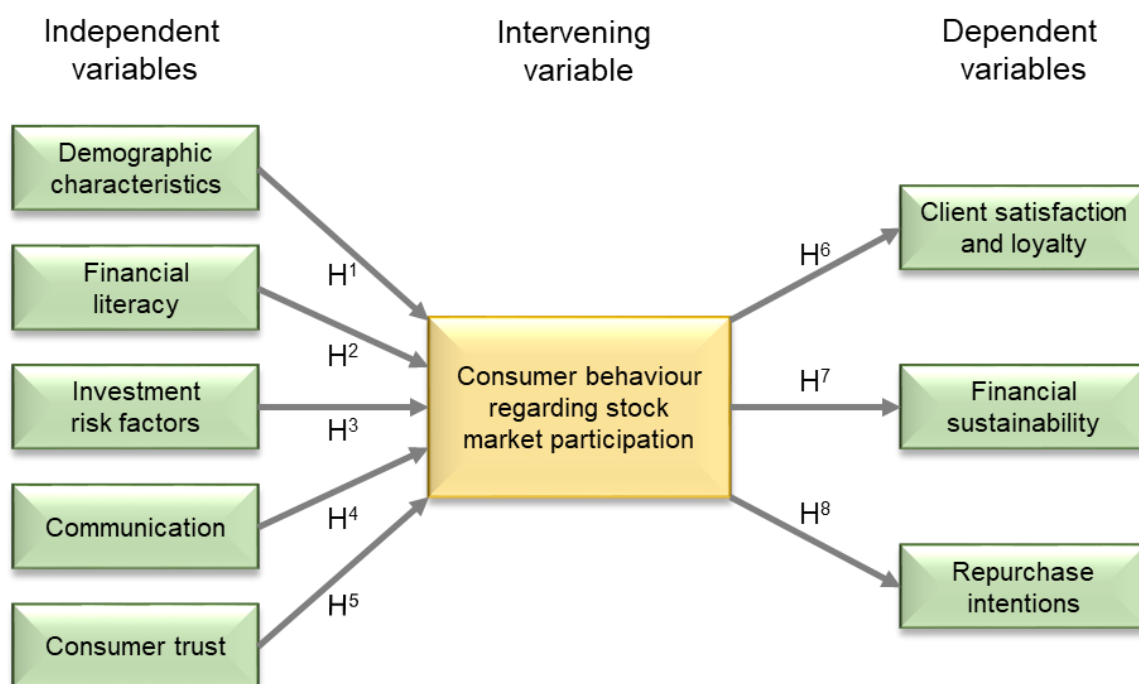
The following research hypotheses are established on the foundation of the hypothetical model for the stock market participation study:

- H¹: There is a significant relationship between demographic characteristics and consumer stock market participation.
- H²: There is a significant relationship between financial literacy and consumer stock market participation.
- H³: There is a significant relationship between investment risk factors and consumer stock market participation.
- H⁴: There is a significant relationship between communication and consumer stock market participation.
- H⁵: There is significant relationship between consumer trust and consumer stock market participation.
- H⁶: There is a significant relationship between consumer stock market participation and client satisfaction and loyalty.
- H⁷: There is a significant relationship between consumer stock market participation and financial sustainability.
- H⁸: There is a significant relationship between consumer stock market participation and repurchase intentions.

1.5 PROPOSED THEORETICAL MODEL OF CONSUMER BEHAVIOUR REGARDING STOCK MARKET PARTICIPATION

Three theoretical models, namely, the Consumer Decision model (Perner, 2013), the Segmenting model (Ratanjee, 2013, adapted from Gallup, 2004) and the Attitudes and Behaviours model (Ratanjee, 2013), are utilised for the foundation of this study. Thus, a theoretical model of consumer behaviour regarding stock market participation was structured. The anticipated hypothetical model depicts that consumer behaviour regarding stock market participation is affected by five independent variables: demographic characteristics, financial literacy, investment risk factors, communication and consumer trust. Similarly, the model indicates the following asserted outcomes of stock market participation: client satisfaction and loyalty, financial sustainability and repurchase intentions. Figure 1.1 demonstrates the theoretical model of consumer behaviour regarding stock market participation for the current study.

Figure 1.1: Theoretical model of consumer behaviour regarding stock market participation



Source: Researcher's own construction.

The ensuing section presents a review of the theoretical literature on all the variables of the model of the study, as depicted in Figure 1.1.

1.5.1 Stock market participation

According to Chan, Yim and Lam (2010), consumer participation refers to the degree to which consumers contribute effort, preference and knowledge to service production and delivery. According to Chien and Morris (2017), consumers' participation in the stock market varies, which implies that all consumers should invest at least a fraction of their wealth in shares in order to take advantage of the return on their investment. Furthermore, stock market participation includes ownership and co ownership of shares, as well as the financial returns from these shares (Radtke, Holstenkamp, Barnes & Renn, 2015:9). For the purpose of this study, stock market participation refers to the degree to which consumers should or prefer to invest at least a portion of their wealth in shares in order to take advantage of the return on their investment. Even though stock market participation simply measures whether the investor invests in the stock market, the level of equity holding in an investor's portfolio is an equally important outcome (Sivaramakrishnan, Srivastava & Rastogi, 2017:820). According to Jagongo and Mutswenje (2014:93), individual investment behaviour is concerned with the individual's choices regarding the purchasing of small amounts of securities for his/her own account. However, an investor with very low equity holding is not likely to reap the benefits of investing in stocks.

According to Magliolo (2012), for the few consumers who invest in the stock market in SA, consumers provide the following reasons as to why they chose to invest in the stock market:

- consumers want to grow investment even though this is not guaranteed, as stock markets fluctuate at any given time although in the long-term the stock market has been proven to give investors a good return;
- consumers invest in the stock market for an income stream through a dividend pay-out when a firm is performing or making a profit; and
- as an option to diversify and spread risk.

Investment decisions are often supported by a decision tool. In addition, it is assumed that information structure and factors in the market systematically influence individual investment decisions as well as market outcomes. Hence, this study focuses on

identifying factors that influence (antecedents) and benefit (outcomes of) consumer stock market participation.

1.5.2 Demographic characteristics

Demographic characteristics refer to the fundamental population statistics of customers, such as their age, gender, income levels, education levels, occupation, social class, marital status, race, household size, family life cycle, family composition, housing type, culture or ethnicity, and location (Kardes, Cline & Cronley., 2011:109; Vasseur & Kemp, 2015:1107). For the purpose of this study, demographic characteristics refer to age, gender, income level, education level, family or household structure, cultural background and family or household size.

According to Schiffman and Kanuk (2007; 2015), demographic characteristics such as age, gender, marital status, income, occupation and educational level are most often used as the basis for market segmentation. Demographic characteristics are strongly related to consumer buyer behaviour and are good predictors of how the target market will respond to a specific marketing mix (Lamb, Hair, McDaniel, Boshoff & Terblanche, 2004:46).

In a study on perceptions of stock market investments amongst middle class and government employees, Thampathy and Krishnan (2014) established that misconceptions about the stock market are a hindrance to participation in stock market investment by middle class and government employees.

Lamb, Hair, McDaniel, Boshoff and Terblanche (2015) maintain that demographic considerations exert a particularly important influence on marketing in SA. This infers that there is a relationship between demographic characteristics and consumer participation in the stock markets; for example, the emergence of the middle class in SA is now an important mechanism in consumer and financial markets. The influence of demographic variables on consumer stock market participation will be investigated in this study.

1.5.3 Financial literacy

Lusardi (2008:2) refers to financial literacy as the knowledge of basic financial concepts such as how compound interest works, the difference between nominal and real value, and the basics of risk diversification. Financial literacy is further defined as the knowledge of, and ability to explain, basic economic and financial concepts as well as the use of such knowledge to manage one's financial resources effectively (Hung, Parker & Yoong, 2009:12). For the purpose of this study, financial literacy refers to a consumer's knowledge of financial concepts, attitudes and skills which they are able to operationalise into behaviour that would result in good financial outcomes (Hung, *et al.* 2009:1; OECD, 2011:3).

According to Lusardi (2008:1), a failure to plan for retirement, the lack of participation in the stock market, the poor creation of financial debts and poor credit behaviour can all be linked to ignorance of basic financial concepts. Most studies conducted on financial literacy indicate a correlation between financial aptitude and sound financial decision-making. Thus, it is necessary for this study to further investigate the impact of financial literacy on stock market participation in SA.

1.5.4 Investment risk factors

According to NFU Mutual UK Handbook (2017), investment involves some form of risk, and the potential for higher returns is usually accompanied by a higher level of risk. Similarly, Zurich Awareness Booklet (2018) concur that risk means the possibility of a number of different outcomes resulting from a given action. Investment academics usually identify risk as the volatility associated with the prices and/or returns of investments (Vanguard Handbook, 2017:5). Collaban, Finefrock and Lahey (2012) stipulate that market risk is about the risk of losing all investment, or a significant portion thereof, in the stock market.

Investment risk refers to the probability that an actual return on an investment will be lower than the investor's expectations; therefore, it is the measurable uncertainty that an investment will not generate the expected returns (Jordan, Miller & Dolvin, 2012:22). According to Botha, Rossini, Geach, Goodall, Du Preez and Rabenowitz (2015:221), investment risk refers to the asset devaluating or the risk of capitalising and spending. In this study, investment risk is defined as the probability or likelihood

of occurrence of losses relative to the expected return on any particular investment (Jordan *et al.*, 2012:22). Afsharha (2014), as well as Garman and Fogue (2017), infer that the more risk a consumer is willing to take the higher the investment gains they should expect, and vice versa. Central to consumer behaviour under crisis is the concept of perceived risk, which can be identified as perceptions about the probability of loss, negative consequences and uncertainty (Afsharah, 2014:7; Tsotsou, 2008:4).

Consumer behaviour patterns range from limited decision-making to extensive decision-making where limited decision-making is evidenced by shorter information gathering periods before taking a decision, while extensive decision-making involves much more time for information gathering (Kotler & Caslione, 2009:243; Perner, 2013:3). With regard to investment risk factors, the focus of this study is on identifying how consumers' attitudes toward risk have an effect on stock market participation.

1.5.5 Communication

Lamb *et al.* (2015) define communication as the effort to understand and communicate clearly with the customer. McQuail (2009:7) argues that mass communication is the process of communication operating at the society-wide level; it is identified by its institutional characteristics such as a firm's brand or information pamphlets.

Schiffman and Kanuk (2015:103) suggest that communication is the unique tool that businesses use to lure consumers to respond in a desired way. Keyton (2011) concurs that communication is the unique tool that marketers use to persuade consumers to act in a desired way. In this study, communication is defined as the unique tool that marketers and businesses use to attract consumers to respond in a desired way (Schiffman & Kanuk, 2015:103; Keyton, 2011: 48).

Karakostas, Kardaras and Papathanassiou (2005) maintain that communication channels of the FSPs of some of countries, such as the United Kingdom (UK), are not well developed and that communication methods with consumers need attention. Therefore, it is important for communication to play an important role in creating awareness and creating relationships of trust with consumers. According to Li (2009), social interaction is one of the most important channels through which consumers communicate knowledge and information about financial investment. Information technology has made the Internet a major communication channel, arguably reducing

the time consumers physically spend talking to their neighbours, fellow churchgoers and colleagues (Brown & Taylor, 2010:2).

There are a number of factors which may disrupt the process of communication (International Open College (IOC), 2017). Some of the possible problem areas that could act as barriers to effective communication are presented in Table 1.1.

Table 1.1: Barriers to effective communication

Status/Role: The difference in status between the sender and receiver sometimes affects the effectiveness of the communication process.	Known or Unknown Receiver: Whether the receiver is known or unknown to the firm also plays a major role in determining the effectiveness of a firm's communication.
Cultural differences: Cultural differences both within and outside the firm may impede the communication process.	Consumer perceptions/attitudes: The method of communication needs to take into account the consumer's personality traits, age, level of education and preferred style of communication.
Communication channels: Sending messages via inappropriate channels can send out the wrong signals and create confusion.	Atmosphere/Noise/Distracton: Surroundings sometimes act as barriers to effective communication. For example, a noisy place can put a strain on oral communication.
Length of communication: The length of communication affects the communication process, especially when the message is too long or too brief.	Clarity of message: All messages to consumers should be conveyed in a clear or unambiguous manner.
Use of Language: Poor choice of words or language hampers communication.	Lack of Feedback: Consumer feedback is important as it enables confirmation of understanding by the firm and/or the consumer. A lack of feedback can create problems and can lead to uncertainty.
Disabilities: Impaired sight, dyslexia and poor mental health can be barriers to good communication and should be taken into consideration when reaching out to consumers.	

Source: International Open College (IOC, 2017).

According to IOC (2017), when a firm is choosing a channel of communication it should consider all aspects of the communication process, possible barriers, evaluate the complexity of the message and decide the best way to convey it, as depicted in Table 1.1. It is important for financial advisers/planners to communicate well with consumers as this will encourage and foster consumer participation in the stock market. In this regard, this study places its focus on the influence of communication on stock market participation.

1.5.6 Consumer trust

Trust refers to the expectation, or positive impressions, of securing collective benefits from mutual interactions (Krot & Lewicka, 2012:225). Thomas (2009:346) concurs that trust is “an expectancy of positive outcomes that one can receive based on the expected action of another party”. According to Corbitta, Thanasankita and Yib (2003:203), customer trust levels are likely to be influenced by the level of perceived market orientation and, for example, site quality, technical trustworthiness, as well as the user’s web experience. For the purpose of this study, consumer trust refers to the expectation or positive impressions created to secure collective benefits from mutual interactions.

Business relationships should be based on good faith; as such, trust relationships should be part of financial services as products are often complex and require some level of personalisation because consumers place a certain amount of trust in the firm or supplier of their choice (Cheng, 2009:2). The relationship between the consumer and the financial service provider also tends to be long-term in comparison to relationships within other industries, such as consumer products or services, wherein customer frequency rates can be much higher compared to other ways of marketing since marketing events provide a platform for firms to spend more time with their customers (Cheng, 2009:2). According to the South African Savings Institute (SASI, 2010:3), the nation’s lack of faith in financial advisers/planners and brokers in the financial system has affected individual and household attitudes towards savings. Trust thus may drive not only stock market participation but financial development more generally. Therefore, to foster trust relationships and to protect consumers against fraud and dishonesty there are many consumer protection bodies in SA such as the Ombudsman, for the banking services, who ensures that consumer complaints

about banking services and products are resolved. The influence of consumer trust in service providers on consumer participation in the stock market will be investigated in this study.

1.5.7 Client satisfaction and loyalty

Krivobokova (2009:565) refers to customer satisfaction as the sense of satisfaction that a consumer feels when comparing their preliminary expectations with the actual quality of the acquired product. According to Dehghan and Shahin (2011:3), customer satisfaction is influenced by two factors: expectations and experienced service performance.

According to Egan (2008:291), there are two approaches to defining loyalty: the behavioural and the attitudinal. In behavioural terms, loyalty is based on the frequency of purchases, and it is measured by monitoring the number of such purchases as well as any brand switching. In attitudinal terms, loyalty incorporates customer preferences for, and inclination towards, brands in order to determine levels of loyalty. Customer loyalty refers to a customer's willingness to continue patronising a firm over a long-term, preferably on an exclusive, basis; while also recommending the firm's products to friends and associates (Lovelock & Wirtz, 2011:316). In this study, client satisfaction and loyalty is defined as the feeling that a product has fulfilled or exceeded the customer's expectations as well as the customer's willingness and devotion to continue patronising a firm over a long-term.

Krivobokova (2009:567) further suggests that the most apparent reason why companies have to be concerned about customer satisfaction is that they need customers to be ready to repurchase their services in future. Lovelock and Wirtz (2011:331) further believe that having the right portfolio of customer segments, attracting the right customers and delivering high levels of satisfaction are a solid foundation for creating customer loyalty. The composite definition of loyalty considers that loyalty should always comprise favourable attitudes, intentions and repeat-purchase (Jacoby & Chestnut, 1977, as cited by Dehghan & Shahin, 2011:3). Lovelock and Wirtz (2011:316) also maintain that customer loyalty extends beyond behaviour in order to include preference, liking and future intentions. According to Dehghan and Shahin (2011:2), loyalty is likely to lead to positive attitudes and behaviours such as

repeat patronage and purchases, as well as positive recommendations which may influence other actual or potential customers. Furthermore, Dehghan and Shahin (2011:3) argue that those consumers who demonstrate the highest levels of loyalty toward the product or service activity tend to repurchase more often, and spend more money. There has been little research focusing on the influence of stock market participation on client satisfaction and loyalty, which is the focus of this study.

1.5.8 Financial sustainability

Bowman (2011) refers to financial sustainability as the ability to maintain financial capacity over time. Financial sustainability refers to managing limited financial resources to not only meet current needs but also to develop plans for major goals and long-term needs (Hira, 2016:357). In this study, financial sustainability refers to having the ability to manage financial resources so as to meet family financial needs throughout one's life cycle and through the ups and downs of the economy at large (Hira, 2016:357). Du Plessis (2008:43) suggests that savings provide stability, at both the household and the country level, against economic shocks and erratic foreign direct investment flows. This is in addition to the economic growth opportunities that become evident from savings. Yuh and Hanna (2010:71) highlight the importance of savings at the household level as retirement security, for making home purchases and for coping with emergencies.

Various financial investment theorists associate financial sustainability with investment in shares. Magliolo (2012:22), for example, identified the following three main reasons why the general public invests in shares:

- Capital growth: This is however not guaranteed, as markets can move both up and down at any given time. However, over a period of time the share market has historically given investors a good return;
- Income stream: Many listed companies pay out a part of their profits to shareholders, and this is called a dividend. A dividend is like interest on a term investment except that the amount of the dividend depends on how well the company is performing. Some companies pay high dividends, some low, and some do not pay dividends. Listed companies usually pay dividends at their interim stage (half yearly) and annually; and

- Diversification of risk: Some investors might have a term investment or funds in a savings account, a retirement scheme or unit trusts. Buying shares is another way to invest savings and spread risk.

According to the JSE Report (2014), SA struggles with a low investment culture. Meyer (2002), cited in Rai and Rai (2012), states that the poor need to have access to financial services on a long-term basis rather than just receiving onetime financial support. This indicates that the relationship between economic growth and the development of a robust investment culture is fundamental to the development of an economy such as that of SA. Hence, it is important for this study to investigate the effect of stock market participation on financial sustainability.

1.5.9 Repurchase intentions

Repurchase intentions can be translated as the likelihood that consumers are willing to buy a product or service in the future; in addition, an increase in buying intentions will amount to an increment in customers' purchasing probability (Schiffman & Kanuk, 2010). Hellier, Geursen, Carr and Rickard (2003:1764), as cited by Yap and Kew (2007:62), define repurchase intentions as the individual's judgement about buying a designated service again from the same company, taking into account his/her current situation and circumstances. For the purpose of this study, repurchase intentions refers to the likelihood that the user will repurchase the relevant goods or services in the future (Bojei & Hoo, 2012:39; Magliolo, 2012).

Repurchase intentions is important for a firm when predicting the possible behaviour of consumers and their future demands (Kim, Lee & Youn, 2012:23). Consumer experience from previous transactions, such as price consideration, relationship, competition and service quality will influence a consumer's behaviour regarding repeat purchasing (Li & Hong, 2013:63). In addition, Li and Hong (2013:63) argue that a consumer's repurchase intentions can be influenced by confirmation and satisfaction.

Researchers such as Jones and Sasser (1995), as well as Mittal and Lassar (1998), who are cited in Ganiyu (2012), agree that customer repurchase intentions is impacted by customer satisfaction, but the overall relationship between service quality, customer satisfaction and customer repurchase intentions still remains abstract and open to further research. This is also the case regarding stock market participation.

Thus, for the purpose of this study, it is important to investigate the effect of stock market participation on repurchase intentions.

1.6 CLARIFICATION OF CONCEPTS

1.6.1 Stock market

Magliolo (2005:26) defines the stock market as a central market place in which governments and companies can raise funds in order to expand their businesses and shareholding base. Thus, the stock market is perceived as a public entity for trading shares and listed securities at an agreed upon price. The individual investor plays an important role in the stock market because the biggest share of their savings are invested in the country. Individuals can participate in the stock market through registered stock brokers, banks, licensed financial planners and investment managers.

1.6.2 Johannesburg Stock Exchange (JSE)

According to Magliolo (2005:26) and Masoud (2013:13), the fundamental role of a stock market is to provide a fair and internationally competitive market place for the trading of financial securities for the benefit of all participants. In SA, this role is performed by the Johannesburg Stock Exchange (JSE), which is the oldest stock market in Africa. It offers secure, efficient primary and secondary capital markets across a diverse range of securities supported by post trade and regulatory services. The JSE was formed in 1887 during the first South African gold rush. Following the first legislation covering financial markets in 1947, the JSE joined the World Federation of Exchanges in 1963 and upgraded to an electronic trading system in the early 1990s. The JSE demutualised, became a public company and listed on its own exchange in 2005. The JSE is currently ranked the 19th largest stock exchange in the world, by market capitalisation and the largest exchange on the African continent. SA has a vibrant and well-regulated financial services industry that is backed by legislation, regulation and specific rules. According to BANKSETA (2018) the provision of financial services in SA is regulated primarily by the Financial Markets Act, No. 19 of 2012 (FM Act) and the Financial Advisory and Intermediary Services Act, No. 37 of 2002 (FAIS Act). The JSE is supervised by the Financial Services Board (FSB) and it is licensed

to operate under the Financial Markets Act, No. 19 of 2012. According to the FSB (2015), South African consumers participate in the stock market through registered stock brokers, banks and other licensed financial services.

1.6.3 Middle class

The middle class usually includes relatively successful businessmen and owners of medium sized companies. At the upper part of this class are highly educated and ambitious individuals. The lower part is made up of white collar workers, i.e. office clerks, teachers, most tradesmen, technicians, and small business owners (Al-Jeraisy, 2008:131).

1.6.4 Risk

This refers to the measurable uncertainty that an investment will not generate the expected returns. The basic risk / return concept assumes a trade-off between the two (Longman Dictionary of Financial Terms, 2008:104). For the purpose of this study, investment risk can be defined as the probability or likelihood of occurrence of losses relative to the expected return on any particular investment.

1.6.5 Financial intermediary

An entity that helps to ensure that the funds supplied by the sources of capital are made available to those that need them, for example, a commercial bank (Longman Dictionary of Financial Terms, 2008: 51).

1.6.6 Consumer behaviour

Consumer behaviour refers to the buying behaviour of final consumers, individuals and households who buy goods and services for personal consumption (Kotler & Armstrong, 2010:134). According to Lamb, *et al.* (2016) consumer behaviour is how consumers make purchase decisions and how they use and dispose of the purchased goods or services; the study of consumer behaviour also includes an analysis of factors that influence purchase decisions and product usage.

1.7 RESEARCH DESIGN AND METHODOLOGY

1.7.1 Methodology and research design

Murray and Hughes (2008:121) describe the overall aim of the methodology as providing the reader with an overview of the methods employed so that a judgement can be made as to how appropriate they are given the objectives of the research and how valid the data is that they have generated. Sekaran and Bougie (2016:108) as well as Saunders, Lewis and Thornhill (2009) define research design as a general plan or road map on how a researcher intends to fulfil the research objectives and get answers to the research questions. Research design also translates a conceptual research problem into the writing of hypotheses and their operational implications to the final analysis of data (Kumar, 2014:122). There are generally three types of research designs, namely, exploratory, descriptive and explanatory (Saunders *et al.*, 2009:133; Kumar, 2014:13). An exploratory research design is suitable for studies that seek to understand an area where little is known or a new original problem (Robson, 2002:59; Kumar, 2014:13). A descriptive research design allows for the exploration and description of phenomena in real life situations; it also provides an accurate account of the characteristics of particular individuals, situations or groups (Grove, Gray & Burns, 2015:33). According to Kumar (2014), the main purpose of descriptive research is to describe what is prevalent with respect to the problem under study. According to Kumar (2014), an explanatory research design attempts to clarify why and how there is a relevant relationship between two aspects of a situation or among the various constructs of a study.

1.7.2 Research paradigm of the study

Struwig and Stead (2013:64) suggest that there are two main research paradigms: the quantitative paradigm (which is also referred to as positivist) and the qualitative paradigm. A qualitative approach is often described as the subjective interpretation of facts, ideas and observed phenomena which takes the perspective and accounts of the research participants as its starting point (Oflazoglu, 2017:9). Qualitative research consists of research methods aimed at generating an in-depth understanding of human behaviour by gathering data through observation, interviews, group

discussions, field notes, text as well as pictures, in order to explore and understand the behaviour of humans (Denzin & Lincoln, 2011:3).

A quantitative study is one in which data collection and analysis involve the accurate measurement of phenomena, often the application of such occurrences and observable facts thereof is quantifiable. A quantitative study is an approach for testing theories by examining the relationships amongst variables (Saunders, Lewis & Thornhill, 2019:4). Saunders *et al.* (2019:146) further suggest that a quantitative study might use existing theory to develop hypotheses that would be tested and confirmed, in whole or in part, or refuted, thus leading to the further development of theory which may then be tested by further research. This approach is deductive and highly structured methodology in order to facilitate replication (Gill & Johnson, 2010, cited in Saunders *et al.*, 2019:147). Quantitative research methods allow researchers to gather numerical data from large samples by using questionnaires; the collected data are analysed statistically (Rubin & Babbie, 2009:34; Saunders *et al.*, 2019:146-147).

An explanatory research design is most appropriate for this study. This is motivated by the fact that the main objective of this study, and its relevant hypotheses, is to establish the relationships between the independent variables (demographic characteristics, financial literacy, investment risk factors, communication and consumer trust) and the intervening variable (consumer stock market participation) as well as between the intervening variable and the dependent variables (client satisfaction and loyalty, financial sustainability and repurchase intentions) of the study.

Since this research study is aimed at establishing consumer behaviour regarding stock market participation in SA, the research philosophy adopted herein is positivistic. The positivistic paradigm is the most appropriate research philosophy to follow in this study, with recognition being given to the research problem and hypotheses as well as the cross sectional time horizon, as the data collected would be analysed leading to the recommendations of this study.

A deductive approach will also be used in this study based on the strength that it starts with the theory from which specific expectations are derived and quantifiable, and measurable data are collected to test specific hypotheses in addition to which the

causal relationships between the variables of the study are assessed (Saunders *et al.*, 2019:145; Engel & Schutt, 2014:31).

1.7.3 Population and sampling

According to Cooper, Schindler and Sharma (2014), a population is the total collection of elements about which one wishes to make some inferences. Levy and Lemeshow (2013) define population, or universe or target population, as the entire set of individuals regarding which the findings of a survey are to be concluded. There are nine South African provinces: Eastern Cape, Western Cape, Northern Cape, KwaZulu-Natal, North West, Mpumalanga, Limpopo, Free State and Gauteng. Since it is usually not possible to reach all members of the target population, one must identify a portion of the population which is accessible. Due to convenience, as well as time and budget constraints, the population of this study consisted of all South African consumers located in four of the nine provinces, namely, Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng. According to Thompson (2012), sampling concerns every aspect of how data are selected, out of all possibilities that have been observed, and whether the selection process has been under the control of investigators or has been determined by nature or unintended, as well as how to use such data to make inferences about the larger population of interest. Kumar (2005:164), as cited in Dhivyadeepa (2015), also refers to sampling as a process of selecting a few (a sample) from a bigger group (the population) to become the basis for estimating or predicting the prevalence of an unknown piece of information.

Daniel (2012:6) suggests that the two major types of sampling are probability and non-probability sampling. Etikan and Bala (2017:1) refer to non-probability sampling as a procedure that will not bid a basis for any opinion of probability that elements in the universe will have a chance to be included in the study sample. According to Wolf, Joye, Smith and Fu (2016), non-probability sampling is a deviation from probability sampling principles; this implies that units are included with unknown probabilities or that some of those probabilities are known to be zero.

Convenience and quota sampling are the methods of non-probability sampling that will be used in this study in order to select potential respondents. According to Struwig and Stead (2013:116), convenience sampling is chosen on the basis of availability.

Further, Saunders *et al.* (2009) suggest that the main reason why researchers choose quota sampling is that it allows the researcher to focus on a subgroup that is of great interest to the study.

Table 1.2 shows the annual income classification of South African consumers.

Table 1.2: Annual income classification of South African consumers

No.	Annual income	Monthly income	Classification
1	R0 – R20 500	R0 – R1708	Lowest
2	R20 5001 – R89 000	R1708 – R7417	Second lowest
3	R89 001 – R202 000	R7418 – R16833	Low emerging middle
4	R202 001 – R412 000	R16833 – R34333	Emerging middle
5	R412 001 – R707 000	R34333 – R58916	Lower middle
6	R707 001 – R1512 000	R58917 – R126000	Upper middle
7	R1512001 – R2414000	R126000 – R201166	Upper income / Emerging affluent
8	R2414 001+	R201167+	Affluent

Source: Adapted from Standard Bank SALGA (2016).

For the purpose of this study, the sample frame consists of emerging middle, lower middle and upper middle class consumers of financial products and services from four provinces (Gauteng, KwaZulu-Natal, Eastern Cape and Western Cape) in SA; the population sample was based on these categories. Consumers of financial products and services with their annual income classification within these three categories (see bold text in Table 1.2) were included in the sample of this study (Standard Bank SALGA, 2016).

The sample size in a study will depend on the number of constructs and the number of items per construct that needs to be measured. Siddiquee (2013:285-286) suggests that the appropriate sample size will depend on the number of items in the measuring instrument. According to Hair, Black, Babin and Anderson (2014:574), a minimum sample size of 500 respondents is required when more than seven constructs are examined. In this study, there are nine constructs that will be measured, as indicated

in the hypothesised model (Figure 1.1). According to Klugman and Lamb 2019: 291) the larger the sample size, the lower the likelihood of error in generalising to the population. Also, the expected response rate needs to be taken into consideration, this implies that the researcher needs to make allowance for non-responses to a survey, so that this can be calculated into the required sample size (Morton, Bandara, Robinson & Carr, 2012:106). According to Fink (2003) the response rates of 100% and 95% as well as 70% are expected and considered as sufficient and acceptable. In this study, the expected response rate is 70%. Therefore, taking this into account the researcher will distribute questionnaires to 1035 potential respondents in order to obtain a sample size of 725 respondents.

1.7.4 Data collection

According to the International Standard ISO/IEC cited in Zozus (2017), data can be defined as the interpretable representation of information in a formalised manner suitable for communication, interpretation or processing. Mosley (2008), as cited in Zozus (2017), further suggests that data refers to the raw material used to create information. Creswell (2014:7) maintains that, for the quantitative research method to be successfully implemented in a study, theory must be tested by collecting information on instruments based on measures completed by respondents. Thus, both secondary and primary research was conducted in this study.

Secondary research: According to Wilson (2010:134), secondary data can be defined as data that has already been published. For this study, secondary data was collected from books and journals as well as the databases of the Nelson Mandela University Library, which include EBSCO host, Emerald, Science Direct, Sabinet Online and Nexus, as well as Google search engines. Secondary research is used in this study to assist in shaping the direction of the study.

Primary research: This involves the collection of new data for the purpose of providing answers to a current research problem (Mooi & Sarstedt, 2011:29). Wilson (2010:134) defines primary data as information gathered for the purpose of the researcher's own study. Primary data was collected by the researcher with the assistance of fieldworkers who were recruited for this exercise. Prior to the data collection exercise, the fieldworkers were trained to administer the questionnaires correctly and to observe

ethical issues, as well as to ensure that the respondents understand what the researcher wants them to do and that they consent to the study (Zikmund, 2010:90).

1.7.5 Measuring instrument design

A questionnaire is a data collection tool available in the shape of a form containing a set of appropriate questions meant for collecting the necessary data from the subjects of the study by getting it completed by the subjects (Mangal & Mangal, 2013:337). The primary aim of the questionnaire used in this study was to gather information on consumer behaviour regarding participation on the stock exchange. The questionnaire was structured in such a way that respondents were able to answer it easily. The survey-questionnaire method is the research instrument used for data gathering in this study as a self-administered questionnaire was used to gather data from consumers of the financial products and services in four of SA's provinces. Primary data was collected through the questionnaires by research assistants.

In this study, the purpose of the measuring instrument was to obtain primary data in order to test the relationships shown in the hypothesised model. The researcher collected data with the assistance of fieldworkers who were recruited for this exercise, and the questionnaire was comprised of the following two sections:

Section A: used a seven-point ordinal Likert-type scale to gather consumers' perceptions of the five independent variables, consumer stock market participation and the dependent variables (90 statements). Pinto and Garvey (2016:65-66) state that an ordinal scale is a measurement scale in which attributes are assigned a number that represents order or rank. This implies that an ordinal scale provides information on preference order or rank (Pinto & Garvey, 2016:65-66). Therefore, a seven-point Likert-scale ranging from strongly disagree (1) to strongly agree (7) was used so that respondents can indicate whether they agree or disagree with certain statements.

Section B: consisted of nominal-scaled questions meant to solicit background information from the respondents (biographical characteristics). According to Pinto and Garvey (2016:65-66), a nominal scale is a measurement scale in which attributes are assigned a label (that is, a name). This means that nominal data can be counted but there are no quantitative differences or preference ordering. Therefore, in this type

of scale, a variable is measured in terms of two or more different categories. For the purpose of this study, the questionnaire gathered data on each respondent's gender, age, educational and income level, source of income and household structure (six items).

Before the empirical study was conducted, ethical clearance was obtained from Nelson Mandela University. The aim was to target 725 consumers in the financial services industry. A total of 510 useable questionnaires were obtained (which is an effective response rate of 70.34%).

1.7.6 Pilot study

Woken (2013) refers to a pilot study as a pre-study of a broader and full study. It is perceived as a limited version of a research project, as it may use fewer subjects than the researcher plans to include in the full study. Sharma (2014:290-292) concurs that a pilot study is a miniature trial run of the methodology planned for the major research study which facilitates the improvement of the methodology of the study. Furthermore, Blessing and Chakrabarti (2009:114) suggest that the aim of a pilot study is to try out the research approach in order to identify potential problems that may affect the quality and validity of the results. In this study, the pilot study was conducted in two provinces which are not part of the final empirical study. The validity of the questionnaire and the reliability of the collected data were assessed through the pilot study. Thirty copies of the questionnaire were distributed to a variety of consumers of financial products and services with different demographic characteristics.

1.7.7 Data analysis methods

The quantitative methods of data analysis will be used in this study. The statistical techniques used in this study comprise of the following: descriptive statistics, multivariate analysis, exploratory analysis, correlation analysis and multiple regression analysis. Descriptive statistics (for instance, variance and standard deviation) are used to provide statistical summaries of data that will explain measures of central tendency and dispersion such as mode, median and mean (Struwig & Stead, 2013:165). The internal reliability of the study variables was assessed by means of Cronbach's alpha coefficients. Factor analysis was used to determine the factor structure (model) and explain a maximum amount of variance (Moutinho & Hutcheson, 2011:116). According

to Hair *et al.* (2014:2), multivariate analysis will be used to assess simultaneously multiple variables in a single relationship or a set of relationships or objects under investigation. The essential relationships involving the effects and outcomes of consumer stock market participation in SA are tested using multiple regression analysis. Hair *et al.* (2014:157) define multiple regression analysis as a statistical technique that can be used to analyse the relationship between a single dependent variable and several independent variables. Moreover, correlation analysis was used to measure the strength of the relationship between two variables (Moutinho & Hutcheson, 2011:56). Data analysis and interpretation are aided by inferences from theory. Therefore, the theoretical framework that has been reviewed in the previous sections was used during the data analysis stage in order to avoid spurious results. The STATISTICA Version 12 computer programme was utilised to analyse the data in this study.

1.7.8 Validity and reliability of the research instrument

The reliability of the measuring instrument refers to its consistency, that is, the extent to which a measuring device will produce the same results when applied more than once to the same person under similar conditions (Struwig & Stead, 2013:138). Struwig and Stead (2013:139) maintain that the reliability of the test score is based on an accurate and random error variance. In this study, the assessment of the internal reliability of the instrument was assessed by means of calculating Cronbach's alpha values.

Validity is defined by the extent to which any measuring instrument measures what it is intended to measure (Thatcher, 2010:125). According to Thatcher (2010), there are three different types of validity, namely, criterion-related validity which is referred to as predictive validity; content validity which is referred to as face validity; and construct validity. In this study, content and construct validity were utilised to evaluate the validity of the measuring instrument.

1.8 THE PURPOSE AND SIGNIFICANCE OF THE RESEARCH

1.8.1 Purpose of the study

The purpose of this study is to promote consumer behaviour with regard to stock market participation. In addition, the study seeks to heighten the need for financial sustainability and benefits of stock market participation that will result in the improved welfare of society regarding household savings, which will in turn boost the South African economy. Furthermore, this study will shed light on the limited stock market participation which has been found to have implications on the financial sustainability of consumers.

1.8.2 Significance of the study

The stock market is without doubt one of the greatest tools ever invented for building wealth. According to Schiffman and Kanuk (2004:235), social class analysis holds enormous promise for marketers, public policy makers and consumer advocates in terms of understanding, influencing and improving the conditions for consumer behaviour. Therefore, by considering various aspects linked to consumer behaviour, to identify the antecedents and outcomes of stock market participation in SA, a significant contribution can be made by this study to consumers (and possibly their financial well-being) and the country's stock market.

This study will fill the gap in consumer behaviour literature in terms of stock market participation. In addition, the empirical results of the study will lead to appropriate recommendations that could add practical value through possibly higher levels of stock market participation and resultant outcomes. The research findings of this study will contribute towards the promotion of high levels of consumers and gross national savings that will reduce a country's reliance upon and exposure to the vagaries of global capital markets. This study will help financial planners to incorporate behavioural finance insights and tools into their practice. The valuable information and insights drawn from the research findings will contribute to the body of knowledge that will benefit the JSE, FSPs, Financial Market Regulators, marketing companies and the National Treasury, in particular, as well as the investing public. For instance, identifying stock market participation drivers will help both government and FSPs to structure their financial literacy programs to suit the needs of consumers and, by

identifying potential stock market consumers' demographic characteristics, marketers will adequately structure their campaigns and use the relevant communication channels to increase stock market participation. The findings will substantially enhance studies in behavioural finance, financial planning, consumer buying behaviour and marketing. The research will also bring to light the challenges facing effective participation in the JSE which, once addressed, will be of great importance to FSPs, financial advisers/planners, policy makers and, ultimately, contribute to the economic wellbeing of South Africans.

1.9 SCOPE AND DEMARCATION OF THE STUDY

The research aims to investigate behavioural factors influencing the decisions of individual investors in the stock market. The study focuses on certain aspects of consumer behaviour that are effective towards participation in the stock market in SA while concurrently analysing a comprehensive list of stock market participation drivers and comparing their explanatory power. The study also sheds light on the limited stock market participation which has been found to have implications on both household savings levels and the public at large. Geographically, the study focusses on four South African provinces, namely, Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng.

1.10 PRIOR STUDIES ON STOCK MARKET PARTICIPATION

There is little research that has been published in SA relating to consumer behaviour with regard to participation in the stock market. However, this study has been influenced by previous work of other researchers in the field of consumer behaviour, behavioural finance and behavioural economics. The researcher reviewed a representative selection of the literature on consumer behaviour, behavioural finance and behavioural economics from a variety of perspectives. A few existing studies, particularly in the United States, have indicated a correlation between consumer perceptions and the buying of shares and listed securities.

In a study to establish factors that influence investment decisions at the Nairobi Stock Exchange (NSE), Jagongo and Mutswenje (2014:92) confirm that there seems to be a certain degree of correlation between perception and participation in the stock market. Their research concludes that the most important factors that influence

individual investment decisions are: the reputation of the firm, its past performance, the firm's status in industry, as well as expected corporate earnings and profit. Conversely, Hellstrom, Zetterdahl and Hanes (2013:1) document evidence on the impact of family on an individual's stock market participation; their study indicates that an individual's likelihood for subsequent participation increases or decreases following positive or negative parental and partner stock market experiences. The effect of social interaction is further found to be of relatively greater importance for individuals with relatively lower levels of financial literacy and for individuals with an average higher level of interpersonal trust. Manjula (2013:37) concurs that the most economically significant variables reflecting social stance and personal values are sociability and political orientation. More socially active individuals and right-wing orientated individuals are more likely to hold stocks (Manjula, 2013:37). Hansen (2012:361), however, argues that even if investigated financial industry types are present in most societies and their service offerings are most likely guided by similar financial and economic principles, this could mean that the results may suffer from a lack of generalisability when other countries and/or industries are considered. Although all these studies focused on important factors influencing investment decisions pertaining to past performance, a firm's status in industry, expected corporate earnings and profit, none of the studies focused on factors influencing consumer behaviour regarding stock market participation.

1.11 STRUCTURE OF THE RESEARCH

This section provides a chapter-by-chapter outline of the structure of the research.

Chapter One: Overview and background of the study

Chapter One provides an introduction and background to the research by outlining the problem statement, research objectives, research questions, hypotheses as well as the proposed theoretical model of consumer behaviour regarding stock market participation, which shows the variables to be tested in this study. The research methodology and research design as well as the purpose and significance of the study are discussed in this chapter. Lastly, the chapter provides an outline of the structure of the research.

Chapter Two: Overview of stock markets and the Johannesburg Stock Exchange

Chapter Two presents a historical background and contemporary view of share investments and stock exchanges. The chapter focuses on the Johannesburg Stock Exchange, commonly referred to by its acronym JSE. The chapter will give a brief overview of some of the world's major stock exchanges, the role of the stock exchange in the country, its contributions to economic development and its listing requirements. The chapter will also elaborate on the regulatory environment under which the JSE, its members and various stakeholders participate. The chapter will conclude with a discussion of current stock market activity in SA.

Chapter Three: Overview of the investment environment and financial planning

Chapter Three discusses the theoretical aspects relating to investments and financial planning. Specifically, the chapter discusses various investment theories and strategies as relevant to this study. These discussions highlight aspects relevant to financial decision-making, which include decisions regarding stock market participation. The financial decisions of households and the investment environment in which consumers make these decisions, the financial system, financial market instruments as well as financial intermediaries are also discussed herein. The chapter introduces aspects of the financial planning process as well as the role of financial advisers/planners as key role players in consumer participation in the stock market through the dissemination of investment advice. Practice management, as relevant to financial planners, is also discussed in this chapter.

Chapter Four: Consumer buying behaviour and behavioural finance

Chapter Four presents a literature review on consumer buying behaviour and stock market participation relevant to the investment decision-making context. The chapter also examines consumer behaviour models relevant to the foundation of this study. In addition, the chapter highlights the link between behavioural finance and consumer behaviour.

Chapter Five: Analysis of the key areas influencing stock market participation

Chapter Five provides an overview of other key areas of stock market participation, namely, general determinants and consumer-specific drivers of stock market participation. In addition, the chapter discusses investor personality types and how these relate to stock market participation.

Chapter Six: Hypothetical model of the study: Consumer behaviour towards stock market participation

Chapter Six provides support for the basis of the proposed hypothesised model of the study. As previously explained, the primary objective of this study is to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in SA. The chapter discusses the hypothesised model and elaborates on all related variables by paying attention to previous research findings on consumer participation in the stock market, and findings related to the variables used to build the hypotheses of the study.

Chapter Seven: Research design and methodology

This chapter outlines the applicable research design and methodology of the study. Specifically, the applicable research paradigm is highlighted in this chapter. This is followed by a discussion of the design and administration of the measuring instrument. Furthermore, the population sample, data collection and analysis, as well as the reliability and validity assessments of the research instrument, are elaborated upon in this chapter. Thereafter, the descriptive statistics used to summarise the sample data are provided. The chapter also outlines the ethical considerations of the study.

Chapter Eight: Empirical results of the study

This chapter discusses the empirical results of the study on consumer behaviour regarding participation in the stock market in SA. The results of the reliability and validity assessments of the measuring instrument used are presented in this chapter. Chapter Eight also presents the descriptive analysis results and the empirical testing of the relationships between the independent and intervening variables of the study, as well as between the intervening and dependent variables of the study. The variables exposed to empirical evaluation in this study are: demographic characteristics, financial literacy, investment risk factors, communication and

consumer trust. Furthermore, the effect of consumer stock market participation on client satisfaction and loyalty, financial sustainability and repurchase intentions are evaluated in this chapter.

Chapter Nine: Conclusions and recommendations of the study

This chapter provides a summary of all the preceding chapters of the study, and it presents the conclusions of the empirical results of the research. The chapter also provides suggestions regarding areas for further research. This chapter will also deliberate on the implications and limitations of the study. The primary aim of this study was to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in SA. Therefore, the concluding chapter for the study will also provide recommendations to relevant role players, such as financial intermediaries and consumers, regarding stock market participation; for example, this chapter suggests strategies on how to increase stock market participation amongst consumers.

1.12 SUMMARY

Chapter One has laid the foundation and set the scene for this research. This chapter has provided the background to the study; it has also presented the primary objective and problem statement, concerning the antecedents and outcomes of stock market participation, guiding the research. Chapter One also outlined the secondary objectives of the study, and the related research questions. This chapter also presented the hypothetical model which was developed through the literature. The research hypotheses were established on the foundation of the hypothetical model for stock market participation. This chapter also provided an outline of the research methodology, purpose and scope of the study, as well as its structure.

CHAPTER TWO

OVERVIEW OF STOCK MARKETS AND THE JOHANNESBURG STOCK EXCHANGE

2.1 INTRODUCTION

Chapter One provided the background to the research. Since the study is concerned with consumer participation in the stock market, this chapter presents an overview of the shares market in SA and contextualises it from a historical perspective as well as a contemporary view. The chapter presents an outline of the different types of shares and it discusses the historical background of SA's Johannesburg Stock Exchange, commonly referred to by its acronym JSE. Chapter Two also highlights the main players and participants in the exchange. In addition, the chapter provides a brief overview of some of the world's major stock exchanges, the role of the stock exchange in the country, its contributions to economic development and the listing requirements for companies. The chapter introduces the newly established and registered stock exchange in SA, that is, the ZAR-X. Furthermore, the chapter explores the regulatory environment in which the JSE, its members and various stakeholders participate. Finally, the chapter briefly discusses stock market activity on African stock markets and some of the initiatives that are considered to foster the growth and development of the continent's stock exchanges.

2.2 THE CONCEPT OF SHARES

Brown (2004:9) defines a stock as a share in the ownership of a company; it represents a claim on the company's assets and earnings. It can also be described as a financial instrument that represents a share in the ownership of a company and, as an asset class, shares play a fundamental role as they represent a considerable portion of many individual and institutional investment portfolios (McMillan, Pinto, Pirie & Van de Venter, 2011:332). According to Jordan, Miller and Dolvin (2015), the holder of a share is entitled to a share of the company's earnings and any voting rights attached to the share. According to Brown (2004) and JSE Online (2018), a share was previously represented by a share certificate, however, with the advent of the computer and the internet a buyer would no longer receive a hard copy of this document because the intermediary or brokerage keeps these records electronically

and trading is done on the internet or via telephone. The average consumer's interest in the stock market has grown exponentially and, what used to be the preserve of the elite, has now turned into the vehicle of choice for growing wealth (Brown, 2004:9; JSE Online, 2018:1). According to Brown (2004) and Standard Bank Online (2016), this demand for shares, coupled with internet penetration as well as the high levels of literacy and the growth of the middle class, has made it easier to access the stock market. Despite shares being popular culminating in the proliferation of FSPs and intermediaries, Standard Bank Online (2016) suggest that most consumers do not fully understand shares, and much about shares is learned from social conversations. Although shares can be a vehicle for generating liveable income, there are risks involved; however, the key to guard against the risks in the share market is to invest in financial literacy and to know the dynamics of investing (Brown, 2004:9).

According to Standard Bank Online (2016), before embarking on investing in the stock market a prospective investor needs to consider the timing in terms of age and time remaining before retirement as well as how much time they have left to achieve their financial goals. According to Agrawal and Jain (2013:115), investors also need to consider their family situation, occupation and employment status in terms of job security and a reliable source of income; in addition, they need to consider their standard of living and the ongoing requirements for an enjoyable standard of living, which includes personal belongings, holidays, entertainment and luxury items. The decision to invest in shares should also be informed by the need for financial independence, estate planning and personal financial control.

2.2.1 Types of shares

According to Van Wyk *et al.* (2016), shares can be differentiated into two main categories: ordinary shares and preference shares.

2.2.1.1 Ordinary shares

According to JSE (2018), ordinary shares represent ownership in a company where shareholders are owners of the company and have full participation in its success or failure. Share owners get one vote per share to elect board members, who oversee the major decisions made by management (Van Wyk *et al.*, 2016:360). Ordinary shares give the shareholder all the privileges and rights to income distribution through

dividend payments (Marx, 2013:13). Ordinary shares are issued by companies to raise capital for business expansion; they represent the amounts invested by the owners of the business. Furthermore, the JSE (2018) suggest that the reason owners of ordinary shares are essentially the owners of the business is that they can vote and manage the company, and share in its performance. Ordinary share owners have the first option to buy new shares thus their voting rights and claim to earnings cannot be diluted without their consent. Furthermore, ordinary shareholders have a residual claim on the income and net assets of the company after its obligations to its creditors, bondholders and preferred shareholders have been met (Marx, 2013:13). Accordingly, ordinary shareholders have a perpetual claim since the shares have no maturity date and shareowners can redeem their investment only by selling their shares to another investor.

According to Jordan *et al.* (2015), the benefits of owning ordinary shares are twofold. First, businesses pay cash dividends to their shareholders although the timing or the amount payable is not guaranteed and the dividends are paid at the discretion of the board of directors. Second, the potential benefit of owning shares is that the value of an investor's share may rise since share values overall increase, and as a result of the future growth prospects of a business.

2.2.1.2 Preference shares

Preference shares differ from ordinary shares in that the dividend in a preference share is fixed and never changed and, in the event of liquidation, the dividend is paid before ordinary shareholders are paid (Van Wyk *et al.*, 2016:363). The share entitles the holder to a fixed rate of dividend, which is not guaranteed, while partly representing ownership in a business; in addition, the holder has limited voting rights (Van Wyk *et al.*, 2016:363). According to Marx (2013), preference shares are ranked ahead of ordinary shares for dividends and, in the event of liquidation, the dividend is at a fixed rate. Preference shareholders receive dividends before ordinary shareholders in the event of liquidation or bankruptcy (Marx, 2013:12). Preference shares may also be callable; this means that the company has the option to purchase the shares from shareholders at any time, for any reason, usually for a premium (Marx, 2013:12). Preference shares are also different from ordinary shares in that preference

shareholders usually do not obtain as much benefit as ordinary shareholders, should the company make a profit (Van Wyk *et al.*, 2016:363).

2.2.2 Share investments

According to Standard Bank Online (2016), consumers are driven to invest in shares in order to achieve their long-term financial goals as it has been historically proven that share markets outperform any other investment over the long-term. Additionally, Standard Bank Online (2016) maintains that there are considerable reasons why the public invests in shares; these reasons are different for each investor depending on his/her life circumstances, age and specific needs. Magliolo (2012) believes that some consumers invest in shares in order to obtain capital growth, while others invest in share in order to obtain a regular income such as a dividend; moreover, investors may invest in shares for financial sustainability and financial independence. Similarly, Wong (2011) argues that an investor invests for the long-term, earns periodical cash flow, and does not aim for short-term gains. Shares offer opportunities for both strong capital growth and regular dividend income, which is tax free; furthermore, consumers hedge investments against inflation (Ozuomba, Anichebe & Okoye, 2016:1). From historical performance over a long period there is a strong upward trend in the value of shares listed on the JSE (Marx, 2013: 28). Capital growth occurs when, for example, a share worth R10 today will be traded for R30 in the future; in such an instance, the capital growth would thus be R20 (R30-R10).

Lindgren (2014) states that investing in the stock market may be risky, but consumers can mitigate this risk. Commonly known as collective investment schemes, unit trust transactions pool all the investors' monies together. The unit trust spreads the risk across many stocks, sectors and countries, thus making it an effective tool in portfolio diversification. Consumers can also get some comfort through the purchase of government-issued bonds in stable economic systems, or through the purchase of the highest quality corporate bonds issued by different firms. According to Jones (2010), such securities are arguably the best means of preserving capital while receiving a specified rate of return because they are perceived to be low risk, since investing in shares is riskier than purchasing government bonds. Investors seek to maximise their returns from investing relative to the risk they are willing to take (Weber & Klement, 2018:1).

A greater return on investment is achieved by taking on more risk. Standard Bank Online (2016) maintains that shares have, historically, performed exceptionally well, more so than other investments such as bonds or savings accounts. However, the safest investments are also the ones that are likely to have the lowest rate of income return, or yield (Brown, 2004:15). According to Brown (2004), consumers must sacrifice a degree of their comfort if they want to exponentially grow their yields since the relationship between risk and return is such that as return increases, risk increases, and vice versa. To increase their rate of investment return, and take on risk above that of money market instruments or government bonds, investors may choose to purchase corporate bonds or preference shares with lower investment ratings (Brown, 2004:15). Most prospective investors would prefer some level of income generation in their portfolios so as to keep up with the rate of inflation, although maximising income return should be the goal for a portfolio, especially for consumers who require a fixed sum from their investment on a monthly basis (Alao & Adebawolo, 2012:53; Kumar, 2013:95).

Investing for growth is most closely associated with the buying of ordinary shares, particularly growth shares, which offer low yields but considerable opportunity for increase in value (Brown, 2004:15). According to Jordan *et al.* (2015), growth shares are shares that will achieve above average risk adjusted rates of return because they are undervalued. Brown (2004) further argues that growth shares generally rank among the most speculative of investments as their return depends on what will happen in an unpredictable future. It is also important to note that capital gains offer potential tax advantages through a lower tax rate; however, funds that are generated through ordinary share offerings, for example, are often geared toward the growth plans of small firms.

According to Brown (2004), when a government drives investments in shares and stock markets it provides tax incentives and often chooses to tax capital gains at a lower rate than income. This serves as a motivator to stimulate entrepreneurship and the establishment of new business ventures that help grow the economy. There are other reasons and objectives that give rise to share investment; these are known as secondary objectives (Kumar, 2013:96). A consumer may chase certain investments to align to tax minimisation approaches as part of an investment strategy; for example,

a highly paid executive may want to track investments with favourable tax treatment in order to lessen an overall income tax burden. According to Standard Bank Online(2016), making contributions to a retirement annuity or other tax-sheltered retirement plan can be an effective tax minimisation strategy.

There are various ways to purchase stocks on the stock exchange. The most widely-used method to trade and invest in shares is the use of a brokerage or a licensed financial adviser. There are two different types of brokerages: the first is the full-service brokerage, which offers expert advice and can manage the account, but could also be very expensive; the second is the discount brokerage, which offers little in terms of financial advice, but is less expensive in terms of its fees. However, through the internet, investors can enlist the services of online discount brokers who are much more affordable. According to McMillan *et al.* (2011), Dividend Reinvestment Plans (DRIPs) and Direct Investment Plans (DIPs) are plans by which businesses allow shareholders to purchase stock directly from the company for a minimal cost. In this economic order, it is far more convenient for most investors to get stock quotes off the internet; this method is superior because most service providers update regularly and give the investor more information through news, charting, research and investment insights (McMillan *et al.*, 2011:55).

People and institutions that invest in the stock market vary in their knowledge and experience, from large institutional money managers to retail consumer investors (Van Wyk *et al.*, 2016:367). Individual consumers usually hold only a small direct investment in shares, however, they have several indirect investments in equity via pension and provident funds, medical aid schemes, insurance policies, assurance policies and unit trusts (Van Wyk *et al.*, 2016:367). Market participants vary in scope from fully-integrated investment banks to medium and smaller sized brokers with specialties in retail and institutional brokerage, corporate finance and registered professional trading, while other consumers participate through online trading (Van Schalkwyk, 2016:4). According to Laveena, Jindal and Dhiman (2015:1), online trading is conducting stock transactions on the internet via several websites. The avenue of the internet is a convenient method for the public to carry out financial transactions online, now even faster than ever (Laveena *et al.*, 2015:1). Online trading on the stock market

constitutes all the platforms of banking, commerce and stock trading, which makes it easy for consumers to transact (Laveena *et al.*, 2015:1).

Since this study's focus is on consumer participation and investment in the stock market, it is worth mentioning that many investments are reasonably illiquid, which means they cannot be immediately sold and easily converted into cash. According to JSE Online (2017), achieving a degree of liquidity requires the sacrifice of a certain level of income or potential for capital gains. Furthermore, JSE Online(2017) and Standard Bank Online (2016) concur that ordinary shares are often considered the most liquid of investments, since these can usually be sold within a day or two of the decision to sell, while bonds can be marketable even though some bonds are highly illiquid. Additionally, Standard Bank Online (2016) suggests that money market instruments may only be redeemable at the precise date at which the fixed term ends.

According to JSE Online (2017), the size of companies listed on the stock exchange is measured by the firm's market capitalisation, which is also referred to as a market cap. The JSE (2017) defines a market cap as the market price of an entire business as calculated by multiplying the number of shares outstanding by the price per share. Investors generally divide the South African market into three basic market caps: large cap, mid cap and small cap. JSE Online (2017) maintains that the companies in the top 40 index are considered large caps while the mid cap index comprises of shares ranked from 41 to 100 on the market. On the otherhand, small caps are those companies smaller than the top 100 listed companies. Companies with a large market capitalisation can also be listed on both local and foreign stock exchanges through dual listing; for example, in addition to being listed on the JSE, Anglo, BHP Billiton, Old Mutual and Investec are also listed on the London Stock Exchange. According to Standard Bank Online (2016), the following are two of the reason for dual listings:

- to gain international status and exposure, as the JSE is an emerging market and hence priced accordingly so a move to foreign and international markets can increase awareness of a company, and it can increase the perception that it moves to a larger exchange; and
- foreign capital is often cheaper internationally, which could be the result of mergers or takeovers.

Table 2.1 shows stock market capitalisation across G-20 Economies by country.

Table 2.1: Stock market capitalisation by country

Country	Level*	1Y Chg.	5Y Ago	10Y Ago	25Y Ago
Argentina	34	-21.43%	52	39	2
Australia	1,286	7.37%	676	585	138
Brazil	1,230	0.07%	589	235	32
Canada	2,016	5.74%	1 002	894	242
China	3,697	9.10%	2 794	681	NA
France	1,823	16.23%	1 492	1 356	245
Germany	1,486	25.48%	1 108	1 079	252
India	1,263	24.42%	645	279	24
Indonesia	397	1.71%	99	55	0
Italy	480	11.35%	521	615	135
Japan	3,681	3.96%	3 220	3 041	3 910
Mexico	525	28.47%	233	123	14
Russia	875	9.83%	397	231	NA
South Africa	612	17.08%	491	268	126
South Arabia	373	10.18%	246	157	NA
South Korea	1,180	18.72%	495	330	NA
Spain	995	-3.48%	946	726	91
Turkey	309	53.00%	118	68	1
United Kingdom	3,019	4.01%	1 852	2 460	771
United States of America	18,668	19.36%	11 738	14 266	2 790

* In USD(\$) billions as at 2012

Source: Adapted from Quandl (2013).

Table 2.1 shows stock market capitalisation across the G-20 Economies by country, with SA featuring competitively against countries such as Italy, Mexico and Turkey. The history of stock markets is relevant to this study as it provides the historical background to the formation of the early stock markets and the nature of stock market activity, as well as consumer participation in the formative years of the stock markets. The following section will briefly discuss the history of the world's major stock exchanges, in addition to offering a detailed account of the history of the JSE. The JSE is relevant to this study since it is the main stock exchange in SA.

2.3 THE DEVELOPMENT OF STOCK MARKETS

According to Van Wyk *et al.* (2016), a stock market provides a platform for the buying and selling of shares and other tradable instruments. Van Wyk *et al.* (2016) define a stock exchange as a place where buyers and sellers can meet to fulfil, buy and sell, transactions guided by the rules provided by the FSB in SA, the Securities Exchange Commission in the United States of America and the Financial Services Authority in the United Kingdom (Van Wyk *et al.*, 2016:366). History has played a key role in the development of the stock exchange in most countries (El-Wassal, 2013:606; Snyman, 1996:7). As an economic activity, mining is credited as a fundamental influence in the establishment of the stock exchange in SA (Hassan, 2013:3). According to JSE Online (2017), in the early 2000s, stock exchanges were physical locations where the buying and selling of shares was carried out on a trading floor by a method known as open outcry. Stock exchanges have morphed into electronic or virtual platforms consisting of a network of computers through which buying and selling orders are executed electronically. The liquidity of the stock market provides consumers with the opportunity to hastily and smoothly buy and sell shares. Furthermore, the JSE Online (2017) maintains that the stock market has proven to be an alluring proposition to investing when bench marked against other less liquid investments, such as property.

According to Keane (1983), stock markets are ubiquitous and they are a global phenomenon, with the USA housing most of the biggest exchanges in the world. The other main global finance and investment centres are London, which is the home of the London Stock Exchange (LSE), and Japan, which is the home of the Hong Kong Stock Exchange. The over the counter bulletin board (OCTCBB) is the other global platform upon which global financial transactions take place. Reilly and Brown (2011)

list the National Association of Securities Dealers Automated Quotation System (NASDAQ) as another global platform and home to penny stocks where there is little to no regulation, thus making investing in OTCBB stock very risky.

The NASDAQ, as an automated electronic quotation system for the vast over the counter market (OTC), was established in 1971. It was the world's first electronic stock exchange (NASDAQ Online, 2018; Reilly & Brown, 2003:122). The NASDAQ is well known for being innovative and taking on bold initiatives. It initiated a lot of innovations and became a world market leader in stock trading, with over 4000 listed companies (Reilly & Brown, 2003:122). The NASDAQ is owned and operated by the NASDAQ OMX Group, and it is regulated by the Financial Industry Regulatory Authority (FINRA), (Kaur, 2014:2322). Furthermore, the NASDAQ has no central location or trading location as transactions are carried out through a computer and telecommunications network of dealers; furthermore, it has become a major competitor to the NYSE (Kaur, 2014:2322). Intermediaries on the NASDAQ act as market makers for various stocks (Trader Guide Systems, 2009:15). These market makers provide continuous buy and sell prices within the confines of gazetted percentage spreads for shares for which market makers are permitted through regulation (Williams, 1993, cited in Trader Guider Systems, 2009:15). Furthermore, market makers identify potential buyers and sellers directly, but they usually update shares to satisfy the demands of consumers (Trader Guider Systems, 2009:16).

Stock exchanges can trace their origins to early exchange transactions in agriculture, and various other commodities. Commodity traders on the early trading fairs in the middle ages found it appropriate to trade using forms of credit which required documentary proof in the form of drafts, notes and bills of exchange (El Wassal, 2013:611). The origins of the French Stock Exchange can be traced as far back as when trading in commercial bills of exchange began, which most historians postulate as the 12th Century (Snyman, 1996:5). The origins of the London Stock Exchange (LSE), which is considered the largest in Europe, can be traced back to 1801, while the New York Exchange, which is the largest organised securities market in the USA, traces its origins back to the stimulus of the American war of independence and has been in operation since 1817 (Snyman, 1996:5; Neal, 2007:6; Kaur, 2014:2319). The American revolution, like the Napoleonic wars, required the mobilisation of large sums

of money; in this regards, the large number of securities issued by the states soon produced a need for marketing facilities (NYSE Online, 2018). Dealers on the New York Stock Exchange (NYSE) initially dealt in securities issued by 370 government banking institutions, insurance companies as well as railway and canal builders. It was however not long before business expanded to such a degree that a special building was required to transact business, together with a set of rules by which the market was organised, as the NYSE board.

2.3.1 New York Stock Exchange (NYSE)

Located in New York, the NYSE is the most prestigious stock exchange in the world. It was established in 1817 (Reilly & Brown, 2003) with the inauguration of the Buttonwood Agreement by 24 of the city's stock brokers and merchants. It is the market of choice for the largest companies in the USA, such as General Electric, Google, Facebook, Coca-Cola, Gillette and Walmart (NYSE Online, 2018; Kaur, 2014:2319). Kaur (2014:2319) states that the NYSE was established to replace the New York Stock and Exchange board which had been established in 1817 by New York brokers. Membership in the NYSE became exchangeable in 1868, as it enabled its members to sell their membership. It became the first type of exchange where much of the trading is done face-to-face on a trading floor although computers play a significant role in the process (Kaur, 2014:2319). According to Reilly and Brown (2003), the NYSE has its prices established and determined using an auction method where orders are placed through brokerage firms that are members of the exchange and flow down to floor brokers who go to a specific spot on the floor where the stock trades. Once a trade has been executed, the details of the transaction are sent back to the brokerage firm, who then engages the investor. The USA's second largest stock exchange is also located in New York – it is called American Stock Exchange (AMEX) (Reilly & Brown, 2003:114). There are also other smaller regional exchanges, such as the Pacific, Midwest, Cincinnati, Philadelphia, and Boston stock exchanges, in the USA (Kaur, 2014:2319).

2.3.2 Frankfurt Stock Exchange (FSE)

The history and evolution of the Frankfurt Stock Exchange (FSE) dates to the times of medieval fairs, particularly the Frankfurt autumn fair which was first mentioned during

the Assumption holiday in the year 1150 (Kaur, 2014:2323; Deutsche Bourse Group, 2018). This fair is believed to have had its origins in the 11th century as a harvest celebration. When the Bavarian Emperor Ludwig expanded this privilege to include a spring fair as well, the city became the epicentre for commercial and monetary transactions (Gomber, 2016:76). As a result of trading and commercial activity, the manufacture of goods on order gradually developed into merchandise production for an open and nationwide market; this resulted in the establishment of an exchange in 1558 in order to set up fixed currency exchange rates. According to Deutsche Bourse Group (2018), bankers such as Rothschild and Max Warburg had substantial influence on Frankfurt's financial trade. According to Kaur (2014) and Gomber (2016), the FSE moved into its new building at Borsenplatz in 1874; however, it was only after World War 2 that it was finally established as the leading stock exchange in Germany, with incoming national and foreign investments.

2.3.3 London Stock Exchange (LSE)

According to Neal (2007), the LSE's roots can be traced back to the old Royal Exchange in London in 1801. Its activities switched to the coffee houses between London's narrow alley ways during the first three quarters of the 18th Century, and has served as the stock exchange of Great Britain and Ireland with operating units in London and Dublin since (Reilly & Brown, 2003:117; Stringham, 2010:6). The volume of business conducted stimulated by the raising of funds to finance the Napoleonic wars had reached such proportions that a new building was constructed in Chapel Court. According to LSE Online (2018) as well as Reilly and Brown (2003), the shares listed on the LSE are categorised into three groups – Alpha, Beta and Gamma – and the pricing system on the LSE is transacted by dealers who use a virtual communication system. Additionally, LSE Online (2018) as well as Reilly and Brown (2003) concur that the Alpha shares are the 65 most traded shares, with the Betas being the 500 next most traded shares. Alpha and Beta shares are transacted by dealers who are obligated to offer bid quotations to all players of the stock exchange, while all Gamma shares market quotations are representative and must be validated before the shares are traded.

2.3.4 The Johannesburg Stock Exchange (JSE)

The JSE's trading system is called the JSE Trade Elect; it is operated under licence from the London Stock Exchange (Van Wyk *et al.*, 2016:381). According to De Beer, Keyser and Van der Merwe (2015:2), the JSE has its roots in the rush, speculation and wild optimism that heralded the early days of gold mining in and around Johannesburg. The history of the JSE is as a result of the fortunes of the gold mining industry that was responsible for its births and subsequent growth. De Beer *et al.* (2015:3) concur that mining was a central and very important factor in the development and origin of the JSE as well as the subsequent growth and development of SA's robust financial services industry. According to Snyman (1996) and De Beer *et al.* (2015:3), shortly after the discovery of gold on the Witwatersrand, the mining village of Johannesburg was established in September 1886. The first share transaction was executed in a miner's tent in Ferreira's camp, which became the first organised settlement comprising of wood and iron buildings, as well as wagon tents and mud huts; it was the forerunner of the village of Johannesburg (Snyman, 1996:8; De Beer, *et al.* 2015:3).

Founded in 1887, shortly after the discovery of gold on the Witwatersrand, in response to the need for capital to fund a growing appetite for investments in the mining sector, the JSE has grown substantially. It has evolved from an open outcry system focused on equity trades, to a fully automated electronic environment that offers a varied array of trading instruments (African Securities Exchange Association, 2014:105). According to JSE Online (2018), the first serious attempt to establish some semblance of an organised stock exchange was undertaken shortly after the founding of Johannesburg, when the prospectus of the Witwatersrand club and exchange company was advertised on 24 February 1887. As a result of further and persistent exploration and development, and the widened scope of gold fields, a spate of company promotions swept SA. By the end of November 1887, 68 gold mining companies had been floated and, by 1893, the Rand had become the focus of world interest. According to JSE Online (2018), the stages in the evolution of the JSE correlate closely to the growth and development of the South African economy.

The JSE is a controlled and regulated platform for the trading of shares in companies that are listed on the JSE. According to Standard Bank Online (2016), the JSE

enables smooth and efficient trade in the companies listed on the JSE and ensures that the listed entities operate within a regulated framework. In summary, the JSE offers an easy route for transacting and trading in shares of top companies within SA, with protection for the investor. The business trading hours of the JSE are from 9am until 5pm every week day (excluding public holidays). According to Standard Bank Online (2016), even though the JSE has a proven rate of inflation-beating returns in the long-term, it is in no way a guarantee that it is safe to invest in the stock exchange since companies can fail, markets can collapse, and prices can plummet as well as soar.

Some of the ways to reduce the risks of trading on the JSE are: trade only in large capitalisation companies; trade in blue chip companies; trade for the long-term; reduce the number of trades in any given year; buy the index (via ETF) and buy shares of blue chip companies when they have high dividend yields (Standard Bank Online, 2016). The JSE has consistently been one of the world’s twenty largest stock markets; moreover, it is the sixth largest among emerging economies, after China, Brazil, India, Taiwan and South Korea. It is by far the largest stock market in Africa (ASEA, 2014:105). Table 2.2 provides a statistical summary of JSE trading activities from the perspective of various market indicators.

Table 2.2: Trading equity statistics

Indicators	2011	2012	2013	2014
Listed companies	406	400	386	391
Number of companies trading	385	375	361	365
Market capitalisation (ZAR billions) at year-end	845.58	998.34	1102.37	1150.5
Turnover (%)	46.25	40.93	55.25	35.20

Source: Adapted from ASEA (2014:105).

Table 2.2 shows a statistical summary of the companies listed on the JSE, the number of companies trading shares and the market capitalisation. This table also shows the percentage turnover of shares traded from the number of trading companies, year-on-year, from 2011 to 2014.

In the financial services industry, the JSE is considered horizontally and vertically integrated. This means that it offers a wide spectrum of products (horizontal axis) and an end-to-end service from listing to clearing and settlement (vertical axis) (JSE, 2015:4). There are over 400 companies listed on the main board. JSE consumers and participants are guaranteed an integrated market, encompassing listing, trading, clearing and settlement across all products, that is overseen by advanced market surveillance. The JSE is unique and counts amongst its core competencies its ability to conduct equity market surveillance and supervision to the individual client level on a real-time basis (JSE, 2015:4). In 2014, the total value of trade on the JSE was R31 trillion (approximately US\$2.8 trillion), while offering investments in five financial markets, namely, Equities, Bonds as well as Financial, Commodity and Interest Rate Derivatives. The JSE generates revenue from:

- listing companies and other instruments;
- trade and post-trade activity on a per trade basis (with fees related to a combination of the value and/or number of instruments or contracts traded for a trade or post-trade activity);
- the sale of market data related to various markets or indices to a global client base. The JSE sells live, statistical, historical and end-of-day data from all JSE markets; and
- dividends from Strate, which is licensed as SA's central securities depository. Strate provides electronic settlement for the JSE, money market securities for the South African market and equities for the Namibian Stock Exchange. The JSE owns 44.5% of Strate (JSE, 2015:4).

As part of corporate social investment (CSI), the JSE conducts public awareness campaigns and offers, together with other institutions, financial literacy programs and tutorials. One of the tutorials comes in the form of a game called Investment Challenge (JSE, 2015:4). Investment Challenge is a game that aims to teach South Africans of all ages about investing on the JSE and the larger role that such investment plays in the country's economy. The challenge helps those participating to learn about the fundamentals of investing and encourages them to research and strategise around the trading of JSE listed instruments. Participants test their trading skills through a

simulated trading programme whereby performance is tracked and measured (JSE, 2015:4).

2.3.5 The Alternative Exchange (ALTx)

In 2003 the JSE launched an alternative exchange, Alternative Exchange (ALTx), for small to mid-sized companies looking to list on a regulated exchange (JSE, 2015:2). ALTx is the alternative exchange attached to the JSE, and it is intended for smaller companies (JSE, 2015:2). The shares on the ALTx are traded in the same way as those in the main board of the JSE. These are smaller and newer companies with smaller income or profits; in most instances, they would still be new, with less strict listing requirements. According to Standard Bank Online (2016), consumers are advised not to invest a large part of their money in the ALTx, as the risk is quite high. Since there are cost implications when a consumer buys or sales shares, this would normally be carried out by brokers who charge brokerage fees and taxes that are levied. Besides the cost of shares, there are other costs such as brokerage fees, Strate, Uncertificated Securities Tax (UST) and Insider Trading Holding Fees. Telephone trades will also attract an extra fee, and all trades on the JSE are done in cents (JSE, 2015:2).

2.3.6 South Africa's newly licensed stock exchange: ZAR X

According to ZAR X (2016), the Johannesburg Stock Exchange (JSE) is lauded as the largest stock exchange in Africa and, since its foundation in 1887, it has held a monopoly as the only stock exchange in SA. According to FSB Online (2016), this has changed since the establishment, the subsequent licensing on 30 March 2016 and the announcement that the FSB had granted a stock exchange licence to ZAR X, which is a new company incorporated for the primary objective of operating and managing a market infrastructure. It all started in 2014 when the FSB issued a directive compelling the existing over the counter (OTC) equity trading market to alter its methodology, that is, to operate through a licensed exchange in terms of the Financial Markets Act (FMA) or cease trading outright. ZAR X (2016) reports that although the OTC market is currently dominated by large companies such as MTN, Vodacom, Multichoice, Sasol and Imperial, there are other participants that operate restricted shareholder platforms as well as companies that are merely seeking a limited spread of shareholders and

liquidity at a low cost. This unique and monopolistic situation has created the need for ZAR X.

According to ZAR X (2016) several South African companies previously issued shares and facilitated trading in the OTC market using unregulated OTC platforms.

As the OTC market expanded, the FSB recognised a need for greater regulation to protect shareholders and ensure a fair, orderly and transparent market place for issuers (FSB Online, 2016). The FSB determined that all operators of unregulated OTC platforms must cease operating or apply to become licenced exchanges under the FMA. According to FSB Online (2016), Board Notice 68 of 2014 reaffirmed the view of the Registrar that operators of exchange infrastructure should be licenced and that a proliferation of exchanges should not be allowed. Furthermore, ZAR X (2016) suggest that this has caused significant upheaval in the market, for both issuers and shareholders. As a result of regulatory amendments, a substantial number of OTC companies were in breach of the FMA and faced significant potential penalties under the FMA; these companies have either stopped operating their OTC platforms or applied for extensions from the FSB. ZAR X saw an opportunity for unregulated OTC in the market and offered to provide the solution.

ZAR X is a licenced stock exchange, as envisaged and enshrined in the Financial Market Act 19 of 2012; it is regulated by the FSB. According to the available information on ZAR X's value proposition, it is to provide a "low-cost, simple and convenient end-to-end trading platform that empowers ordinary South African consumers with shareholder ship opportunities". ZAR X (2016) proposes to work in three sections for company listings: a main board; an over-the-counter stock-trading business; and an investment products market for trading structured products and preference shares. ZAR X also facilitates information transparency in its market by aggregating and broadcasting real-time information and operating its exchange platform for companies to provide financial and other corporate disclosure for investors.

FAIS registered financial service providers (FSPs) and financial advisors may participate in the ZAR X market by executing client orders; these intermediaries earn revenues from commissions charged on orders. According to Van Schalkwyk

(2016:4), for the newly licensed ZAR X stock exchange in SA, a prospective investor should decide which brokerage firm to use, send the brokerage FICA documents or proof of residence to open a trading account, choose to trade using the web or the ZAR X mobile application, decide on which securities to buy and put money into the designated ZAR X Nominees Trust bank account.

The regulatory framework that governs ZAR X as a Self-Regulatory Organisation (SRO) and the compliance obligations of ZAR X Market Participants comprises the Financial Markets Act 2012, ZAR X Rules and Procedures and the Financial Intelligence Centre Act 2001. The regulatory activities undertaken by the ZAR X Market Regulation division include the monitoring of trading on the ZAR X market to identify possible market abuse and oversight of ZAR X Market Participants' compliance with their regulatory obligations.

As a new player in the South African economy and the financial services industry, in particular, the actual impact of the ZAR X on SA's economy is yet to be seen. However, ZAR X, 2016 suggests that their all-encompassing approach to consumers from different demographic backgrounds, such as lower-income groups on the stock exchange platform, will promote saving and encourage participation, thus allowing for a more 'investment wise' population; this could, potentially, have a positive effect on SA's economic growth.

2.3.7 The development of stock market indices

Since it would be too difficult to track every single stock trading on the JSE, a smaller sample of the market, thus a representative sample of the whole, is used as an index to follow the performance of financial markets (JSE, 2015:2). An index is a great tool for bench marking how the overall market or specific sector is doing, and it is widely used to measure and watch the performance of different categories of the market (JSE, 2015:2). According to Standard Bank Online (2016), indices such as the JSE All Share, the FTSE, DJIA, S&P 500, and the NASDAQ composite have grown. Furthermore, an index is the average price of a group of shares listed on the JSE or "a statistical measure of the changes in a portfolio of shares representing a portion of the overall market. On the JSE, the top 40 index covers the 40 largest stocks on the JSE while the overall index includes all stocks on the JSE (JSE, 2015:2). Other

examples include retailers or retail shares whose index is composed of retailers listed on the JSE. In addition, some of the main indices can be traded directly via Exchange Traded Funds (ETFs). Additionally, Standard Bank Online (2016) implies that within each index, certain stocks will have more strength since they have a larger value and represent how the company can be traded freely on the JSE.

The Dow Jones Industrial Index, which is a price weighted average of the 30 best performing shares listed, is one of the oldest and most widely quoted stock market indices (Reilly & Brown, 2003:42; Hora & Terrance, 2006:17). It is believed that the index was established in 1896, by Charles Dow, with only twelve of the largest public companies in the USA (Hora & Terrance, 2006:17). The Dow Jones Industrial Average (DJIA) contains 30 of the biggest and most well-established companies in the United States (Reilly & Brown, 2003:42; Hora & Terrance, 2006:17). Before computerisation, calculating the price of a share market index had to be kept as simple as possible. The original DJIA was calculated by adding up the prices of the twelve business entities, and then dividing that number by twelve (Reilly & Brown, 2003:35; Hora & Terrance, 2006:17). These calculations made the index nothing more than an average, but it served its purpose. According to Bodie, Kane and Marcus (2012), the DJIA uses a similar yet slightly different approach, known as price-based weighting, wherein the weight of each security is the share's price relative to the sum of all the share prices. Most indices weight companies based on their market capitalisation; for example, if a company's market capitalisation is R10,000,000 and the value of all shares in the index is R100,000,000, then the company would be worth 10% of the index. According to Standard Bank Online (2016), these types of systems are efficient as a result of computerisation and digital technology, and accurate calculations are done in real time.

According to JSE Online (2016) as well as Standard Bank Online (2016), the JSE All Share index is the main index of the South African share market. It is made up of 62 stocks in total, and consists of the shares of the top 40 companies by market capitalisation and another 22 companies across all industries and sectors. The JSE's Actuaries All Share 40 Top Companies Index (ALSI 40 Index) is an equity index established to reflect the performance of the South African ordinary share market. According to JSE (2016) a relatively small proportion of the total number of securities

listed on the JSE are incorporated into the index on the basis that movements in the share prices of those constituent companies can be said to represent the movement of the market. Shares selected for inclusion in the ALSI 40 Index are generally blue chip shares of larger companies with sound financial standing, having widely traded and marketable shares. The all gold index is a weighted average and consists of all the companies which specialise in mining gold that are listed on the JSE (JSE, 2016:5). There are various other stock indices such as the resources index, financial index and the industrial index. The financial index is comprised of shares such as banks, for example, Barclays Africa and Standard Bank, while the resource index is made up of resource or commodity shares such as BHP Billiton, and the industrial index is made up of industrial companies such as Richemont (JSE, 2016:5).

According to Satrix Online (2019), the Satrix 40 is a relatively new instrument introduced by the JSE to follow and watch the performance of the underlying index, such as the ALSI 40. It falls under a sector called TIFS/IX37 (Traded Index Funds). To follow the performance of the ALSI 40 without buying all 40 shares, a consumer could buy the Satrix 40, which is an exchange traded fund, as a listed share on the JSE. According to Satrix Online (2019), exchange traded funds are funds that are traded on the stock exchange and track a share exchange index; by investing in an ETF a consumer has exposure to a diversified portfolio of shares listed on the JSE. This means that by investing in the Satrix 40 ETF, consumers will be investing in the 40 largest companies on the JSE Securities Exchange without having to purchase individual shares in each of these top 40 companies. Other benefits of ETFs include lower investment costs, as the investment costs of ETFs tend to be lower than other collective investments, and they can be transacted on the JSE during the exchange's normal trading hours; furthermore, the dividend pay-out of all the companies in the Satrix 40 is done quarterly (JSE, 2015: 2).

2.3.8 Listing on the stock exchange

In order to expand and grow their businesses, organisations need to raise money by either borrowing or getting debt financing or selling part of the company, which is known as issuing shares or equity financing, and list on the JSE provided they comply with the listing requirements (JSE, 2015:2). When a company issues its own shares, it does not require the company to pay back the money or make interest payments

along the way. When a company goes public, the company issues shares in the primary market in exchange for cash (Madura, 2008:229). According to Madura (2008), listing on the stock exchange has the following two effects on the company:

- it changes the company's ownership structure by increasing the number of shareholders; and
- it changes the company's capital outlook by increasing the equity investment in the company, which allows the company to either pay off some of their debt or capitalise its operations, or both.

The first sale of a share, which is issued by the private company, is called the initial public offering (IPO) – this is also known as a primary issue (Madura, 2008:233). A company listing for the first time hires an investment bank that serves as the lead underwriter for the IPO; the underwriter is involved in the development of the prospectus as well as the pricing and placement of shares (Madura, 2008:233). The investment banker must establish the offer price at which the shares will be offered at the time of the IPO; this is usually influenced by prevailing market and industry conditions (Madura, 2008:234). After the primary distribution of stock, all subsequent sales of the stock take place in secondary markets, such as the JSE. According to the South African Institute of Chartered Accountants (SAICA, 2019), companies must be compliant and meet an exchange's requirements in order to have their shares listed. These requirements vary from one stock exchange to another.

In SA, a company may list either on the main board or on the alternative stock exchange. Such conditions vary from exchange to exchange and sometimes include that a company should have a minimum number of shares outstanding, minimum market capitalisation, and a minimum annual income (Kaur, 2014:2324). In order to be listed on the New York Stock Exchange (NYSE), an organisation must have issued at least a million shares worth \$100 million and must have earned more than \$10 million over the last three years. To be listed on the NASDAQ, an organisation must have issued at least 1.25 million shares of worth at least \$70 million and must have earned more than \$11 million over the last three years (Kaur, 2014:553). Further abroad, the main market of the London Stock Exchange has set conditions for listing as a minimum market capitalisation of £700,000 and three years of audited financial statements, with a minimum public float of 25% including sufficient working capital for

at least 12 months from the date of listing. In India, the Bombay Stock Exchange (BSE) has requirements for a minimum market capitalisation of 250 million (US\$4.2 million) and minimum public float equivalent (Kaur, 2014:553). In order to list on the JSE, a company has to meet certain minimum standards as indicated in Table 2.3.

Table 2.3: Principal requirements for a listing on the JSE

Criteria for the Main Board	
Minimum subscribed capital	R25 000 000
Minimum equity shares issued	25 000 000
Percentage held by public	20%
Minimum number of public shareholders:	
For equity securities	300
Preference shares	50
Debentures issued by the listing company	25

Source: Adapted from Marx (2013).

Table 2.3 indicates that, in order for a company to list on the main board of the JSE, it should have a minimum subscribed capital of R25 million, with a minimum equity shares issued of 25 million, with 20% of these in the hands of the public. The listing company should also have at least a minimum of 300 public shareholders for equity securities, 50 public shareholders for preference shares, and 25 public shareholders for debentures.

According to Reilly and Brown (2003) as well as Papneja, Tomar and Singh (2013:61), stock prices change every day in response to market forces. For example, if there is a larger demand for a share than the number of shareholders willing to sell it (supply), then the share price increases. Conversely, if more people want to sell a stock than buy it, there would be a greater supply than demand, and the price would fall (Reilly & Brown, 2003:889; Papneja *et al.*, 2013:61). The price volatility of a stock can also be influenced by investor sentiment about what the organisation is worth and the availability of new information about the company. The value of an organisation is its market capitalisation, which is the total number of issued shares multiplied by the share price at a given point in time (Van Wyk *et al.*, 2016:360). Furthermore, a

company that trades at R100 per share and has 1 million shares outstanding has a lesser value than a company that trades at R50 per share which has 5 million shares outstanding ($R100 \times 1 \text{ million} = R100 \text{ million}$ while $R50 \times 5 \text{ million} = R250 \text{ million}$). In other words, the price of a stock does not reflect a company's current value, it also reflects the growth that investors expect in the future. The market value of a share is the price that prospective buyers are willing to pay for the share at present, and it attempts to estimate the fair value of a share. This is determined by the demand and supply of the company's shares; the book value of a company is equal to its total assets minus its total liabilities (Van Wyk *et al.*, 2016:373).

According to Standard and Poor (2015), African stock exchanges and other emerging markets are more than 12% of world market capitalisation, and they are steadily growing. Stock exchanges play an extra role of acting as the clearinghouse for each transaction; this means that they collect and deliver the shares, and guarantee payment to the seller of a security. This role ensures a smooth flow of transactions as it eliminates the risk, to an individual buyer or seller, that the counterparty could default on the transactions (Aduda, Masila & Onsongo, 2012:215). In Table 2.4, some of the world's major stock exchanges are presented highlighting their market capitalisation and volumes of shares traded as at April 2017.

Table 2.4: Stock exchange rankings

Exchange	Market capitalisation (USD billions)	Trade volume (USD billions)
Australian Sec. Exchange	1 272	442
Bombay Stock Exchange	1 682	800
Euronext	3 321	2 176
Frankfurt Stock Exchange	1 766	502
Hong Kong Stock Exchange	3 325	913
JSE Limited	951	751
Korea Exchange	1 251	1 297
London Stock Exchange	6 187	2 866
Madrid Stock Exchange	942	287
NASDAQ	6 831	8 914
NASDAQ Nordic	1 212	731
National Stock Exchange	1 642	2 007
New York Stock Exchange	19 223	12 693
Shanghai Stock Exchange	3 986	1 890
Shenzhen Stock Exchange	2 285	1 101
Six Swiss Exchange	1 516	93
Taiwan Stock Exchange	861	572
Tokyo Stock Exchange	4 485	1 900
Toronto Stock Exchange	2 781	1 121

Source: Adapted from World Federation of Exchanges (2017).

It is evident from this table that the JSE is ranked amongst the world's leading stock exchanges, according to market capitalisation. Participants in the stock market vary from small individual investors to institutional players. Stock brokers may act either as agents for their customers, or as principals for their own accounts (Kaur, 2014:2327). According to Mamtha and Srinivasan (2015:208), the rapid price changes on an

exchange are the result of time factors, socio political events and the expectations or sentiments of buyers and sellers; this means that the price at which buyers and sellers are prepared to conclude transactions change by the minute. Furthermore, these price changes can also be the result of the combined weight of information available in the market.

The Global Competitiveness Report 2015-2016, published by the World Economic Forum (2015:23), recognised SA as one of the top two best regulated securities exchanges in the world, for six years running (JSE, 2015:2). For five consecutive years, the JSE has been ranked first for 'Regulation of Securities Exchanges' by the World Economic Forum Global Competitiveness Survey, up to and including the 2014-15 report. It strives to maintain this position through ongoing capital investment in trading technology (ASEA, 2014:105).

The JSE operates in a diverse market environment that is fraught with different market indicators, as shown by Table 2.5.

Table 2.5: Main economic indicators

Indicators	2011	2012	2013	2014
Population (million)	51.6	52.3	53.2	54
Real GDP (USD millions)	391.1	353.1	307.1	277.4
Inflation rate %	5	5.6	5.7	6.1
Net FDI (USD millions)	4504.7	1571.3	1652	-1226.2
Unemployment rate %	23.8	24.5	24.1	24.3
Interest Rate (T-Bills) (%)	5.5	5.3	5.1	5.8
Exchange rate (R/USD)	7.3	8.2	9.7	10.8

Source: Adapted from ASEA Report (2014:105).

Table 2.5 indicates that although the South African population has been growing from the year 2011 to the year 2014, the Gross Domestic Product (GDP) has been contracting. The rate of inflation and the rate of unemployment have increased during this period. The interest rates were rising and the Rand also lost its value in the same period.

Having discussed the history of the stock markets and the listing requirements for firms wanting to be listed on the stock market, the next section will consider the role played by the stock market in the economy.

2.4 THE ROLE OF A STOCK EXCHANGE IN THE ECONOMY

Stock markets play a pivotal role in pooling savings towards investment in households, businesses and government in order to support their sustained growth and development (National Treasury, 2016:1). In addition to raising capital, households and various entities use the stock markets to manage their risk and invest their savings so as to ensure future prosperity (National Treasury, 2016:1). The injection of savings funds into new projects, the provision of decent housing, quality education and health care as well as infrastructure development are all affected, to a lesser extent, by the workings of the stock exchange (Italian Derivatives Market, 2014:1).

In other countries, stock exchanges operate as non-profit organisations that provide and facilitate for their members to buy and sell shares. According to Valdez (2007:161), the stock exchange “provides the regulation of company listings, a price formation mechanism, the supervision of trading, authorisation of members, settlement of transactions and publication of trade data and prices.” The increased interest in shares is partly credited to shares’ superior performance relative to bonds, real estate and other personal investment instruments over the long-term (Thomas, 2011:147). The JSE, therefore, plays a significant role in mobilising domestic and foreign savings by channelling them towards South African investment requirements.

According to Magliolo (2012), as well as the United Nations Conference on Trade and Development (UNCTAD,2017:7), the fundamental essence of a stock market is to provide a fair and internationally competitive market place for the trading of financial securities on behalf of all participants. Brown (2004) and UNCTAD (2017) describe the basic function of a stock exchange as meeting the needs of all participants of financial instruments; it also involves facilitating the exchange of securities between buyers and sellers, and reducing the risks of investing (Brown, 2004:7; UNCTAD, 2017:7). According to Brown (2004), the role of the stock market in the economy is twofold:

- firstly, listing on the JSE has the potential to raise large sums of capital for the financing of new businesses as well as the capitalisation of existing ventures leading to the creation of new employment opportunities; and
- secondly, it can be an opportunity for consumers to invest in the medium to long-term as the capital appreciation from holding shares over a period exceeds the rate of inflation.

The JSE provides a cost effective, efficient, well regulated, transparent and trusted platform for financial transactions to take place (JSE, 2015:4). These contributions are among the tools needed to spur growth and deal with the challenges faced by SA as well as to enable value creation (JSE, 2015:4). The JSE helps SA to raise finance for companies and the government, from both domestic and international pools of capital, manage risk and gain access to a mechanism for sustainable wealth creation (JSE, 2015:4).

Although research indicates that developed stock markets lead to the improved economic performance of a country, Kenny and Moss (1998), cited in Osamwonyi and Kasimu (2013:83), believe that stock markets are not necessary for economic growth as many countries prefer using the financial banking system for investment. Similarly, Singh (1991, cited in Yartey and Adjasi, 2007:6), suggests that emerging markets should rather make use of bank-based financial systems as their stock markets are usually under-capitalised with often high share price volatility. Magnusson (2002) notes that in order for investors and emerging economies to benefit from investment spin offs it is important that financial institutions, at the least, pass minimum efficiency hurdles. The banking industries of most developing countries are not well established, some are weak and corrupt, and may therefore not be efficient enough to overcome the hurdles (Magnusson, 2002:41). Although in many countries the banking-based system is preferred, individuals in developing countries should be well informed and aware of which financial system follows proper regulations; they should do a proper due diligence exercise in order to ascertain where their investments will be most beneficial (Magnusson, 2002:41).

Arestis, Demetriades and Luintel (2009:16), as well as Seetanah, Subadar, Sunnassee, Lampion and Ajageer (2012), argue that as the value and importance of stock markets to the economic growth and wellbeing of most countries increase, a

research opportunity is created for the relationship between financial development and economic growth on the effects of stock market development. Many researchers argue that this relationship has an insignificant impact on low levels of per-capita income (Deidda, 2006:36) while others found that a positive relationship between the role of stock markets and economic development exists, specifically in the case of developing countries (Masoud, 2013:13). The banking system is regularly compared to the stock market with regard to their effect on economic growth and prosperity. Although both banks and stock markets promote economic growth, for Masoud (2013:13) the effects of the latter are proven to be far more powerful (Arestis *et al.*, 2009:16). Niblock, Heng and Sloan (2014:47) also argue that stock markets drive economic reform, financial liberalisation and market integration, while Henry (2000) found that after liberalising stock markets, high growth rates of private investment were experienced, which directly influenced economic growth.

Despite various findings, most researchers unanimously agree that a robust and well-functioning financial system is a contributing factor to steady economic growth in developing countries (Hassan, Sanchez & Yu, 2011:88; Masoud, 2013:13). Therefore, FSPs should promote international investments with the aim of fostering growth (Hassan *et al.*, 2011:100). Seetanah *et al.* (2012) suggest that a robust and efficient stock market increases savings and efficiently allocates capital to dynamic investments; this results in an increase in the rate of economic growth and financial sustainability. Furthermore, Hassan (2013) believes that a stock exchange has multiple other roles in an economy, such as employment creation and the equal distribution of wealth, other than raising capital for organisations, mobilising savings for investment and facilitating the growth of organisations. Kaur (2014) concurs that, as a result of listing on a stock exchange, companies generally tend to improve their management standards and efficiency so as to satisfy the demands of their shareholders and improve shareholder value. Consequently, it is alleged that publicly listed companies tend to have better management records than privately held companies; it is believed that this is due to fiduciary oversight from the board of directors (Kaur, 2014:2516).

According to Madura (2012), share prices fluctuate depending on prevailing market conditions, and prices tend to respond positively when companies and the economy

in general show signs of stability and sustainable growth, whereas a financial crisis could eventually lead to a stock market crash. Therefore, the price movement and market instability of share prices and of the stock indexes in general can be an indicator of the general trend in the economy (Kaur, 2014:2516.). Various researchers unanimously concur that stock exchanges play a vital and varied role in the development of the economy of a country (Thomas, 2011:149).

The value add of SA's financial markets in the economy is substantial as research has shown that a well-functioning stock market can lead to a lower cost of equity capital for companies and it allows individuals to effectively save and invest (Hassan, 2013:1). Thus, the stock market is perceived as a public entity for trading shares and listed securities at an agreed upon price, while the individual or retail investor plays a critical role in the stock market because their savings are pulled into national savings. According to Kaur (2014:2516), through public sector borrowing instruments, governments may decide to borrow money to finance infrastructure projects by issuing and selling government bonds; these bonds can be raised through the stock exchange whereby consumers buy them, thus indirectly loaning money to the government.

According to Samuel (1996), cited in Ngoc (2014:1), more than acting as a source for financing investment, a stock market also acts as a signalling mechanism to managers regarding investment decisions, and as a catalyst for corporate governance through its stringent regulatory and compliance requirements. However, many people buy stocks for control and influence over firms; this is because shareholders need to own a specific number of shares in order to be on the board of directors who can make strategic decisions and set directions (Van Wyk *et al.*, 2016:208). According to Magliolo (2005:26), the fundamental essence of a stock market is to provide a fair and internationally competitive market place for the buying and selling of shares on behalf of all participants.

According to Tuladhar (1996), as cited in Aduda *et al.* (2012:214), stock markets provide a platform for wider ownership amongst the public, thereby distributing risks and wealth amongst smaller investors. Similarly, according to Thomas (2011:148), a country's shares market serves as a barometer of public sentiment about the country's economic prospects. The link between share prices and economic performance reflects causation running in both directions, as the country's economic performance

impacts the shares market (Thomas, 2011:149). Stock markets provide investors with an effective tool for making investment choices which suit their own preferences of risk and returns based on transparency and quality information. As such, stock markets help the economy to generate more savings and productive investments. The United Nations Development Program (UNDP) (2014) states that African stock exchanges face several challenges before they could enter a new phase of rapid growth. To foster the growth and development of African stock exchanges, the UNDP is critically reviewing more efficient ways to eliminate existing impediments to institutional development. These include a wider dissemination of information on these markets, the implementation of robust electronic trading systems and the adoption of central depository systems. According to the UNDP (2014), several countries have already begun implementing necessary changes, notably in trading and settlement systems, and regulatory regimes that will continue to improve.

The 1990s, according to the UNDP (2014), witnessed a deliberate shift by several African governments to free market policies driven by the desire to reduce the burden on government finances. The implementation of economic reforms and the privatisation of state-owned companies is a key component of the drive towards efficient stock markets. Several of these privatisation options are made possible by encouraging the listing of previously state-owned companies or parastatals on local exchanges. To further stimulate the development of a local capital market, many subsidiaries of large international companies are encouraged to list their local operation UNDP (2014:2). For prospective investors wishing to raise capital, the UNDP (2014) views African equity markets as open for business despite the relatively small number of listed companies.

Some African countries, such as Kenya and Ghana, have taken advantage of the development of their security markets to issue stock exchange listed treasury debt instruments wherein these countries issue longer-term instruments to better manage their local debt (UNDP, 2014:2). The spinoffs from this have been the improved transparency in the pricing of local bank lending facilities and increased competition within local banking industries. This has resulted in rapid development in the debt segment of African capital markets. In addition, an increasingly encouraging trend is the development of the African pension fund industry (UNDP, 2014:2). Except for SA,

and some of its neighbouring countries, private equity and institutional investment flows in Africa have traditionally been invested mostly in property development, term bank deposits and treasury bills. As part of wider financial sector reform, a considerable number of African countries have introduced new laws enabling the emergence of a local fund and asset management industry (UNDP, 2014:2).

The JSE helps to lower the cost of capital to consumers and accelerate the economic growth of the South African economy by providing an institutional platform for gathering domestic assets and efficiently channelling them into productive investments (JSE, 2015:2). As an important institutional landmark of SA's economic landscape, the JSE provides a primary and a secondary market as well as after-service support and technology services. It also sells market data, and regulates the primary and secondary markets. The exchange has global reach through its international investor base and range of tradable instruments, which are enabled by cutting-edge technology. It offers exposure to investments from SA, the African continent and farther afield (JSE, 2015:2).

There is a substantial amount of information produced about the JSE's daily transactions and dealings through print, digital and electronic media such as newspapers, online magazines and television. The JSE has both a website and produces SENS (Stock Exchange News Service) which is designed to ensure that all information from listed companies is released at the same time for everybody. According to Standard Bank (2016), SENS information is found on most financial websites. It provides trading updates, financial results, directors' dealings in companies' shares and important news regarding the sale or purchase of assets, as well as anything that may affect companies' stock prices or have an influence on how investors view companies. Having discussed the important role played by the stock market in economic growth and development, it is also necessary to discuss the role that the JSE can play in dealing with the legacy of apartheid and economic disenfranchisement. The issue of transformation is relevant to this study, as transformation will lead to economic empowerment of the majority, thus leading to increased consumer participation in the stock market. In the light of this, the next section will discuss transformation as a mechanism to attract consumer participation in the stock market.

2.5 TRANSFORMATION AS A JSE MECHANISM TO ATTRACT CONSUMER PARTICIPATION

After the transition from Apartheid in 1994, the democratic government of SA considered that the creation of political equality, though necessary, was not enough to reverse the inherited social and economic inequalities. In order to deal with the legacy of apartheid, a more responsive approach to the distribution of assets and opportunities was deemed desirable; as a strategic imperative, and the central pillar of this intervention, was Black Economic Empowerment (BEE Commission Report, 2001:2). According to JSE Online (2016), the Board, executive management and senior members of the JSE acknowledged that transformation is a moral and strategic business imperative and they embraced the challenge of being a progressive and transformed organisation. The Board values equity, fairness and diversity in the business, and seeks to provide meaningful work opportunities for all JSE employees. The Board views itself as an active participant in addressing the socioeconomic challenges faced by SA, and aims to create prosperity for all South Africans. The Board fully agrees that this thinking and conviction will guarantee that the JSE's transformation efforts are focused in areas that will broaden the talent pool, develop people, and improve stakeholder relationships as well as increase black ownership.

According to the South African Institute of Race Relations (2013:1), less than a quarter of shares on the JSE are black-owned and 73% of top managers are white, with a significantly large income gap between whites and blacks. The BEE Commission (2001) believes that black equity participation in each sector of the economy should be increased to at least 25% including individuals and collective enterprises (BEE Commission, 2001:8; Business Report Online, 2019:4). Equity participation refers to ownership measured in terms of economic interest in each sector over the period specified. Where equity is near to 25%, continued efforts must be made to increase the equity by an additional 25%. BEE Commission (2001:8) reports that black people (including businesses and collective enterprises owned by blacks) should hold at least 25% of the shares of companies listed on the JSE. At least 40% of non-executive and executive directors of companies listed on the JSE should be black. According to the BEE Commission Report (2018), there is no significant change in the levels of transformation with black ownership reflecting a decline to 25.2% from 27% in 2017, with JSE listed companies sitting at 38% of management control for black people.

According to Black Business Quarterly Magazine (BBQ,2018), black ownership on the JSE has been a subject of debate since the year 2010 when the JSE released its first report on the composition of companies owned on the JSE. According to the report released by the JSE in 2010, black South African investors owned 18% of the available share capital listed in the Top 100 companies (BBQ, 2018). Center for Economic Development and Transformation Report (CEDT) (2017) maintains that the JSE calculations were done according to the Department of Trade and Industry's (DTI) Code of Good Practice Requirements, excluding mandated investments including treasury shares and company operations outside SA. In his State of the Nation Address (SONA) in 2017, President Jacob Zuma stated that black-owned shareholdings on the JSE had jumped from 3% to 10%, however, the accuracy of these figures was contested in the media. In 2017, the JSE concurred that direct black South African investment listed on the JSE is 3%; however, when the values of direct and indirect holdings are included in the Top 100 companies, the figure is 23%. BBQ, (2018) and CEDT (2017) report that this figure was disputed by the National Empowerment Fund (NEF, 2017) who argued that the percentage of black-controlled and managed companies on the JSE remained at 3% as this figure represents black ownership of the economy on the whole, rather than a comparison of shareholdings in other categories, such as white or foreign owned investments as in the case of the JSE's numbers.

2.6 THE FINANCIAL SERVICES' REGULATORY ENVIRONMENT IN SOUTH AFRICA

SA has a robust and well-regulated financial services industry that is supported by stringent legislation, regulation and rules (FSB, 2015:1). Further to the first legislation covering financial markets in 1947, the JSE joined the World Federation of Exchanges in 1963 and upgraded to an electronic trading system in the early 1990s (FSB, 2017:3). The JSE demutualised and became a public company listed on its own exchange in 2005. The provision of financial services in SA is regulated mainly by the Financial Markets Act, No. 19 of 2012 (FM Act) and the Financial Advisory and Intermediary Services Act, No. 37 of 2002 (FAIS Act). The JSE is supervised by the FSB and it is licensed to operate under the Financial Markets Act, No. 19 of 2012 (FSB Online, 2014:1). The FSB is a regulator that helps to protect the consumer by enforcing laws

related to the stock market. The FSB monitors securities, stock exchanges, corporate reporting, investment firms, stock brokers, and public utility holding companies.

The Financial Advisory and Intermediary Services Act (FAIS) was promulgated in SA taking into consideration the size of the industry as well as the potential devastating financial effects to consumers if FSPs are not properly regulated and not in line with international best practice (Crankshaw, 2006:5). The intention of FAIS is to regulate the conduct of companies offering financial products and financial planners, and to provide better protection to individuals. Section 15 of the FAIS Act prescribed a general Code of Conduct to which financial planners must adhere whilst providing services to individuals (FSB, 2014:23). The general duties of a financial adviser and planner are to render financial services honestly, fairly, with due skill, care and diligence, and in the interests of clients and the integrity of the financial services industry (FSB, 2014:23). Section 15 of the FAIS Act describes in detail the requirements that need to be followed by a financial planner to be compliant with the provisions of the Code of Conduct (FSB, 2014:23). The impact of FAIS Act on practice management has been increased costs of compliance and the lengthening of the financial planning process (FSB, 2014:23).

South African consumers participate in the stock market through registered stock brokers, banks and other licensed FSPs (FSB, 2015:1). Stock brokers or middle men receive a commission on each transaction for the service rendered in bringing sellers in effective contact with buyers. There are three issues around security on investments on the JSE, namely, the security of a consumer's shares, the security surrounding the process of doing the trade (whether via telephone or the internet) and the risk of a broker going out of business (JSE, 2015:2). According to the JSE (2015), trading security ensures that all trades that are done via a telephone are recorded so that, when an error or a misrepresentation is made, a recording could be requested and the entire conversation reviewed. Trading security ensures that trading via the internet is as secure as any other internet transaction if the relevant data is correctly captured and entered onto the system when buying or selling. It also ensures that any cash that is held by a stock broker on behalf of consumers is held by the JSE, is 100% safe and earns good interest. Additionally, the share security system Strate electronically manages all JSE transactions to ensure that there is no fraud; it also helps to resolve

disputes (JSE, 2015:2). Should a consumer choose a brokerage firm that defaults, they should be able to claim against the member firm through the JSE's Guarantee Fund. The Fund has assets worth more than R80-million, and was specially set up to offer protection and reassurance to investors (Standard Bank, 2016:2).

According to the National Treasury (2016:1), the regulation and supervision of financial institutions and markets should be able to respond to market failures that can arise due to the nature of risks and challenges in the financial sector. The failure of one FSP can spill over into systemic instability through the interconnections between financial institutions and a general loss of confidence in the financial system as a whole (Forbes, 2012:3; National Treasury, 2016:1). Where market power is concentrated in a small number of financial institutions, there is a risk in terms of consumer abuse by FSPs, particularly in relation to costs, charges and transparency, as a result of limited competition (National Treasury, 2016:1).

The current framework for financial regulation and supervision in SA is reasonably complex, with several regulators. The main regulators are the Bank Supervision Department (BSD) of the South African Reserve Bank (SARB) and the FSB. The BSD prudentially regulates and supervises banks. The FSB regulates and supervises most non-bank financial institutions as well as securities markets, where it relies on self-regulatory organisations such as the JSE and STRATE (Goodspeed, 2013:1). The National Credit Regulator (NCR) regulates the market conduct of all credit providers (banks and non-banks), while the National Consumer Commission (NCC) regulates the market conduct of all consumer goods and service providers as well as banks (other financial services firms have been exempted). To add to the complexity, financial sector regulators are – to varying degrees – subject to the authority of two government departments. The Department of Trade and Industry oversees the NCR and NCC, while the BSD has a direct reporting line to the Minister of Finance on legislative issues, and the FSB is subject to the general authority of the Minister of Finance (Goodspeed, 2013:1).

2.6.1 Twin Peaks

Following a review of the domestic financial regulatory system in terms of international experience, the National Treasury has concluded that a Twin Peaks structure is most

appropriate in terms of achieving alignment with international best practice (Goodspeed, 2013:1). The Twin Peaks model proposed for SA is characterised by:

- separate regulators for prudential (Prudential Authority) and market conduct (Financial Sector Conduct Authority) functions, to allow for a dedicated and comprehensive focus on the distinct challenges raised regarding market conduct;
- a mandate to maintain financial stability of the financial system proposed to the South African Reserve Bank;
- mechanisms for cooperation and consultation across government and all financial sector regulators to promote consistency and coordination in delivering policy objectives;
- a harmonised system of licensing, supervision, enforcement, consumer recourse (ombudsman), and appeal mechanisms (tribunal); and
- an emphasis on pre-emptive, risk-based and outcomes-focused approaches to regulation (National Treasury, 2016:1).

The Twin Peaks reform speaks to the fragmented nature of the current regulatory framework which has created challenges and inconsistencies in the application of financial regulation and scope for regulatory arbitrage. SA's move to Twin Peaks was announced in the National Treasury's policy document, *A safer financial sector to serve South Africa better*, in February 2011 (Goodspeed, 2013:1). The policy document acknowledges that in order to support sustained economic growth and development, SA needs a safe and stable financial services industry that is accessible to all. The main document, which was adopted by Cabinet in July 2011, seeks to separate prudential and market conduct regulation so that supervision will shift to the Twin Peaks model (Goodspeed, 2013:1). The execution of the model is a two-phase process. The first phase involves developing and tabling, in Parliament, overarching legislation to empower the prudential and market conduct regulators to deliver on their mandates (Goodspeed, 2013:1). The second phase comprises of harmonising specific financial sector legislation, such as the Banks Act, as well as Long- and Short-term Insurance Acts, with overarching legislation and regulator mandates (Goodspeed, 2013:1).

In view of the challenges of financial stability, prudential and conduct issues, the Twin Peaks reform will be structured around the following policy objectives:

- maintaining the stability of the financial system (a financial stability objective);
- maintaining the safety and soundness of regulated financial institutions and market infrastructures (a prudential objective);
- protecting consumers of financial products and services and ensuring financial institutions treat their customers fairly (a market conduct objective);
- expanding access to appropriate financial products and services (a financial inclusion objective); and
- combating market abuse and financial crimes (a market integrity objective).

The implementation of the Twin Peaks model has two fundamental objectives: a) to strengthen SA's approach to consumer protection and market conduct in financial services, and b) to create a more resilient and stable financial system (Goodspeed, 2013:2). As the introduction of a new model of financial regulation is not a simple task, it will require effective planning to ensure that risks are managed and effective supervisory oversight remains in place throughout the transition (Goodspeed, 2013:2). The Financial Regulatory Reform Steering Committee will develop a more detailed and definitive plan to ensure stakeholder cooperation, coordination and support in order to achieve a safer financial sector that serves South Africans better (Goodspeed, 2013:2).

2.6.2 Retail Distribution Review (RDR)

This review has been undertaken against the background of a new approach to regulating market conduct in the financial sector. Under a Twin Peaks approach, which will separate prudential and market conduct regulation of the sector, market conduct regulation and supervision is informed by the Treating Customers Fairly (TCF) framework (Goodspeed, 2013:2; Financial Sector Conduct Authority, 2018:5). The TCF approach focuses on the extent to which regulated financial institutions deliver fair outcomes for financial customers and entails a more proactive and interventionist approach, by regulators and policymakers, to dealing with market failures. The RDR is a prominent example of this new approach (Goodspeed, 2013:2; Deloitte, 2018:1). The results of the Retail Distribution Review (RDR) carried out by the FSB proposes

far reaching reforms to the regulatory framework for distributing retail financial products to customers in SA (FSB, 2014:5). The review was undertaken in response to the fact that, despite the significant progress achieved through the Financial Advisory and Intermediary Services (FAIS) Act in raising intermediary professionalism, improving disclosure to clients and mitigating certain conflicts of interest, significant concerns regarding poor customer outcomes and financial products remain (FSB, 2014:5).

Key structural changes include:

- placing greater responsibility on product suppliers for ensuring the delivery of fair customer outcomes through their chosen distribution channel;
- placing limitations on the types of remuneration that intermediaries can earn and from whom, so as to address conflicts of interest; and
- enabling customers to understand and compare the nature, value and cost of advice as well as other services that intermediaries provide.

These changes should also support the development of more competitive markets and the development of transparent and fair products. According to Goodspeed (2013), the RDR proposals seek to give retail customers confidence in the retail financial services market and trust that product suppliers and advisers/planners will treat them fairly. This, in turn, will support a more sustainable market for financial advice and financial services over the long term.

According to Goodspeed (2013) as well as Deloitte Online (2018) the desired outcomes of the RDR are financial service distribution models that support the delivery of suitable products and provide consumers with fair access to suitable advice on financial products. In addition, they will enable consumers to understand and compare the nature, value and cost of advice as well as other services that intermediaries provide. Furthermore, the desired outcomes of RDR would enhance the standards of professionalism in financial advice and intermediary services, so as to build consumer confidence and trust as well as to enable customers and distributors to benefit from fair competition for quality advice and intermediary services, at a price more closely aligned with the nature and quality of the service. The RDR will support sustainable business models for financial advice that enable delivery of fair customer outcomes.

In the light of the above, it is evident from the literature reviewed in this chapter that a well-regulated financial system will lead to consumer confidence in the financial system and consumer participation in the stock market.

2.7 STOCK MARKET ACTIVITY IN AFRICA

In the years following the global financial crisis of 2008, international investors began paying attention to emerging markets, particularly African markets (Patel, McKay, Janse van Rensburg & Bhagwan, 2014:6). According to Patel *et al.* (2014), many factors make the African continent an attractive destination for investors; these factors include more favourable economic growth, population dynamics and moderate debt levels than developed markets. In addition, Africa's favourable demographic profile, rapid urbanisation, the rise of the African consumer and its improving political outlook as well as its governance frameworks all strengthen the case for investing in Africa (Patel *et al.*, 2014:6).

African stock markets are still small compared to stock exchanges in other emerging markets, and they are dominated by a few large firms (Andrianaivo & Yartey, 2009:7). Moreover, shares in some stock markets are rarely traded and there are large gaps between buy and sell orders, except in SA, Egypt and, to some extent, Nigeria (Andrianaivo & Yartey, 2009:7). According to Andrianaivo and Yartey (2009), the low liquidity on African stock markets implies more difficulty in supporting a local market with its own trading systems, market analysis and brokers because business volume is low.

Improvements in stock market development have seen several African countries implementing policies to encourage capital market growth. Ghana, Kenya, SA and the stock exchanges of eight West-African countries are lowering barriers to entry for small firms, with the aim of expanding the pipeline of new listed companies (ASEA Annual Report, 2018). The stock markets across the continent recorded 28 initial public offerings (IPOs) in 2018, which raised \$2.9bn (approximately R43.5 billion), and 98 further offerings, which raised \$10.6bn (approximately R159 billion) on African capital markets (PwC Report, 2018, as cited in Menon, 2018:1).

The Absa Africa Financial Markets Index (AAFMI) (2018) evaluates financial market development in 20 African countries. It highlights countries' growth prospects with the

view to show how countries can improve their ways of doing business so as to meet the yardsticks for investor access and sustainable growth. The Index assesses countries according to the following six pillars: market depth, access to foreign exchange, tax and regulatory environment and market transparency, capacity of local investors, macroeconomic opportunity and enforceability of financial contracts, collateral positions and insolvency frameworks (AAFMI report 2018:15).

According to ASEA Annual Report (2018) African countries are advancing policies that support the development of financial markets across the continent. Furthermore, SA is introducing a Twin Peaks approach for improving financial regulation, and the 'financial sector development strategy' introduced in Mozambique stands out amongst the frameworks introduced in 2017. The greatest area for improvement in Africa remains the capacity of local investors, as well as the lack of knowledge and expertise of pension fund trustees and other asset owners. Investor education is a major component of these countries' financial development frameworks (AAFMI report 2018:15). One way of achieving this is the introduction of an alternative market for small and medium-sized enterprises. Rwanda, Botswana and Ghana are among the leading countries in introducing steps to bring firms into the formal sector, and to encourage them to list on alternative exchanges, while providing significant education and training to these firms regarding stock markets and the benefits of listing (ASEA Annual Report, 2018).

According to Minney (2019), Africa's stock exchanges, regulators, central banks, stock brokers and clearing systems are working together on the African Exchanges Linkage Project (AELP). The aim of the project is to create a trading and information link between seven leading securities exchanges in Africa. The linkage project is a venture between the African Development Bank and the African Securities Exchanges Association, with the aim of facilitating cross-border trading and settlement of securities, unlocking investment flows, promoting innovation and diverse investments, and addressing the lack of depth and liquidity in Africa's stock markets (Minney, 2019:2; ASEA Annual Report, 2018:3).

Regional integration is key to the development of African stock markets as the linking of seven exchanges in Africa would collectively have a market capitalisation of over US\$1.4 trillion (approximately R21 trillion). In addition, it will stimulate intra African

flows and provide participation opportunities for consumers and trading participants in over fourteen African countries (Minney, 2019:2; ASEA Annual Report, 2018:3). Furthermore, the African Exchanges Linkage Project will contribute to a wider financing pool for African firms and help close the infrastructure gap, which is estimated at US\$67 – 107 billion (approximately R980 billion – R1.57 trillion) annually.

According to ASEA Annual Report (2018), the Committee of SADC Securities Exchanges (CoSSE) aims to implement SADC ideals of close linkages between the region's capital markets. At the same time, Ghana, Ivory Coast, Nigeria and the regional BRVM are looking at ways of aligning their exchanges to allow stock brokers from each country to trade directly on any of the other stock exchanges through the West African Capital Markets Integration programme. A SADC committee of securities exchanges is pushing capacity building initiatives to stimulate cross-border trades which also includes harmonising listing requirements and improving data dissemination (Minney, 2019:2; ASEA Annual Report, 2018:3). Governments should continue to create enabling environments that encourage investment, economic growth and development, while regulation should follow market needs and focus on supporting development as favourable regulatory frameworks are essential for sustainable economic growth (ASEAS Annual Report, 2018:3).

It is evident, from the literature reviewed, that stock market activity in Africa has gained momentum and the investment environment is improving and becoming conducive for consumer participation.

2.8 SUMMARY

This chapter discussed the concept of shares and elaborated on the different types of shares. The development and historical journey of the world's major stock exchanges has been explained here. Furthermore, the history and the development of the JSE as well as statistical information of its contribution to the economy was outlined in this chapter. The chapter further outlined the stock market environment, its role players, and highlighted the role of stock markets in the development of a country's economy. The role of the JSE, as a public company which allows individual investors to purchase and hold shares, was also discussed in this chapter. The role of the JSE as an economic transformation mechanism was also discussed herein. The chapter

introduced the ZAR X, which is a newly licensed stock exchange in SA, and highlighted the proposed changes to the country's regulatory environment through the implementation of the Twin Peaks model and the RDR.

If consumers aim to invest in shares via the JSE, consumers need to be aware of the investment environment and realise that they are part of the financial system. Since this study focuses on consumer investment relating to stock market participation, Chapter Three provides a theoretical overview of the investment environment and financial planning. The chapter will also discuss the financial system as well as aspects of risk and uncertainty as relevant to consumer investment. In addition, the chapter will highlight investment advice and financial planning as service models.

CHAPTER THREE

OVERVIEW OF THE INVESTMENT ENVIRONMENT AND FINANCIAL PLANNING

3.1 INTRODUCTION

Chapter Two of this study includes a historical background of the JSE. Chapter Two also gave a brief overview of some of the world's major stock exchanges, the role of a stock exchange in a country, its contribution to economic development and the listing requirements for companies specifically wanting to list on the JSE. The chapter explored the regulatory environment under which the JSE, its members and various stakeholders participate, and concluded by highlighting stock market activity in Africa.

Since the focus of this study is on consumer behaviour regarding participation in the stock market, this chapter provides a theoretical overview of the investment environment and financial planning. This chapter focuses on the financial decisions of households and the investment environment in which consumers make these decisions, the financial system, financial market instruments as well as financial intermediaries. The chapter also elaborates on risk and uncertainty in the context of consumer investments. Investment theories and strategies are also discussed herein. The chapter concludes with a discussion on investment advice and financial planning. Specifically, aspects of the financial planning process as well as the role of financial advisers/planners as key role players in consumer participation in the stock market are highlighted in this chapter. Practice management of financial planners, as a service model, is elaborated upon in this chapter.

3.2 THE INVESTMENT ENVIRONMENT

Since the focus of this study is on investigating consumer behaviour regarding participation in the stock market, it is important to discuss the investment environment in which consumers participate. The next section defines investment and the investment environment as employed in this study.

3.2.1 Defining investment

According to Bodie, Merton and Cleeton (2009), an investment refers to the way in which a consumer chooses to keep a collection of accumulated savings; moreover,

an investment is expected to generate a stream of future cash flows (Eklund, 2013:22). Similarly, Reilly and Brown (2011:5) define an investment as the current commitment of money for a period in order to derive future payments that will compensate consumers for the time they are willing to defer consumption, the expected rate of inflation and the unpredictable nature of investments.

This definition considers investments such as investments in plant and equipment, as well as consumer investments shares and immovable property. According to Reilly and Brown (2011:5), the potential investor is transacting a known amount at present for some expected future stream of payments that will be greater than the current financial outlay. Although a potential investor can be an individual, a government, a pension fund or a corporation, this study focuses on the individual consumer, that is, the retail investor.

It is evident from the above definition that, in the context of SA, an investment is the current commitment of Rands for a period of time in order to generate future earnings that will compensate the consumer for the time and risk with an expected return.

3.2.2 Defining the investment environment

Weingast (1992:8) defines an investment environment as policy, regulatory and institutional elements that provide incentives to attract the private sector to invest money in socially desirable projects. Similarly, Lisauskaite (2010) defines the investment environment as the existing investment vehicles in the market available for the consumer to transact. According to Li (2013:46), in the investment environment, consumers do not have sufficient and required information; therefore, consumers with knowledge about investment principles are likely to make better informed investment decisions. Therefore, consumers who do not have knowledge about financial investments remain vulnerable to manipulation and exploitation in terms of their financial decisions. Consequently, the principle of utmost good faith must be exercised, and full disclosure must be made regarding information relevant to consumers; this will place consumers in an informed position from which they are able to evaluate the possible risks and returns of a proposed financial plan, thereby protecting their interests (Van Wyk *et al.*, 2016:114). Similarly, Bodie *et al.* (2009)

concur that, in order to make informed choices about financial investment decisions, consumers ought to have a basic understanding of how the financial system works.

3.2.3 Financial investment decisions of consumers

According to Bodie *et al.* (2009:5), households face the following four basic types of financial investment decisions:

- consumption and saving decisions, which entail how much consumers should spend on consumption and how much of their current income should be spent on savings for the future;
- investment decisions, which consider how consumers should invest the money they have saved;
- financing decisions, which look at how households should use money to implement their consumption and investment plans; and
- risk management decisions, which focus on financial investment uncertainties faced by households.

Kumar (2013) states that, in response to the need to secure their financial future, consumers gather a portfolio of financial investments which are held in any number of different assets, such as bank savings accounts or shares, and investing funds into their own homes. Since investing is usually long-term oriented, consumers ought to set investment objectives against which they measure their success or failure.

3.2.4 Investment objectives

This study aims to investigate consumer behaviour regarding participation in the stock market. It is thus important to discuss the investment objectives set out by consumers when they embark on the investment journey, which could include stock market participation. According to Ikeobi, Msheliza and Bulus (2017:87), consumers have diverse reasons why they invest in the stock market although there is usually one dominant objective, with other potential objectives having less significant weight in their decision-making. The investment objectives of consumers refer to what they hope to achieve with their investment. According to Ikeobi *et al.* (2017: 82), objectives define the purpose of investing, thus, a consumer may invest for future financial security or invest in order to have funds available for their children's education.

Similarly, Bodie *et al.* (2009:8) suggest that a careful needs analysis and consumer risk profile should precede any discussion of investment objectives as it makes little sense for a consumer who is risk averse to invest in high risk assets. In addition, investors take the risk of investments into consideration as investors' investment objectives are closely tied to their risk tolerance.

In a study of the Nigerian retail investor, findings reveal that the primary investment objective of retail investors in the Nigerian stock market is financial security; furthermore, when an investor defines his or her investment objectives, it helps to determine the type of investment to be selected and the requisite plan of action in order to achieve the objectives (Ikeobi *et al.*, 2017:87). Successful investing should be preceded by setting measurable and attainable investment objectives and developing a plan for executing those objectives (Vanguard Asset Management, 2016:16).

According to Dawes (1998), cited in Crankshaw (2006), consumers consider current personal and financial information in order to determine future financial objectives and to develop a financial plan that would allow them to meet these objectives. Once the financial plan is implemented, it is reviewed on a regular basis so as to assess progress towards these goals and adjust them as the consumer's personal and financial information changes (Dawes, 1998:4). The process can be illustrated using an example of a consumer who, aged twenty-five, is currently earning a monthly income. If the consumer wishes to retire at the age of sixty-five, having set aside an amount of money to live off during retirement and be financially independent (Rattiner, 2010:46), the consumer should start to save the required amount every month until age sixty-five (setting a financial plan). However, if at age thirty the consumer decides to retire at age sixty with the same future financial objective, the amount of money which must be saved every month will increase, and the consumer needs to proceed by saving the new amount of money (review and adjustment of the financial plan) (Crankshaw, 2006:5).

Financial objectives for consumers may include preparation for life events such as death and disability as well as minimising the financial prejudice for remaining family members. In addition consumers may wish to prepare for financial independence at retirement, choose appropriate investments to build wealth, make provision for

unforeseen health care expenditure and provide for the education of one's children (Crankshaw, 2006:5).

Financial objectives are common to a broad spectrum of consumers in a modern economy such as SA. In order to achieve such, consumers require holistic financial planning. The FSP aims to assist consumers to develop a financial plan and select the correct financial products in order to achieve their investment objectives; the financial adviser or financial planner needs to review the plan with the consumer on an ongoing basis (Rattiner, 2010:4). Botha, du Preez, Geach, Goodall and Rossini (2017: 237) define a financial planner as "a person who provides a variety of services, principally advisory in nature, to consumers with respect to management of financial resources based on the analysis of individual consumer needs and goals".

3.2.5 Investment barriers

According to the European Investment Bank (2017), there are hurdles and investment barriers that influence and can affect a consumer's investment plan. Investment barriers slow down or reduce investment in the economy and diminish the productive capacity as well as suppress long-term economic growth of country (European Investment Bank (2017:3). Investment barriers include access to cash liquidity, an investment time horizon, tax factors, legal and regulatory challenges, and each consumer's unique circumstances (Reilly & Brown, 2011:43). Reilly and Brown (2011:43) name the following as investment barriers:

- liquidity needs: an asset is liquid if it can be quickly converted to cash at a price close to fair market value and, generally, assets are more liquid if buyers and sellers are willing to trade and accept a fairly standardised product. For example, treasury bills are highly liquid assets while immovable property and venture capital are not. Liquidity becomes a barrier where the demand of an asset is low and buyers are not readily available;
- time horizon: a close relationship exists between the time a consumer is willing to wait and defer their need for cash, and the ability to absorb risk. Investors with long investment horizons are generally more comfortable waiting, can tolerate greater portfolio risk and are less demanding of cash because the funds are usually not needed for the near future. They can absorb greater risk

because any shortfalls or losses can be overcome by returns earned in subsequent years. Investors with shorter time horizons generally favour more cash assets and less risky investments because losses are harder to tolerate and absorb during a short time frame. Time horizon becomes a barrier when investors are not willing to defer their consumption or to stay an investor for the complete course of the investment time horizon;

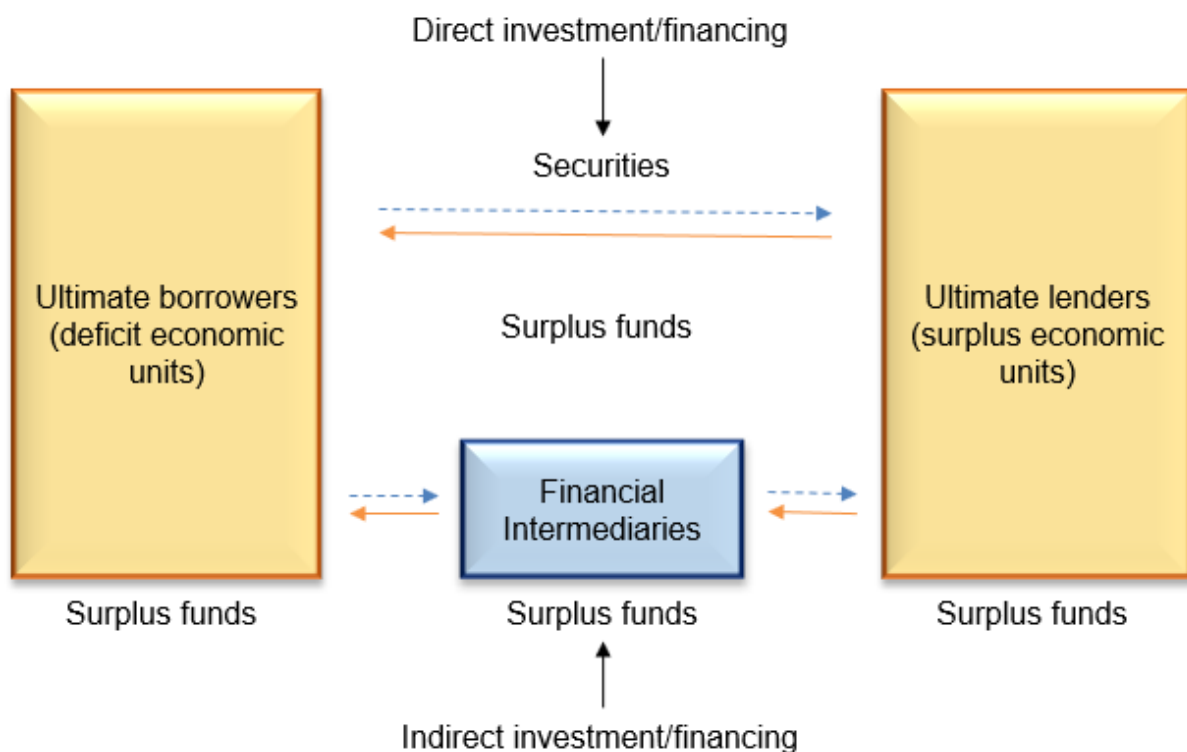
- tax concerns: there are tax implications on all investments, and taxes often raise complications even more so if international investments are part of the portfolio. According to SARS (2019), taxable income from interest, dividends or rent is taxable at the investor's marginal tax rate. Tax becomes a barrier to financial investments in cases in which investors are discouraged from investing in, for example, investments liable to capital gains tax (CGT). It is evident that tax concerns can be barriers to investments.
- the regulatory environment: the investment process and financial markets are highly regulated and, as such, legal and regulatory factors constrain the investment objectives of consumers and institutions; and
- consumer financial needs: individual needs and unique financial circumstances should be considered when deciding on the most appropriate investment option. Some investors may prefer high risk investments solely based on preference. Executives for example, may prefer to let a trusted advisor manage their investments while retirees may have the time to consider investment options themselves. However, retirees believe that they lack the expertise to choose and monitor investments, so they may also seek professional advice. It is evident that demographic characteristics such as age, income level or occupational status can be barriers to financial investments since these can determine specific financial needs.

It is therefore important to point out that financial investments and participation in the stock market are expected to take place in an environment in which there is a well-established financial system. The next section will define the financial system and further elaborate on the various elements of the financial system as well as the relevant role players therein.

3.3 FINANCIAL SYSTEM

According to Faure (2013:8), the financial system is a set of arrangements that embrace the lending and borrowing of funds, and the intermediation by financial intermediaries to facilitate the transfer of funds. Howells and Bain (2007) refer to the financial system as a set of markets for financial instruments, consumers and firms that transact in those markets with regulators of the system. Van Wyk *et al.* (2016) concur that the financial system is a set of arrangements which involve the lending and borrowing of funds by non-financial economic units and the intermediation of this function by financial advisers/planners. Additionally, Bodie *et al.* (2009) describe the financial system as encompassing the markets, intermediaries, service firms and other institutions used to carry out the financial decisions of consumers, firms and the government. Figure 3.1 shows a simplified version of the role players in the financial system, namely, the lenders, borrowers and financial intermediaries.

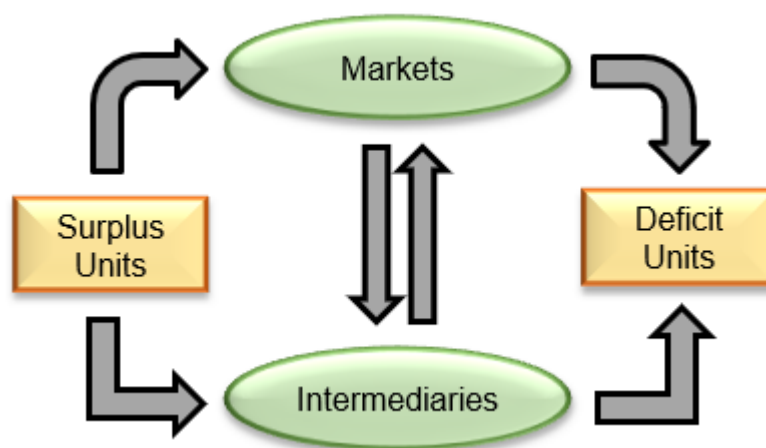
Figure 3.1: Financial system



Source: Adapted from Van Wyk *et al.* (2016:4).

As evident from Figure 3.1, the financial system consists of players who play complementary roles in order to ensure a smooth flow of investment funds. There are lenders with surplus funds and borrowers with an appetite for debt; these two players are brought together by financial intermediaries (Van Wyk *et al.*, 2016:4). Accordingly, funds within the financial system flow from those that have more than enough to those that have a deficit; for example, a household that is saving a portion of its current income for retirement has a surplus of funds whereas another household seeking to buy a house has a deficit (Van Wyk *et al.*, 2016:3). A firm with profits greater than it requires for business recapitalisation is a surplus unit, whereas another firm that needs to finance a major expansion is a deficit unit (Reilly & Brown, 2011:48). Figure 3.2 illustrates the interactions amongst role players in the financial system and the flow of funds.

Figure 3.2: The flow of funds between surplus and deficit units



Source: Adapted from Bodie *et al.* (2009:25).

As is evident in Figure 3.2, funds flow from surplus units to the deficit units through financial intermediaries, such as banks, whereas some funds flow through the financial markets without going through a financial intermediary. Consequently, to illustrate the flow of funds, a consumer who is in a surplus unit buys shares from a company which is a deficit unit and, therefore, is issuing shares.

A stock broker, who acts as an intermediary, would be involved in this flow of funds by collecting the money from the consumer and transferring it to the issuing company in

addition to offering investment advice (Magliolo, 2012). A large part of the funds flowing through the financial system, however, never flow through markets. Instead, as illustrated in Figure 3.2, funds flow from surplus units to deficit units through financial intermediaries (Reilly & Brown, 2011:49). Figure 3.2 also illustrates that intermediaries often channel funds into the financial markets; for example, a middle-aged couple saving for retirement (surplus unit) may invest its savings in an insurance company account (intermediary) which then invests its funds in shares and bonds. Through the insurance company, the couple indirectly provides funds to the company (deficit units) issuing the shares and bonds (Reilly & Brown, 2011:49). In addition to channelling funds into financial markets, some intermediaries obtain funds for the financial markets. A FSP that makes loans to consumers might, for instance, raise those funds by issuing shares and bonds on the stock market (Bodie *et al.*, 2009:24).

The following section seeks to identify and elaborate on the financial market instruments available to consumers.

3.3.1 Financial market instruments

Consumer participation in the stock market is dependent on the availability of tradable financial instruments. This section will discuss a wide array of financial instruments that exist (Van Wyk *et al.*, 2016:10) as a result of the process of financial intermediation and the need to satisfy the investment requirements of lenders and financial intermediaries. According to Taw (2015:4) and Darskuvienė (2010:11), financial instruments are classified as financial assets; these instruments are classified by their value to the investor. According to Parameswaran (2011), a financial instrument is a financial asset that is tradable; moreover, the key differentiator between assets is the maturity of the claims being traded. Some of the basic types of financial assets are:

- debt instruments issued by parties who borrow money, including companies and the government, such as corporate bonds, government bonds, residential and commercial mortgages and consumer loans (Bodie *et al.*, 2009:24). The other term used for debt instruments is fixed income instruments because they promise to pay fixed sums of cash in the future (Meir, 2003:67, Bodie *et al.*, 2009:24);

- money market instruments, which are mostly interest earning securities issued by governments, such as Treasury Bills;
- derivatives are financial instruments, the values of which depend on the value of other basic underlying variables such as shares, equity indices, bonds and commodities (Deloitte Investor Education, 2016:6). Darskuvienė (2010:11) and Parameswaran (2011:23) concur that derivatives are financial instruments with a value that is reliant upon other assets such as shares or bonds. Amongst the most common types of derivatives for short-term debt is the money market, and longer-term debt and equity securities are traded within the capital market (Parameswaran, 2011:23). The core function of derivatives is to serve as instruments for managing exposure to the risks associated with underlying assets; the most common types of derivatives are options and forward contracts (Parameswaran, 2011:23; Hunt & Terry, 2018:187). A call option is an instrument that empowers its holder the right to buy some asset at a specified price, or before some specified expiration date (Parameswaran, 2011:23). A put option is an instrument that gives a consumer the right to sell some assets at a specified price or before some expiration date (Meir, 2003:68). When the holder of an asset buys a put option on that asset, he or she is effectively insuring it against a decline in its price (Parameswaran, 2011:23). Forward contracts are instruments that oblige one party to the contract to buy and the other party to sell some asset at a specified price on some specified date (Bodie *et al.*, 2009:24; Hunt & Terry, 2018:187). Forward contracts permit buyers and sellers of the asset to eliminate the uncertainty about the future price at which the asset will be exchanged (Bodie *et al.*, 2009:24; Hunt & Terry, 2018:187).

These financial assets are relevant since the JSE, one of the focus areas of this study, is a platform where all these assets are traded. In SA, consumers can participate in the stock market through registered stock brokers or financial advisers/planners (Magliolo, 2012), commonly referred to as financial intermediaries. Therefore, for the purpose of this study, it is important to outline the nature of financial intermediaries who provide financial services to consumers.

3.3.2 Financial intermediaries

Consumers participate in the stock market indirectly through financial intermediaries (Allen & Gale, 2003:7). According to Parameswaran (2011:22), a financial intermediary is a FSP that helps to ensure that the transaction of funds is made available to borrowers. Pettinger (2017) defines a financial intermediary as a financial institution such as a bank that helps to facilitate the needs of lenders and borrowers. Similarly, Allen and Gale (2003:7) define an intermediary as an institution that invests on behalf of consumers. Moreover, Bodie *et al.* (2009:58) suggest that financial intermediaries are individuals and companies whose primary business is to provide consumers with financial products and services that cannot be obtained more efficiently by transacting directly in the stock market. Amongst the main types of intermediaries are banks, investment companies and insurance companies (Bodie *et al.*, 2009:58; Pettinger, 2017:132). Consumers participate in the stock market through these intermediaries. It is believed that banks are the largest and oldest financial intermediaries in terms of assets under their management (Rothbard, 2002:58). According to Rothbard (2002), the first recorded history of banks can be traced back to renaissance Italy; at the time, their main function was to serve as a mechanism for clearing and settling payments, thereby facilitating the trade in products and services that had started to flourish in Italy during the renaissance.

Due to the globalisation of the financial markets, the financial system is now global in scope. As a result, the markets, FSPs and intermediaries are linked through a vast international telecommunications network so that the transfer of payments and the trading of shares can be done at any time of the day (Bodie *et al.*, 2009:24). The National Treasury assesses remuneration models of financial advisers/planners on an ongoing basis in order to reinforce the objectives of the FAIS (FSB, 2014:23). The remuneration model which causes National Treasury most concern is that in which financial planners receive upfront commissions from companies offering financial products after the selling of a product (Cameron, 2006:11). It is the view of National Treasury that this remuneration model undermines the relationship between financial advisers/planners and individuals as it encourages inappropriate personal financial planning. It is the stated intent of National Treasury that commissions should be paid on an on-going basis so that the financial adviser/planner is encouraged to give continual advice about financial products sold (Cameron, 2006:11). The implications

of these changes are not yet fully understood, but have the potential to affect the way financial advisers/planners apply practice management principles (Crankshaw, 2006:5).

A financial adviser/planner takes individuals through a consultative financial planning process to identify the individual's future financial goals (Rattiner, 2010:48). The financial planner then makes recommendations to the individual about financial products which are the most appropriate to use to achieve the future financial goals, and assists the individual with the implementation of the new financial product (Crankshaw, 2006:5). Once the financial product is in place, the financial adviser or financial planner will review the progress of the personal financial plan with the individual on a regular and ongoing basis (Mao, 2017:6). The review is necessary because the personal and financial objectives of the consumer can change, thus requiring adjustments to the plan. The financial adviser or financial planner is then able to advise the consumer on the effect of the changes and recommend adjustments to the plan so that it continues to meet the individual's financial objectives (Rattiner, 2010:48). According to MoneyWeb (2016), there are an estimated 30 000 financial advisers/planners in SA, which is more than double the number in 2004 which saw only 14 500 financial advisers/planners in the country (Crankshaw, 2006:5).

In this study, it is noted that consumer participation in the stock market can also be done through insurance companies. The role of insurance companies is to allow consumers and businesses to shed specific risks by buying contracts labelled insurance policies, that will pay out cash compensation to them if certain specified events occur (Wiening, 2002:96; Ndenka, 2014:11). These firms act as brokers and intermediaries whose primary function is to link consumers with service providers. According to Wiening (2002) and Ndenka (2014), insurance policies are assets of the households and firms that buy them; at the same time, they are liabilities of the insurance companies that sell them. Payments made to insurance companies for the insurance they provide are called premiums; insurance companies grow and invest the premiums they collect in assets such as shares, bonds and real estate on behalf of their shareholders or members (Wiening, 2002:96; Ndenka, 2014:11).

As highlighted in this study, consumers can participate in the stock market through registered pension funds. Therefore, the role of pension funds as intermediaries is

elaborated upon in this section. The function of a pension, or a retirement annuity plan, as it commonly known in SA, is to provide pension benefits to consumers upon retirement; these benefits can be sponsored by an employer, a labour union or the consumer (Bodie *et al.*, 2009:58). Employer pension plans are classified into two types: defined contribution and defined benefit (Stoltzfus, 2016:8). In a defined contribution pension plan each employee has an account into which the employer and, usually, the employee make regular contributions (Stoltzfus, 2016:8). At retirement, the employee receives a benefit – the size of which depends on the accumulated value of the funds in the retirement account (Stoltzfus, 2016:8). In a defined benefit pension plan the employee's pension benefit is determined by a formula that considers year of service to the employer and, in most cases, wages or salary; in this option, predetermined benefits are paid upon reaching retirement age (Bodie *et al.*, 2009:58).

Consumers can also participate in the stock market by investing in unit trusts, which can be bought from financial intermediaries such as banks and insurance companies. A unit trust is a portfolio of financial assets put together in the name of a group of consumers; it is managed by a professional investment company or by fund managers. Each consumer is entitled to a pro rata share of any distributions and can redeem his or her share of the fund at current market value (Wiening, 2002:101; Tsaurai, 2015:401). Investors are effectively shareholders in the fund in proportion to their investment; however, they must normally also pay various service and administrative fees, which include, in some cases, a charge to redeem their money (Wiening, 2002:96; Tsaurai, 2015:401)

Apart from banks, stock brokers and insurance companies, consumers can also participate in the stock market through other financial intermediaries such as investment banks, venture capital firms and asset or investment management firms. These financial intermediaries are briefly discussed below.

According to Williamson (1988:103) and Fohlin (2014:7), investment banks are FSPs whose primary function is to help business, governments and other entities raise funds to finance their activities by issuing securities. Investment banks also facilitate and sometimes initiate the mergers of firms or acquisitions of one firm by another, and they often underwrite the securities they distribute (Fohlin, 2014:7). In countries such as the UK these are called merchant banks; they offer a wide array of specialised services

for firms and large investors, including underwriting and advising on securities issues and other forms of capital raising, mergers and acquisitions, trading on capital markets, research, private equity investments and, as such, the bank trades and invests on its own account (Williamson, 1988:103; Fohlin, 2014:7).

Venture capital firms are like investment banks, but with a more opportunistic outlook since their clients are start-up firms rather than large firms (Christofidij & Debande, 2001:6; Cherif & Elouaer, 2008:57; Abdulsaleh, 2016:47). Venture capitalists invest their funds in new businesses and turnkey projects providing management and leadership capabilities, to help management teams get firms to the point at which they are ready to go public and to sell shares of stock to the investing public. Once that point is reached, the venture capital firm will typically divest its stake in the firm and move on to the next new venture or green field project (Williamson, 1988:112; Abdulsaleh, 2016:47). According to Gough (2012) and Davis (2016:9), asset management firms are also called investment management firms; their sole mandate is to advise and often administer mutual funds, pension funds and other asset pools for individual consumers, firms and governments. Asset management firms may, depending on their business model, be separate firms or they may be a division within a firm such as a trust company that is part of a bank, insurance company or brokerage company (Williamson, 1988:103; Davis, 2016:9).

Different financial service providers provide information such as investment news and financial product information as part of their core business, although there are other firms that specialise solely in the provision of financial investment news and product information (Bodie *et al.*, 2009:58). The oldest information service firms are ratings agencies such as Moody's and Standard & Poor's for the securities business, and Best's for the insurance industry. A more recent growth sector is companies offering analysis of financial data, such as Bloomberg and Reuters, or those providing performance statistics on funds, such as Morningstar (Bodie *et al.*, 2009:58). The financial system, including the various financial instruments and intermediaries are important to understand, since these influence consumers' stock market participation. However, it is evident from the literature reviewed that participation in the stock market involves some element of risk and uncertainty.

3.4 RISK AND UNCERTAINTY

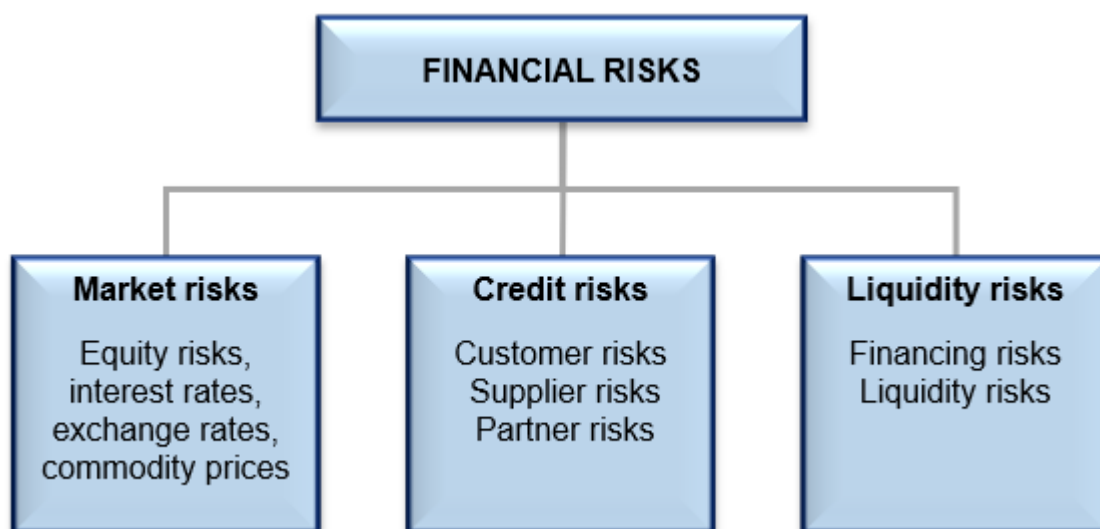
Since risk and uncertainty are incorporated during the consumer's financial investment decision-making process, stock market participation should be viewed in the context of consumer behaviour in a state of risk and uncertainty (Kaczmarek, 2015:145; Van Wyk *et al.*, 2016:204). All risks are ultimately borne by people in their capacity as consumers; decisions such as investing in the stock exchange are significantly influenced by the presence of risk and are, therefore, partly risk management decisions (Van Wyk *et al.*, 2016:204). The investment environment can be classified according to the way in which consumers interface with service providers and make decisions. The three most widely known states in which consumers must make decisions are: certainty, uncertainty, or risk (Van Wyk *et al.*, 2016:204). The point of departure would be a clear distinction between risk and uncertainty. It is an axiom of financial investments that investment with the highest returns have the highest risks and, conversely, the safest investments have the lowest returns (Vanguard Asset Management, 2012). All financial decisions involve risk and return trade-offs (Lintner, 1967:215; Van Wyk *et al.*, 2016:204).

It is thus evident that the lower the investment risk, the lower the return on investment; inversely, the higher the risk, the higher the return on investment. Investments with the highest returns have the highest risks and, conversely, conservative investments have the lowest returns. Since benefits from returns generated by investments are realised as investment flows, there is a possibility that the actual return will be different from the expected return. Van Wyk *et al.* (2016) argue that certainty is a condition that exists when an individual consumer has exposure to perfect information regarding the outcome of their financial decisions and consumption choices. In contrast, uncertainty is a situation in which a consumer does not possess perfect information nor any probabilities associated with the occurrence of a specific outcome (Van Wyk *et al.*, 2016:204). The third state of risk falls between the extreme situations of certainty and uncertainty, since risk is a situation that exists when perfect information is unavailable to a prospective investor although the probabilities associated with all outcomes are known. Bodie *et al.* (2009:268) suggest that uncertainty exists whenever a consumer of a financial product does not know for sure what will occur in the future, whereas risk is uncertainty that matters because it affects people's welfare; this means that uncertainty is necessary but not a sufficient condition for risk. In every risky situation

there is uncertainty but there can also be uncertainty without risk (Bodie *et al.*, 2009:268).

Economists have explained and categorised an investor's attitude towards risk as either risk averse, risk preferring, or risk neutral. A consumer is risk averse if the expected utility they receive from the outcome associated with a risky choice is less than the utility they receive from a certain outcome, which is equal to the expected or mean outcome associated with the risky choice (Woods & Dowd, 2008:5). Financial risks expose consumers to the possibility of losses arising from the failure to achieve a financial objective (Woods & Dowd, 2008:5). The risk highlights uncertainty regarding share prices, credit quality, liquidity, and a firm's access to financing (Zurich Active Solutions, 2014:11). These financial risks are not necessarily independent of each other; for instance, exchange rates and interest rates are often strongly linked. This interdependence should be recognised when managers are designing risk management systems (Bodie *et al.*, 2009:287). Financial risks can be subdivided into distinct categories such as those indicated in Figure 3.3.

Figure 3.3: Categories of financial risks



Source: Adapted from Woods and Dowd (2008:5).

Figure 3.3 shows that, for customers, there are financial risks that result from possible market risks, credit risks and liquidity risks. Market risks can occur due to losses from changes in future market prices or rates. Price changes will often relate to interest or

foreign exchange rate movements, but also include the price of basic consumer products that are vital to the firm (Woods & Dowd, 2008:5). Credit risks are financial risks associated with the possibility of default by a counter-party; these risks arise because consumers fail to pay for products supplied on credit (Vanguard Asset Management, 2012). This risk exposure increases significantly when a firm relies heavily on a small number of large customers who have been offered access to a significant amount of credit. The importance and relevance of credit risk varies between sectors, and is high in financial services, where short- and long-term lending are basic to a firm's business model (Woods & Dowd, 2008:5). Similarly, financing, liquidity and cash flow risks affect a firm's credit worthiness, which is the ability to obtain ongoing financing, such as gaining access to credit from its bank. Liquidity risk refers to uncertainty regarding the capacity of a firm to meet obligations and the availability of sufficient funds to meet financial commitments when they fall due, whereas cash flow risks are related to the volatility of the firm's day-to-day operating cash flow (Bodie *et al.*, 2009:287).

Consumers' financial risk tolerance is relevant to possible participation in the stock market and, as such, risk management and ways to mitigate risk are discussed in this section. Bodie *et al.* (2009:287) define risk management as the process of formulating the benefit cost trade-offs of risk reduction and deciding on which course of action to take. The first step is risk identification, whereby the risk inherent in a firm is identified and acknowledged. The second step is to assess and profile the risk, and categorise said risk according to magnitude. The third step is the selection of the appropriate risk management techniques in order to address the nature of the risk. The fourth step is to implement and operationalise the risk mitigation strategy. The final step constitutes a review of the risk implementation so as to evaluate the effectiveness of the selected strategy. Moreover, Zurich Active Solutions (2014) identified the following four techniques of risk management: risk avoidance, loss prevention and control, risk retention and risk transfer. In addition, there are further ways of mitigating risk such as diversification, insuring and hedging. In this study, diversification, insuring and hedging are relevant techniques that consumers can use to mitigate investment risk; therefore, these three techniques are discussed below.

Diversification improves welfare by spreading the risk amongst many consumers so that the existing uncertainty is thinly spread and minimised (Vanguard Asset Management, 2012). Similarly, Williamson (1988) and Lundquist (2015:20) concur that diversification is when consumers spread risk by holding different classes of assets. However, in finance, it is believed that the level of risk associated with an asset is assessed based solely on the variability of its returns. In contrast, modern portfolio theory looks not only at an asset's level of risk, but also its contribution to the overall risk of the portfolio to which it is added with an opportunity to reduce its risk as a result of risk diversification (Williamson, 1988:103; Lundquist, 2015:20). According to Bodie *et al.* (2009:289), the addition of individual components to a portfolio provides opportunities for diversification, within limits, since a diversified portfolio contains assets with returns that are dissimilar to, or negatively correlated with, one another. According to Williamson (1988:103), Woods and Dowd (2008:6) as well as Lundquist (2015:21), diversification is key in managing financial risks and may alleviate the risk that unexpected events adversely have on an individual's consumer investments. Diversification amongst investment assets lessens the impact of loss if one issuer fails and if a business diversifies and segment customers appropriately; it also reduces the possibility that a firm will have its business adversely affected, which would result in consumers also being affected (Bodie *et al.*, 2009:289). Although the risk of loss still exists, diversification may mitigate the opportunity for large adverse outcomes.

Insurance can be an effective way of managing risk, and to be insurable a negative occurrence must be significant to cause financial prejudice to the insured if it occurs (Crane, Gantz, Isaacs, Jose & Sharp, 2013:12). According to Crane *et al.* (2013:12), insurance is the means of protecting against unexpected loss; in this regard, risk can be transferred through the purchase of an insurance policy from an FSP.

Van Mieghem (2009) believes that hedging is any action taken to mitigate exposure to a particular risk; it involves balancing the action of taking one risk to offset another. Similarly, Mittal, Khakhar and Mittal (2015) concur that hedging as a risk management strategy is used in limiting the probability of loss. In addition, hedging is a transfer of risk without buying insurance policies (Mittal *et al.*, 2015:3). Most firms hedge in order to reduce risk; furthermore, hedging becomes more effective as the frontier becomes flatter, so that risk reduction only comes with a small value loss (Van Mieghem,

2009:12). A risk management process enables a consumer to manage the risks associated with financial markets; this is a dynamic process that should evolve (Williamson, 1988:103; Lundquist, 2015:21).

It is evident from the literature reviewed that risk is inherent to the financial system. Consumers of financial investments should be aware of the risks involved in participating in the stock market and of the ways in which to mitigate the risks. In most countries, FSPs are required by law to assess the risk tolerance of investors before the investor engages in any trading activity (Roszkowski & Davey, 2010:42). Therefore, various investment theories and strategies are evident as having an impact on intermediaries and consumers – these are discussed below.

3.5 INVESTMENT THEORIES AND STRATEGIES

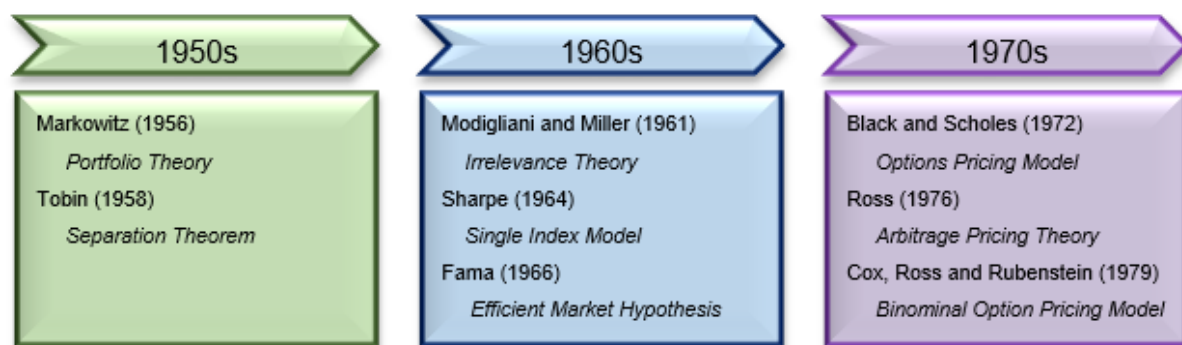
The next section will define and discuss investment theories that influence financial intermediaries, as well as the strategies commonly employed by financial intermediaries when investing in the stock market on behalf of consumers.

3.5.1 Investment theories

The roots of financial market theories carry Bernoulli's (1773) thinking, cited in Van Wyk *et al.* (2016:236), who has been credited as the first to theorise on decision-making under uncertainty (Van Wyk *et al.*, 2016:236). According to Bulsara, Desai and Miniaoui (2015:124), the behaviour of consumers of financial products can be influenced by many internal and external variables. Investment products, such as shares, have their own value irrespective and independent of financial advisers/planners and consumers. Ownership of shares belongs to the investors and, unlike any other consumer products, shares are intangible; moreover, the value of shares is intrinsic and relative as they can be sold or bought, at different periods of time and in different places (Bulsara *et al.*, 2015:124). Progress has been made to study and understand the financial markets as well as the securities exchange (Bulsara *et al.*, 2015:124). There are several theories that underlie the strategies that investors and financial intermediaries use as tools to understand how markets perform. These theories have led to the development of methods and models to value a wide variety of financial assets and derivative instruments that extend across time while imposing complex and opaque risks on investors (Van Wyk *et al.*, 2016:236).

Gough (2012:87) believes that there are many investment strategies offered by fund managers and other institutions. The 20th century saw a more robust articulation of the general theories (Van Wyk *et al.*, 2016:236), with major contributions to the existent theory, as depicted in Figure 3.4.

Figure 3.4: Time line of major investment theories



Source: Adapted from Van Wyk *et al.* (2016:236).

It is clear from Figure 3.4 that there has been significant development in investment theory over the years; in this study, reference is made to various investment theories and strategies. From those theories listed in Figure 3.4, the Markowitz Portfolio Theory and the Efficient Market Hypothesis have been found to be relevant to this study. These two theories assist in understanding consumers when making investments, as they cover aspects such as risk, uncertainty and financial knowledge. Therefore, these theories will be discussed together with other investment theories that have been found to be relevant to this study. These other theories are more recent theories which relate to behavioural finance, as relevant to this study, which considers consumer participation in the stock market.

3.5.1.1 Markowitz Portfolio Theory

Markowitz's (1952) Portfolio Theory provides the first rigorous measure of risk for investors as shows how consumers select alternative assets in order to diversify and reduce the risk of a portfolio (Reilly & Brown, 2011:201). It also developed a risk measure for individual shares within the context of an efficient portfolio (Reilly & Brown, 2011:201). A portfolio in financial investment and economics is referred to as a combined holding of investment, which normally includes more than one asset class,

as well as cash or cash equivalents (Pompian, 2015:34). When choosing a particular investment choice, consumers should have foresight of the features which their portfolio should possess (Pompian, 2015:34). These features and benefits should be adequately matched with the consumer's objectives and needs (Senthilkumar & Vijayabanu, 2012:36). Markowitz (1952), as cited in Bodie *et al.* (2009:5), derived the expected rate of return for a portfolio of assets and an expected risk measure which showed that the variance of the rate of return was a meaningful measure of portfolio risk under a reasonable set of assumptions and derived the equation for computing the variance of a portfolio. This portfolio variance formula indicates the importance of diversifying investments in order to reduce the total risk of a portfolio, and it shows how to effectively diversify. Markowitz's (1952) model assumes that consumers view each investment choice as being represented by a probability distribution of expected returns over some holding period (Bodie *et al.*, 2009:5). The model also assumes that consumers maximise on expected utility and calculate the risk of the portfolio based on the variability of expected returns. Consumers base decisions on expected gain and risk and, for a given risk consideration, consumers expect higher returns (Reilly & Brown, 2011:211).

Following these assumptions, a single asset or portfolio of assets is efficient if no other asset or portfolio of assets provides a higher expected return with a lower risk, or lower risk with a higher expected return (Reilly & Brown, 2011:211). Markowitz (1952) challenged the traditional view of the time, namely, that there is a portfolio of assets that gives both ultimate expected return and minimum risk, and that the focus of portfolio theory is fundamental. Instead, Markowitz (1952) proposed that consumers at portfolio level can gain expected return by taking on risk or reducing it (Van Wyk *et al.*, 2016:236).

3.5.1.2 The Efficient Market Hypothesis

The fundamental principle of the Efficient Market Hypothesis (EMH) is that the price of an asset reflects all available information and reacts only to new developments (Hunt & Terry, 2018:232). This theory is based on the work of Eugene Fama in the 1960s (Gough, 2012:89). Fama (1969) cited in Van Wyk *et al.* (2016) hypothesised that when major stock markets have many expert analysts and investors following every quoted company, the prices are constantly adjusted to account for everything

that is currently known about each company's prospects (Gough, 2012:89). This theory proposes that shares in the major markets are therefore correctly valued most of the time. What this implies is that investors should not bother trying to achieve better performance than the market, if it is truly an efficient market (Gough, 2012:89). The EMH presupposes that the prices of shares fully reflect all the available information and that all market players receive and act on all the relevant information as soon as it becomes available.

According to Bansal (2015:108), the EMH defines the parameters which clearly state that all information has already been reflected in a share's price or market value, and that the current price the share is at is its fair value. Since shares are at their fair value, proponents argue that active traders or portfolio managers cannot produce superior returns, over time, that beat the market (Pompian, 2015:34). Therefore, proponents of the EMH believe that investors should just own the "entire market" rather than attempting to "outperform the market" (Pompian, 2015:34). This premise is supported by the fact that the S&P 500 stock index beats the overall market approximately 60% to 80% of the time (Pompian, 2015:34).

According to Van Wyk *et al.* (2016:239), there are essentially three forms of the EMH:

- the weak form of the EMH claims that all past market prices and data are fully reflected in asset prices;
- the semi-strong form of the EMH asserts that all publicly available information is fully reflected in asset price returns; and
- the strong form of the EMH states that all information, both public and private, is fully reflected in asset prices.

3.5.1.3 Prospect Theory

According to Ricciardi and Simon (2000), Prospect Theory deals with the idea that certain consumers do not always behave rationally. This theory is premised on the idea that there are persistent biases motivated by psychological factors that influence people's choices under conditions of uncertainty (Ricciardi & Simon, 2000:4). Prospect theory views preferences as a function of "decision weights"; it assumes that these weights do not always match with probabilities. Specifically, prospect theory postulates that consumer investment decisions are always based on the possibility of

loss. Schwartz (1998) articulates that consumers tend to consider prospects or possible results in terms of gains and losses relative to some reference point rather than the final states of wealth. The theory demonstrates that, if faced with the possibility of losing money, consumers often take on riskier decisions aimed at loss aversion, although they may sometimes refrain from investing altogether (Schwartz, 1998:82). Consumers tend to reverse or substantially adjust their revealed disposition toward risk (Statman, 2015:124). Prospect theory has substantially contributed to the economics debate and discourse, however, it attempts to model the way people make decisions as opposed to simply relying on the utility decision-making strategies (Hammond, 2015:5).

3.5.1.4 Cognitive dissonance

Goetzmann and Peles (1997), as cited in Kainja (2016:65), examined the role of cognitive dissonance in unit trust investment consumers. Their findings indicate that some individual consumers may experience dissonance during the unit trust investment process, specifically, the decision to buy, sell or hold unit trusts. Other research has shown that investor money is allocated more rapidly to leading unit trust funds than it is to outflows from lagging funds (Goetzmann & Peles, 1997:46; Kainja, 2016:65). Essentially, investors in unit trusts that are not performing are not willing to admit that they made a “bad investment decision” since individuals will attempt to reduce inner conflict and try to decrease dissonance by changing past values, feelings, or opinions, or by attempting to justify or rationalise their choice (Goetzmann & Peles, 1997, as cited in Kainja, 2016:65).

Cognitive dissonance may apply to stock market participants who attempt to rationalise contradictory behaviours so that they follow naturally from personal values or viewpoints. Furthermore, the buying and selling of shares based on price momentum while ignoring basic economic principles of supply and demand is known, in the behavioural finance arena, as herd mentality (Ricciardi & Simon, 2000:4).

3.5.1.5 Theory of Regret

According to Bell (1982), as cited in Shiller (2015:166), the theory of regret postulates that a consumer validates his or her expected reactions to a future event or situation. Bell (1982) described regret as the emotion caused by comparing a given outcome or

state of events with the state of a foregone choice. For instance, when faced between choosing an unfamiliar product and a familiar product, a consumer might consider the regret of finding that the unfamiliar product performs more poorly than the familiar product; the consumer would thus be less likely to select the unfamiliar product (Inman & McAlister, 1994:423; Shiller, 2015:166). The theory can also be applied to the area of investor psychology within the stock market whereby consumers contemplate buying shares or unit trusts, and purchasing the intended security will cause the investor to experience an emotional reaction (Inman & McAlister, 1994:423; Shiller, 2015:165). Consumers may avoid selling shares that have declined in value in order to avoid the regret of having made a bad investment move and the discomfort of reporting the loss (Inman & McAlister, 1994:423; Shiller, 2015:166). It is evident from the literature that consumer investment decisions can be influenced by consumer behaviour. To further elaborate on the correlation between financial decision-making and behaviour, the subject of behavioural finance will be discussed in Chapter Four.

3.5.2 Investment strategies

Financial intermediaries use investment strategies as tactics to analyse listed companies and the performance of shares, as well as to construct financial portfolios suitable for consumers' investment profiles. These strategies are used when financial intermediaries invest on the stock market on behalf of their consumers.

3.5.2.1 *Fundamental analysis*

Patel (2014:55) defines Fundamental Analysis as a method of securities research that focuses on a company's fundamentals, such as its operational and financial situation, as well as prospects, rather than the level of its share price relative to the market. Fundamental analysis focuses on elements such as earnings, revenue, cash flow, debt, acquisitions, product development and the regulatory environment in order to arrive at a fair value for a stock (Patel, 2014:55). For Gough (2012: 88), fundamental analysis begins with a firm trying to establish what its shares ought to be worth, which may have little to do with the current share price. The prospects for the industry are examined and then the accounts, records, economic prospects and management plans of companies within that industry are reviewed for comparison (Patel, 2014:55). Analysts then prepare detailed estimates of future sales, overheads, accounting

policies and a host of other factors that might affect profits. Therefore, fundamental analysis aims to reflect a rational estimate of value, based on the thorough analysis of a business entity in a quantifiable manner (Gough, 2012:88).

3.5.2.2 *Index investing*

It is useful to have a measure of the overall level of share prices of listed shares on the stock market; for example, people holding shares might want an indicator of the current value of their investment to bench mark against the performance of their own investment shares (Bodie *et al.*, 2009:41). Indexing is an investment approach that seeks to match the investment returns of a specified stock market index; when indexing, a fund manager attempts to mimic or replicate the investment outcomes of the target index by holding all the securities in the index (Bodie *et al.*, 2009:41). Indexing is therefore a passive investment approach emphasising broad diversification and low trading activity while holding shares in all the companies of a given index in the same proportion as they are weighted in that index (Patel, 2014:98). Table 3.1 shows a list of the major stock indices generally reported in the international financial news for the stocks traded on major stock exchanges around the world.

Table 3.1: Major stock indexes around the world

Country	Indexes
China	Hang Seng
Europe, Australia, Far East	MSCI, EAFE
France	CAC 40
Germany	DAX
Japan	Nikkei, Topix
Switzerland	SMI
United Kingdom	FTSE-100, FTSE- ALL SHARE
United States of America	DJI, SP500

Source: Researcher's own construct.

Table 3.1 gives a view of some of the stock market indexes around the world that consumers can use to measure the overall level of share prices in the stock market.

In addition, consumers can use these as a bench mark against the performance of their own investment shares.

3.5.2.3 Technical analysis

Patel (2014:55) defines technical analysis as a method of predicting future movements in prices of shares in terms of volume and other variables rather than the fundamentals of the shares concerned. This is a collection of techniques which aim to predict future price movements based on repeating patterns that technical analysts claim to identify by studying historical price charts (Patel, 2014:55). Technical analysts are convinced that all the relevant market information is reflected or discounted in the price, except for shocking news such as natural disasters (Credit Suisse Report, 2010:3). The technical analyst looks at price changes that occur on a day-to-day or week-to-week basis, or over any other constant time, displayed in graphic form called charts. The technical analyst studies technical indicators derived from price changes in addition to the price charts, rather than fundamental issues (Credit Suisse, 2010:3). According to Reilly and Brown (2011:525), technical analysts base trading decisions on examinations of prior price and volume data in order to determine past market trends from which they predict the future behaviour of the market and for individual securities. Reilly and Brown (2011:525) make the following assumptions about price movements:

- the market value of any good or service is determined solely by the interaction of supply and demand. Shares that are listed on the stock market also respond to the principle of supply and demand; the more consumers participate in the stock market the more the price of shares change in response to the demand and supply factor;
- supply and demand are governed by numerous rational and irrational factors. Included in these factors are those economic variables relied on by the investment analyst as well as opinions. The market weighs all these factors continually and automatically;
- disregarding minor fluctuations, the prices for individual securities and the overall value of the market tend to move in trends, which persists for appreciable lengths of time; and

- prevailing trends change in reaction to shifts in supply and demand relationships. These shifts, no matter why they occur, can eventually be detected in the action of the market itself.

If fundamental news about a firm is positive, the price should rise; if the news is negative, the price should fall. However, long-term analyses of price changes in financial markets around the world show that such a correlation is present only in the short-term horizon and only to a limited extent, but it is non-existent on a medium and long-term basis (Credit Suisse Report, 2010:15).

3.6 INVESTMENT ADVICE AND FINANCIAL PLANNING

Chater, Huck and Inderst (2010) believe advice is ubiquitous in the financial investment industry and per a broad survey of investors in Germany established that more than 80% of investors consult a financial advisor. Further, a large cross-country survey in Europe showed that close to 90% of respondents in several countries specifically expect financial institutions to provide advice, and most consumers say that they trust the advice they receive (Chater *et al.*, 2010:4). Survey data from UK suggest that 50% of private pension purchasers received advice where the advisor recommended a product and often arranged a sale (Chater *et al.*, 2010:4). In the USA, people overwhelmingly purchase unit trusts and shares after receiving financial advice while in the European context it is likely that financial advisers/planners are of critical importance although there is little evidence about how consumers process financial advice irrespective of where it comes from (Chater *et al.*, 2010:4).

In their study, which used trading and survey data from a sample of customers from a large German bank, Hackethal, Haliassos and Jappelli (2010:34) found that over half of the surveyed customers stated that they consistently rely on the advice of their personal advisor. Using a pan-European survey, Georgarakos and Inderst (2011) found that trust in financial advice has a significant impact on the decision of less-educated households to buy shares or other risky and more information-sensitive products. It is a common practice in the finance industry not to charge customers directly for advice but for customers to end up paying indirectly through distribution fees, commissions, and other inducements that flow from product providers to brokers and independent financial advisors. There is, indeed, much anecdotal evidence that

the fee structure of investment products, rather than their suitability, drives their sale to customers (Charter *et al.*, 2010:4).

In the USA, evidence suggests that unit trusts sold through brokers or agent networks underperform, and that funds with higher fees improve distribution through higher commissions, thus negatively affecting fund return (Chater *et al.*, 2010:4). Furthermore, financial advisors may also have an interest in increasing the turnover in their clients' portfolio – a practice commonly known as churning – when they earn additional fees or commissions with every new purchase (Charter *et al.*, 2010:4). The impact of commissions on the quality of advice depends not only on whether commissions are made transparent to consumers, but also on consumer awareness of commission structures. For example, studies of consumer reactions to financial advice suggests that many consumers are not familiar with financial adviser incentives (Chater *et al.*, 2010:4). In addition, some experimental evidence suggests that some consumers are willing to follow advice rather blindly even when they are informed about the divergence of interests between them and their financial advisors; regardless, this knowledge does not always seem to make them sufficiently cautious (Chater *et al.*, 2010:4).

Financial advisers provide financial planning services to consumers when providing investment advice on financial products such as unit trusts and investments in shares. According to the Financial Practice Standards Board UK (2015), financial planning is the process of developing an action plan to assist consumers in managing their financial affairs to meet investment objectives. The process of financial planning involves analysing all relevant aspects of a client's financial circumstances across a large breadth of financial planning activities (FPSB UK, 2015:2). Furthermore, financial planning is an intangible process, which does not result in the offering of a physical product; in addition, financial planners operate in this market context in which consumers are buying promises (Kotler, 2014:450). Financial planners are an integral part of the investment process as they assist consumers to develop a personal financial plan and then carry out reviews on consumer investments on an ongoing basis (Kotler, 2014:450). According to Crankshaw (2006), the financial planning process is not a pure service, but rather a major service with some accompanying minor goods and some tangibles attached to it. These tangibles would include items

such as quotations, a record of advice, a financial needs analysis and a report in which the plan is reviewed (Crankshaw, 2006:29). It is a customer-focused service that requires the customer to engage with the financial adviser/planner (Crankshaw, 2006:29).

According to the Institute of Financial Planning Southern Africa (IFPSA, 2016), financial planning consists of the following six fundamental components: Financial Management, Tax Planning, Asset Management, Risk Management, Retirement Planning and Estate Planning. Within financial planning, none of the above components are ever dealt with entirely in isolation since it is the integration and interdependencies amongst these components, as well as the need to analyse and synthesise information presented to formulate strategies, which distinguish financial planning from other forms of financial advice or financial intermediation (IFPSA, 2016:2). Specific product recommendations or sales are not, in and of themselves, financial planning activities. While the process leading up to a specific product recommendation may well involve some financial planning activity, the actual product recommendation falls outside the scope of financial planning (IFPSA, 2016:2) but within the area of product design.

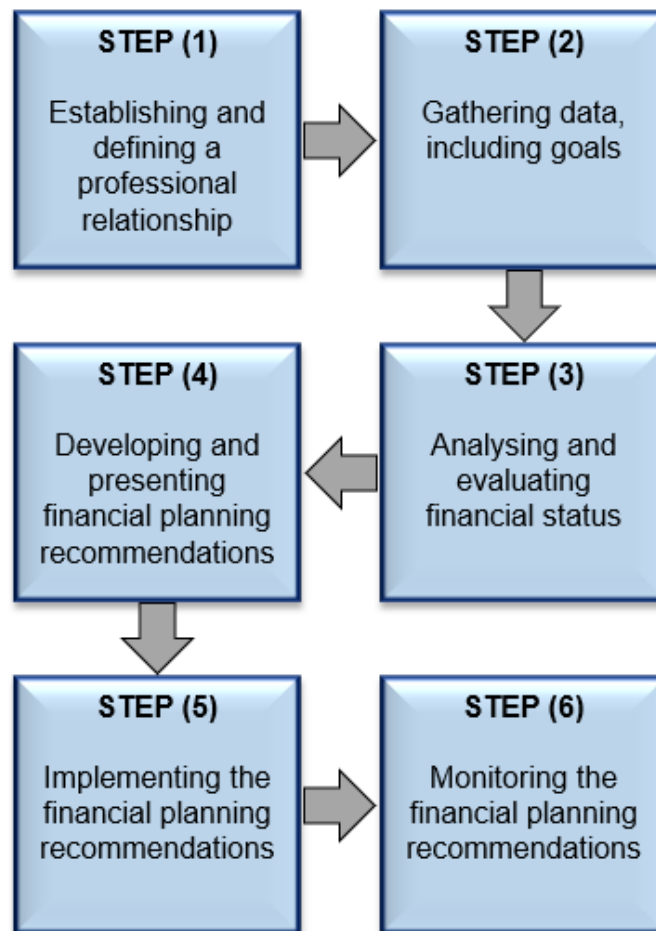
The Canadian Institute of Financial Planning has also adopted a six-step process to financial planning. According to the Canadian Institute of Financial Planning Guide (2016:1), the following constitute the six steps of the financial planning process:

- Establish client engagement and define the terms of the engagement.
- The client and the financial adviser/planner/broker will define and agree upon the scope of the financial planning engagement. Details about each party's responsibilities, the time frames of the engagement, compensation, and conflicts of interest should be set out in writing in a formal engagement letter or in a Letter of understanding, which is to be signed by both parties;
- Gather client information to determine the client's goals, needs and priorities.
- The financial adviser/planner discusses the client's financial goals, needs and priorities before implementing recommendations. The financial adviser/planner gathers all quantitative and qualitative information relevant to the engagement before any recommendations are made;
- Analyse the client's financial information.

- The financial adviser/planner gathers information with respect to the client's goals, needs and priorities then analyses all information to determine the client's financial situation. The financial adviser/planner then evaluates the extent to which the client's goals, needs and priorities can be met under the current circumstances;
- Develop and present the financial plan.
- The financial adviser/planner identifies and evaluates the financial planning strategies in order to achieve the client's stated goals, needs and priorities. Thereafter, the adviser will develop recommendations to achieve the client's stated goals, needs and priorities, and communicate these recommendations so that the client understands them;
- Implementation of the financial plan.
- The client and the financial adviser/planner should agree upon implementation actions, responsibilities and time frames. Thereafter, the client commits to implementing the approved recommendations and signs up for the financial plan and the recommended product; and
- Review the financial plan.
- The client and the financial adviser/planner should also agree on a time frame for monitoring and evaluating the financial plan. The client and the adviser will then review the financial plan to assess its progress, to determine if it is still appropriate and to confirm any revisions mutually considered necessary.

The six steps of the financial planning process are illustrated in Figure 3.5.

Figure 3.5: The six steps of financial planning



Source: Financial Planning Institute of Southern Africa (FPISA) (2016).

As evident in Figure 3.5, financial planning is a process to guide financial advisers/planners in respect of their engagement with consumers. Figure 3.6 illustrates the budgeting and planning process for clients as articulated in the CIFP guide. Although not prescriptive, the CIFP Guide (2016) provides guidelines and insights on how consumers can prepare themselves for financial planning; it also provides recommendations regarding the steps consumers can follow when considering investing.

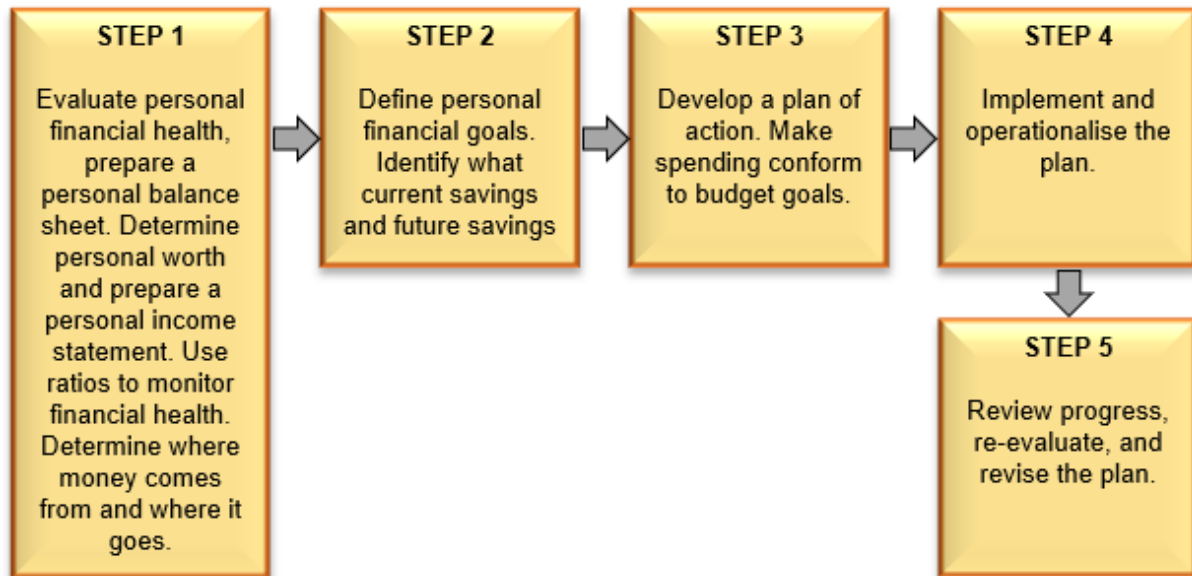
According to the FPISA (2016), financial advisers/planners should focus their attention on the individual, and they should be dedicated to assisting the individual achieve their future financial goals and reduce uncertainty. FPISA (2016) has a set financial planning process consisting of six steps which all financial planners should follow

when engaging in personal financial planning with consumers. According to the Botha, Rossini, Geach, Goodall , du Preez & Rabenowitz (2019), in the South African environment, the requirements (R) of FAIS for financial advisers/planners to be compliant with the regulation governing professionals in the financial services industry are:

- R1 is the initial discussion between the consumer and the financial adviser/planner, which is the foundation of a working relationship. At this stage, the financial adviser ensures that the consumer understands the six-step process, identifies the needs of the consumer and agrees upon the level of advice required as well as the role of the adviser. The payment for services and the remuneration of the adviser are also discussed, as well as obtaining consent to proceed to the next requirement;
- R2 is about gathering information on the consumer's current financial circumstances, commitments and the consumer's investment objectives;
- R3 involves the assessment of the consumer's financial needs, which can involve a workshop to assess the consumer's current financial situation. This may involve an analysis of the consumer's assets and liabilities, cashflow, current risk cover, investments and tax strategies. This allows the financial adviser to investigate solutions and identify ways to capitalise on opportunities;
- R4 expects that the financial adviser/planner offers financial solutions and recommendations that address the consumer's investment objectives. The recommendations should be explained to the consumer in a more simplified way, and they should be recorded in a written record of advice;
- R5 is the implementation stage wherein the consumer authorises the financial adviser/planner to proceed with the implementation of the financial plan. After implementation, the consumer and the financial adviser will review the final documentation for accuracy and ensure that the plan has been implemented as agreed upon. The consumer is then provided with an updated summary of the consolidated financial plan; and
- R6 requires that the financial adviser/planner provides ongoing care and service to ensure that the customer is kept up to date with all the developments on the market; this is also the stage in which the customer's needs are reviewed.

Figure 3.6 shows the budgeting and planning process needed for consumers' financial planning, including their savings and investment planning.

Figure 3.6: The budgeting and planning process



Source: Adapted from the CFP Guide (2016:1).

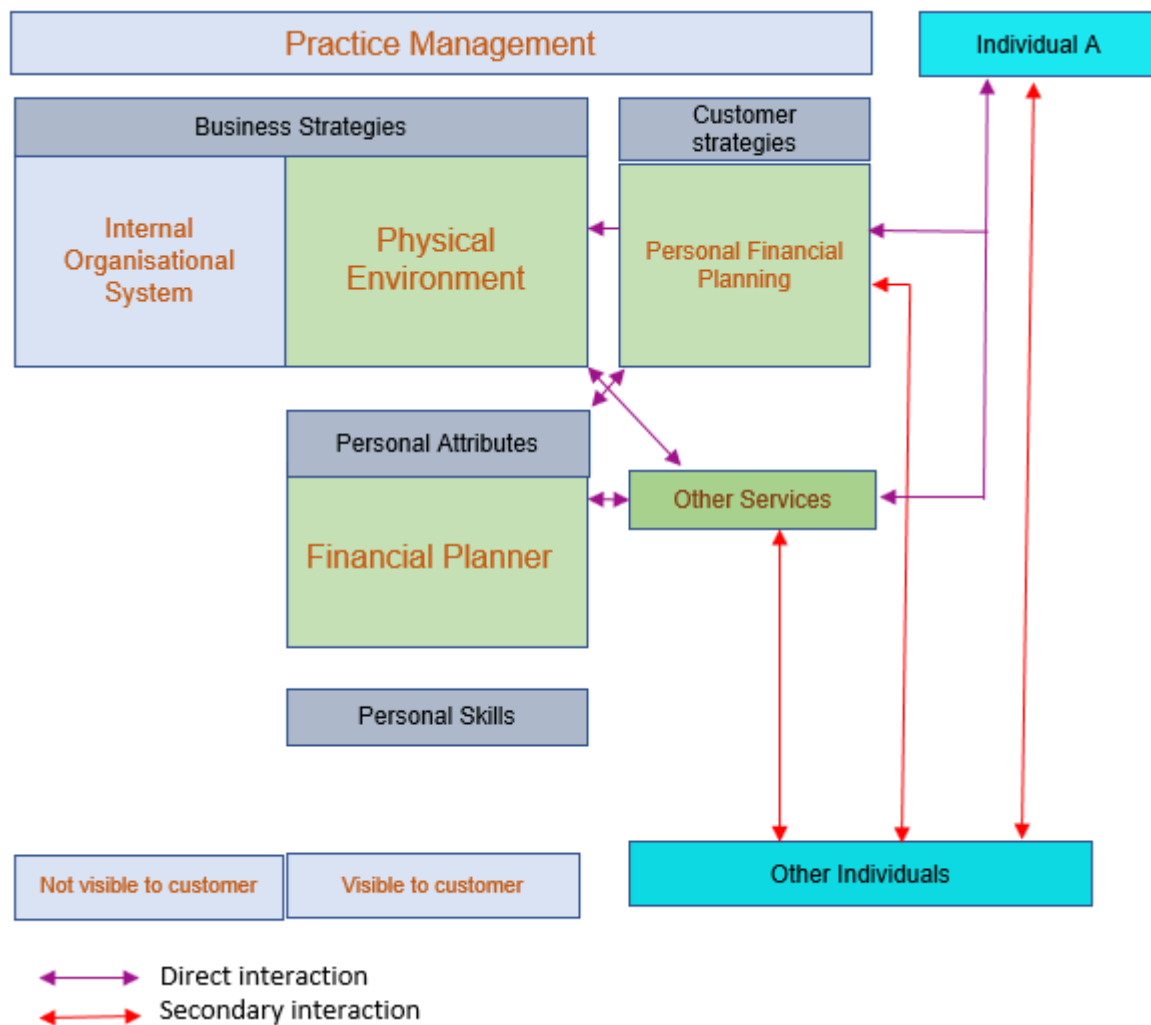
It is clear from Figure 3.6 that effective consumer budgeting and planning is sequential; the figure shows the steps consumers need to proceed through when making financial decisions. The budgeting and planning process begins with an examination of the consumer's current financial situation in order to establish their spending habits. This is followed by setting the consumer's investment objectives, after which an action plan is developed to achieve the objectives through an informed and controlled budget. This is followed by the implementation of the plan and a review of the progress, so as to make the necessary changes to the financial plan.

3.7 THE SERVICE SYSTEM MODEL

FSPs such as banks, insurance firms and stock brokers provide consumers with a service; in most instances, this service is intangible. Therefore, it is important to discuss and elaborate on the service business model relevant to this study. Thereafter, practice management, a specific service model used by financial advisers/planners, is discussed.

Kotler (2014) defines a service as any act or performance that one party can offer to another which is essentially intangible and may not be tied to a physical product. For example, consumer participation in the stock market is a service offered/facilitated by financial firms through various intermediaries and professionals such as financial advisers/planners. According to Lovelock, van der Merwe, Lewis and Fernie (2016), services have traditionally been difficult to define due to the fact that the way in which they are created and delivered to consumers is not easy to grasp, since many inputs and outputs are intangible. Although the process of providing a service may be tied to a physical product, the performance is intangible and does not result in ownership of any of the factors of production but creates value and provides benefits for consumers at a specific time and place in the case of a financial investment (Lovelock *et al.*, 2016:). Meidan (1996:295) defines financial services as activities, benefits and satisfactions connected to the sale of money, that offer users and consumers financial value. A financial service is not the financial good itself, such as an insurance policy, but rather the interaction between a financial adviser/planner and the consumer related to the acquisition of the insurance policy (International Monetary Fund, 2011). The six core functions that constitute financial services are: payments, market provisioning, investment management, insurance, deposits and lending, and capital raising (World Economic Forum Report, 2015:4). Having discussed the service concept, and contextualised it from a financial service perspective, it is necessary to discuss and elaborate on the service business model. Figure 3.7 illustrates the interaction of different elements in the business environment from a personal financial planning perspective.

Figure 3.7: The Service System Model



Source: Adapted from Kotler (2014:450).

It is evident from Figure 3.7 that the service system model is a system with integrated elements and components consistently interacting. According to Crankshaw (2006), in a service system model there are elements that are either tangible to the customer, such as physical objects and computer systems, or intangible to the customer, such as the personal attributes and personal skills of the financial adviser/planner. This implies that aspects that are tangible would include the financial adviser/planner with whom the consumer engages, as well as the office environment and other customers. Intangibles will include the technology deployed to keep track of an individual's financial plans and the relevant administration processes. In addition, the consumer will either have face-to-face or indirect engagements with the elements of the system.

A direct interaction would be the completion of a financial plan, whilst an indirect interaction might be contact with another consumer. This model demonstrates that all these system elements combined affect the ability of the financial adviser/planner to deliver the financial planning process as a service to a consumer.

In addition to the established marketing principles relating to decisions on product, price, place and promotion (Crankshaw, 2006:29), a service environment is made up of people who, in the context of the personal financial planning process, would be the financial adviser/planner and their interaction with the individual who is a consumer. A service environment is also made up of physical evidence, which refers to the environment to which the consumer is exposed during interactions with the financial adviser/planner. The physical evidence supports the credibility of the personal financial planning process (Crankshaw, 2006:29). In conclusion, processes in a service system model refer to the efficiencies in personal financial planning that are experienced by the consumer.

It is evident that the service system model is a tool to foster consumer participation in the stock market. Having discussed the service system model, it is also necessary to consider practice management as a service model used by financial advisers/planners.

3.8 PRACTICE MANAGEMENT

In SA, consumers of financial products access services through intermediaries such as banks and brokers who themselves are financial advisers/planners who independently run their own practices or are tied to an authorised FSP (FSB, 2016:5).

3.8.1 Defining practice management

According to Crankshaw (2006), personal financial planning is a service business offering delivered to individuals by the financial adviser/planner, while practice management is the system that delivers this service. Sayer (2004) reveals that there are four characteristics linked to an ideal financial adviser/planner that should be exhibited in practice management. These characteristics are: to act with integrity, to be honest and professional, to have knowledge and expertise, as well as to fulfil consumer needs efficiently with superior products and deliver after-sales service.

3.8.2 Practice management standards

The Financial Practice Standards Board UK (2015) has defined standards of performance that establish the level of practice expected of a professional financial planner. The FPSB UK establish norms of professional practice and allow for the consistent delivery of financial solutions to consumers; they also clarify the roles and responsibilities of financial advisers/planners and consumers in their interactions, and they work to enhance the value of the financial planning process. FPSB UK's (2015) practice standards establish the level of professional practice reasonably expected of financial planning professionals during financial planning engagements, regardless of practice type, setting, location or method of compensation. FPSB UK (2015) expects that consumers of financial products will benefit from a globally accepted set of practice standards for financial planning professionals. To ensure that these practice obligations are understood, FPSB UK (2015) members incorporate content on practice standards, and their application, into territory-specific Certified Financial Planner certification standards.

As most financial planners are financially rewarded for selling a financial product, conflict may result from the trade-off between immediate personal financial success for the financial planner and the need to remain client orientated (Crankshaw, 2006:42). Rozell, Pettijohn and Parker (2004), as cited in Crankshaw (2006), establish that high customer service was positively related to higher sales performance. The driving factor behind customer service was the level of service quality offered by a firm, which suggests that a financial adviser/planner should adapt their approach to different consumers (Crankshaw, 2006:43). Botha, du Preez, Geach, Goodall and Rossini (2018) suggest different approaches to financial planning, depending on the target market. An effective marketing plan, designed to achieve a competitive advantage, will help build presence in a target market. The marketing plan positions the financial adviser/planner, in the minds of consumers, around needs that cause the consumer to seek out the financial adviser/planner (Swift, 2005:47). It is without doubt that practice management and financial planning are useful tools in the financial services industry as they provide the first point of contact with consumers in the investment process.

The FPISA (2016) is guided by the Code of Ethics and Practice Standards. Members refer to eight principles of ethical conduct when dealing with consumers of financial products. Table 3.2 represents the eight principles of ethical conduct to be followed by all professional financial advisers/planners. Financial advisers/planners also ask themselves the eight questions listed in Table 3.2, as related to the principles underlying the Code of Ethics:

Table 3.2: Ethical consideration questions for financial advisers/planners

1. Client first: Did I act in the best interests of the client?
2. Integrity: Am I prepared to face consequences tomorrow?
3. Objectivity: Am I convinced that I did not allow emotions?
4. Fairness: Did I act reasonably?
5. Competence: Do I have the competency to provide advice?
6. Confidentiality: Am I able to protect client information?
7. Diligence: Did I apply my diligence to the best interests of the client?
8. Professionalism: Have I conducted myself in a professional way?

Source: Adapted from FPISA (2016).

It is evident from Table 3.2 that financial advisers/planners are guided by a Code of Ethics which dictates that they should follow a rational and logical set of questions when conducting business with consumers.

3.9 SUMMARY

The investment environment and the financial system were discussed in this chapter. The discussion focussed specifically on aspects such as investment decisions, objectives and barriers, as well as financial instruments and intermediaries. The concept of risk and uncertainty, as relevant to stock market participation, was briefly discussed in this chapter. Furthermore, the various investment theories were put into perspective, with their role and importance highlighted herein. Moreover, specific investment strategies were elaborated upon in this chapter. The chapter concluded by highlighting the processes that are part of financial intermediaries' investment advice, and the financial planning service offered to consumers.

The ensuing chapter, Chapter Four, will present a literature review on consumer buying behaviour and stock market participation as relevant to the investment decision-making context. The chapter also provides a discussion of consumer behaviour models significant to the foundation of this study. In addition, the link between behavioural finance and consumer behaviour is highlighted through a thorough discussion of behavioural finance.

CHAPTER FOUR

CONSUMER BUYING BEHAVIOUR AND BEHAVIOURAL FINANCE

4.1 INTRODUCTION

In Chapter Three the investment environment and components of the financial systems were discussed. In addition, the chapter elaborated on risk and uncertainty conditions for consumers as well as various investment theories and strategies. The chapter concluded with a focus on investment advice and financial planning. The aim of this study is to investigate consumer behaviour towards participation in the stock market, therefore, Chapter Four presents a literature review on consumer buying behaviour and stock market participation relevant to the investment decision-making context. The chapter examines consumer behaviour models which are substantial to the foundation of this study, namely, the Consumer Decision model, the Segmenting model and the Attitudes and Behaviours model. The chapter also highlights consumer attitudes towards risk, as relevant to investments. The chapter also links behavioural finance and consumer behaviour by focusing on cognitive biases for consumers during financial decision-making.

4.2 BACKGROUND ON CONSUMER BEHAVIOUR

It is important to note that there are many factors relating to consumers that have been suggested to influence stock market participation (Athreya, Ionescu & Neelakantan 2015; Brown, 2010; Changwony, 2012; Hagman, 2015:6; Van Rooij, Lusardi & Alessie, 2011). There is limited literature related to consumer behaviour in the stock market in SA. Therefore, in this study, an attempt is made to consult and review a representative selection of the literature on consumer buying behaviour from a variety of perspectives.

Consumers vary according to their behaviours, standards, preferences and a variety of other characteristics (Schiffman & Kanuk, 2010:648). These characteristics mean that a model appropriate for describing one consumer's behaviour may not be able to explain the behaviour of another, even in similar purchasing circumstances (Schiffman & Kanuk, 2010:648). Kotler and Armstrong (2010) define consumer behaviour as the behaviour of final consumers, that is, individuals and households, who buy products

and services for personal consumption. According to Solomon (2009), consumer behaviour is the study of the processes involved when consumers in their individual capacity or as groups identify, buy, use or dispose of products, services, ideas or experiences in order to fulfil their needs and desires. Similarly, Mansoor and Jalal (2011) believe that the dynamics of buying behaviour manifests in different forms of consumer choices that can vary in response to a wide spectrum of factors such as demographics, social and cultural factors. Pride and Ferrell (2011:233) argue that there are numerous justifications as to why firms and marketers need to understand consumer buying behaviour, most notably:

- consumers' responses to a firm's marketing strategy could have a positive impact on consumers' buying behaviours;
- marketers need to understand consumer influences in order to understand what, where, when and how consumers buy; and
- marketers need to predict consumer decisions and the way in which consumers respond to numerous marketing signals.

4.2.1 Consumer behaviour in a state of risk and uncertainty

Progress has been made in studying and understanding consumer decision-making in a state of risk and uncertainty, including as part of the financial markets and stock markets. There are several theories that underlie the strategies that investors and financial intermediaries use as tools to understand how the stock market works (Yartey, 2008:87). According to Pompian (2015:4), the level of risk a consumer is willing to undertake is not the same, and it depends largely on their personal attitudes to risk. Byrne and Brooks (2008) established that consumer financial decisions are affected by internal and external behavioural factors; they provide evidence from a study which reveal that a consumer is influenced by both the socio-economic environment and psychological characteristics. Similarly, Reilly and Brown (2008), as cited in Rad and Ingley (2011:35), suggest that various psychological characteristics of individuals affect how they act as investors. Thampathy and Krishnan (2014) concur that an extensive range of psychological factors can influence consumer buying behaviour and consumption activities beyond purchasing.

According to Daniela (2010), although knowledge about consumer behaviour is key to marketing effectiveness, much more can be done to enhance the understanding of consumer behaviour in the financial services industry. According to Standard Bank (2016), unlike with consumer goods, the process and decision to pay for a financial product such as shares on the stock market relies on the advice of financial advisers/planners and stock brokers. According to Daniela (2010), consumers regard participation in, and the buying of shares on, the stock market as complicated and would rather not participate. It is observed that most consumers have difficulties identifying differences between a financial product and other unrelated products while, at the same time, consumers are finding it difficult to make independent product assessments before buying and often perceive very high degrees of risk when they finally choose to buy (Daniela, 2010:798). Similarly, Ennew and Waite (2013:128) concur that, since financial products do not generate instant gratification and happiness, they are often perceived as interfering with individual pleasure and are regarded as difficult decisions.

Consumer decision-making in a state of risk and uncertainty has generated attention and interest from academic researchers and models (Schiffman & Kanuk, 2010:648). Although buyers of financial products such as shares may make investment decisions in shares rationally, they analyse the information in the market (Pompian, 2015:4). Varadharajan and Vikkraman (2011) suggest that, sometimes, consumers of financial products make irrational decisions where they ignore certain information that is available. Ratanjee (2013) postulates that rather than making investment decisions using a strictly rational thought process, it appears that consumers can be significantly influenced by their own emotions.

4.3 MODELS OF CONSUMER BEHAVIOUR

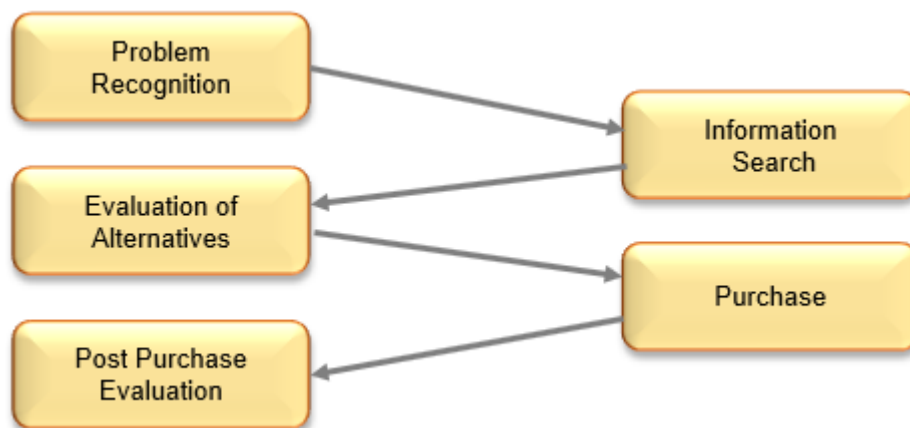
This section will discuss theoretical models of consumer behaviour which are substantial to the foundation of this study.

4.3.1 The Consumer Decision Model

The Consumer Decision model reveals that a consumer progresses from problem recognition to information search, followed by evaluation of alternatives to an actual purchase and then to post-purchase evaluation and validation. Although the process

consists of stages, consumers are sometimes faced with complications during the information search and the evaluation of alternatives stages, and they may suffer from post-purchase dissonance (Perner, 2013:3). The model is graphically presented in Figure 4.1.

Figure 4.1: Consumer Decision Model



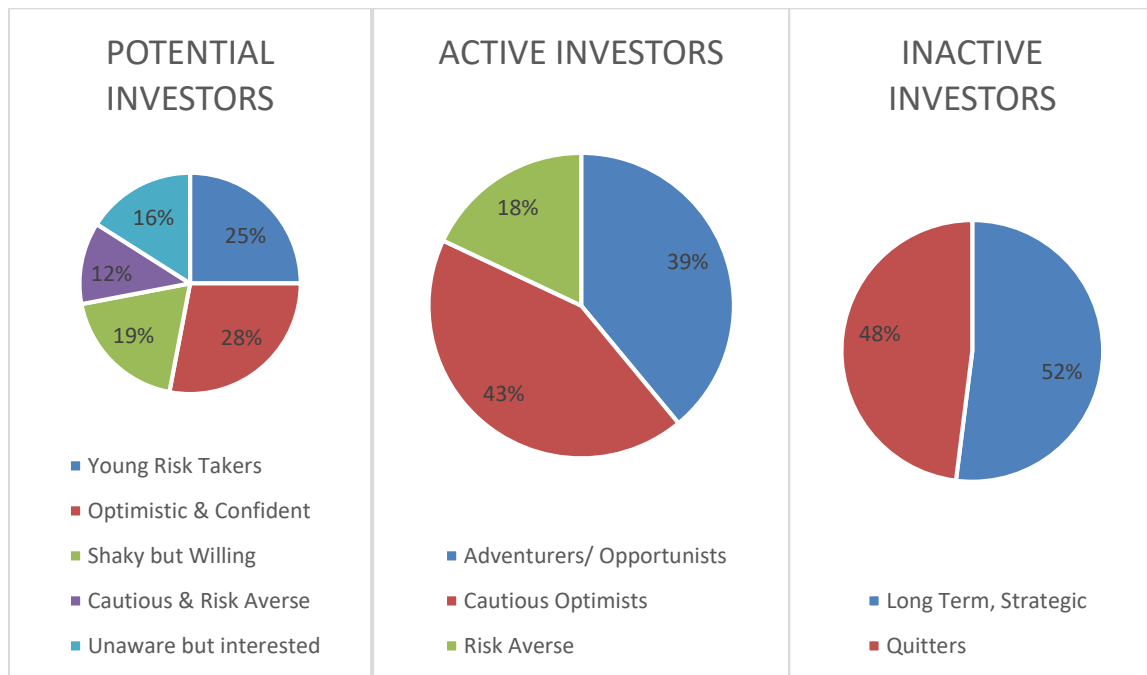
Source: Adapted from Perner (2013:3).

It is evident from Figure 4.1 that the consumer decision process follows a linear progression although, in certain instances, consumers may be faced with complications in their quest to fulfil consumer needs. According to Perner (2013:2), the linear progression of consequences of product consumption that eventually lead to a desired end benefit is called a *Means-End* chain. Perner (2013:2) argues that consumer participation will tend to differ dramatically depending on the type of product. For example, consumer engagement with product providers will be higher for products that are very expensive, or those that require technical analysis (such as shares) or those that are highly valuable in the consumer's life.

4.3.2 The Segmenting Model

This Segmenting model is another model that is based on a study of the Stock Exchange of Thailand, conducted by Gallup in 2004, whereby prospective investors are placed into segments, as illustrated in Figure 4.2.

Figure 4.2: Segmenting the market



Source: Adapted from Ratanjee (2013:8).

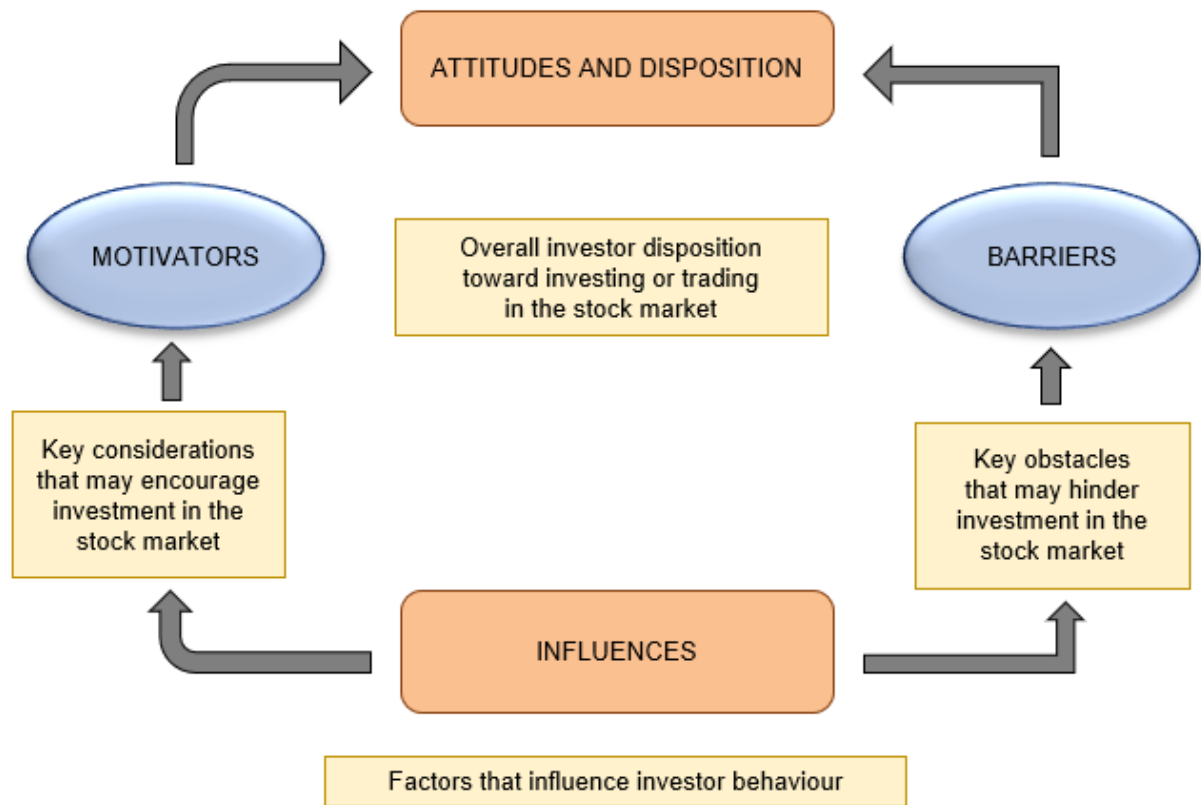
Gallup (2004), as cited in Ratanjee (2013: 3), conducted a study of investor behaviour on behalf of the Stock Exchange of Thailand (SET). The model was used to identify and segment active and inactive investors. The model indicates that insights were drawn from the study and used to develop segmentation so as to inform the SET strategy in order to attract consumer stock market participation (Ratanjee, 2013:8). According to Ratanjee (2013:8), the profiles of investors were summarised according to investors on the SET being regarded as: optimistic and confident; shaky but willing; cautious and risk averse; unaware but interested; adventurers; cautious optimists; risk averse; long-term strategists and quitters. The model reveals five key segments amongst potential investors. The segments are unique both in their behavioural profiles as well as their psychographics. Incorporating psychographics sheds light on the factors that shape the perceptions, opinions and behaviours of consumers currently active in stock markets. Therefore, the model is relevant to this study.

4.3.3 Attitudes and Behaviours Model

The Attitudes and Behaviours model is presented graphically in Figure 4.3. This model assumes that a consumer's attitude towards buying shares in the stock exchange is informed by influential factors (i.e. motivators) which are considerations that may encourage the consumer to participate in the stock market and barriers that may hinder consumer participation in the stock market. The Attitudes and Behaviours Model is designed to measure the attitudes and behaviours of investors (Ratanjee, 2013:4). As is the case with behavioural finance, it integrates consumer emotions and cognitive inconsistencies into a coherent framework to explain what Ratanjee (2013) refers to as "investor think". It is meant to shed light on the decision-making process of consumers. The model measures a few key components, such as motivators and barriers, which influence stock purchase behaviour either positively or negatively. These components are also used to segment the investor base according to behaviours and attitudes, as well as consumers' psychographics such as beliefs, opinions and interests. Insights from the model reveal that by incorporating psychographics and demographics the model provides a comprehensive segmentation of investors.

Ratanjee (2013) reports that this model presents a more complete picture of the combination of forces that influence new investors. Furthermore, the empirical report also sheds light on the factors shaping the perceptions, opinions and behaviours of investors currently active in stock markets. The Attitudes and Behaviours model is substantial to the foundation of this study as it brings aspects of behavioural finance and consumer behaviour together in order to shed light on the factors shaping the behaviour of consumers regarding participation in the stock market.

Figure 4.3: Attitudes and Behaviours Model



Source: Adapted from Ratanjee (2013:4).

It is evident from Figure 4.3 that there are motivators and barriers that influence investor behaviour and which shape consumer attitudes and dispositions towards participating in the stock market. Having discussed models of consumer behaviour, it is also necessary to discuss consumer attitudes towards risk as relevant to consumer participation in the stock market.

4.4 CONSUMER ATTITUDES TOWARDS RISK

According to Garman and Fogue (2017), the knowledge of financial risk tolerance and determining a consumer's willingness and capacity to take on risk is an integral part of financial planning. Therefore, it is important to review the risk appetite of a consumer. Although there are no totally risk-free investments available, some are safer than others; for example, shares on the stock market have a higher risk while bonds have a lower risk.

A consumer's attitude to risk describes the level of risk a consumer is willing to take on a particular investment, taking into account the consumer's circumstances. The NFU Mutual UK Handbook (2017), the Zurich Awareness Booklet (2018) and Vanguard Handbook (2017) use a simple scale of 1 to 5 to measure a consumer's attitude to risk, where 1 represents a more cautious approach to investments and 5 represents a more tolerant attitude to risk. The five categories of a consumer's attitude to risk are presented in Table 4.1.

Table 4.1: Categories of a consumer's attitude to risk

<p>1. Cautious: means the consumer is prepared to take a lower risk with their investment and wishes to avoid the risks usually associated with investing all their money in shares. A cautious consumer is looking for an investment that is expected to be more stable and fluctuate in value far less than shares and, as a consequence, the investment return is likely to be much lower.</p>
<p>2. Moderately cautious: means a consumer is prepared to take moderate risks with their investment but wishes to avoid the risks usually associated with investing all their money in company shares. The consumer is looking for an investment that is expected to fluctuate in value less than company shares and, as a consequence, the consumer accepts that the investment return is likely to be lower.</p>
<p>3. Balanced: means a consumer is prepared to take a measured risk with their investment in return for the prospect of good long-term investment performance. The balanced consumer is looking for an investment with the potential to produce good returns above inflation, but with less fluctuation in value compared to company shares alone.</p>
<p>4. Moderately adventurous: means a consumer is prepared to take more risks with their investment, in return for the prospect of better long-term investment performance. The consumer is looking for an investment that has the potential to produce above average long-term returns, which is likely to involve a high proportion of company shares.</p>
<p>5. Adventurous: means a consumer is prepared to take greater risks with their investment in return for the prospect of long-term investment performance. The consumer is looking for an investment that has the potential to produce superior longer-term returns, which is likely to mean investing fully in company shares.</p>

Source: Adapted from Zurich Awareness Handbook (2018).

It is evident from Table 4.1 that a consumer's attitude towards risk can be categorised on a scale of 1 to 5, where 1 represents a more cautious approach to investments and 5 represents a more tolerant attitude to risk.

According to Jagongo and Mutswenje (2014), individual investment behaviour is focused on choices regarding purchases of small amounts of shares, with investment decisions often being supported by a decision tool. It is assumed that information structure and factors in the market systematically influence consumer investment decisions as well as market outcomes. In a study on consumer behaviour towards unit trusts, Padmaja (2013) established that lack of awareness contributes to non-participation in the buying of unit trusts. Moreover, consumer awareness of the stock market and attitudes to risk were found to predict stock market investor behaviour (Wanyana, 2011:8). This means that both awareness and perceived risk can influence consumer participation in the stock market. In addition, Guiso, Sapienza and Zingales (2008) suggest that consumer participation in the stock market is influenced by the objective characteristics of the shares and the attitude of the investor (Guiso *et al.*, 2008:2558). Daniela (2010) argues that consumers invest what they have, especially in consumer products, and that their daily living needs absorb almost all the resources they have. Similarly, Gardini and Magi (2007) report that stock market participation rates declined strongly in the period 2000 to 2004; the possible explanation for this is that investors chose to move their investments from financial markets to real estate markets. According to the South African Savings Institute (SASI, 2014), household savings have also demonstrated a negative trend due to consumer behaviour that does not promote a savings culture in the country. Consumer debt has been found to negatively impact household savings; as such, consumer disposable income and financial assets have not accumulated to the same extent as household debt since 1995 (Engelbrecht, 2009:112).

Consumers' attitudes toward risk in the investment context also link to their behaviour. The usefulness of considering the field of behavioural finance in this study, which focuses on consumer behaviour regarding stock market participation, is pertinent.

4.5 BEHAVIOURAL FINANCE

Since the main focus of this study is consumer behaviour regarding participation in the stock market, the following section will define and discuss behavioural finance in more detail and elaborate on the relevance of behavioural finance to consumer behaviour.

4.5.1 Defining behavioural finance and the relevant behavioural finance theories

The investment theories discussed previously, such as the Markowitz Portfolio theory and the EMH, are referred to as standard or traditional finance theories (Ricciardi & Simon, 2000:4; Raza, 2014:156; Suryawanshi & Jumle, 2016:2320). Behavioural finance is however defined as the application of psychology to finance (Pompian, 2015:234) and it has begun to emerge as a robust alternative to standard finance theories (Ricciardi & Simon, 2000:4; Raza, 2014:156). According to Chaudhary (2013:4), behavioural finance is the study of psychology and sociology on the behaviour of financial intermediaries and consumers. Verma (2004) suggests that behavioural finance tries to understand how consumers make investment decisions based on emotions. Olsen (1998) as well as Suryawanshi and Jumle (2016:2320) argue that behavioural finance seeks to understand and predict financial market implications as a result of psychological decision-making. Behavioural finance is the study of the influence of psychology (Sewell, 2010), and the science behind how psychology influences financial markets (Forbes, 2009). Economists and other behavioural scientists are not in agreement as to the real definition and validity of behavioural finance since the field itself is still developing and refining itself (Ricciardi & Simon, 2000:4; Raza, 2014:156).

There has been considerable debate over what subject matter constitutes behavioural finance. Behavioural finance tries to explain and improve people's awareness regarding the emotional factors and psychological processes of individuals and entities that invest in financial markets (Ricciardi & Simon, 2000:4). Shefrin (2000:4) describes behavioural finance as the interaction of psychology with the financial actions and performance of all categories of investors. It is evident from these definitions that behavioural finance helps understand why consumers buy and sell shares; therefore, the concept is relevant to this study on consumer behaviour regarding participation in the stock market. The reason for this is that consumers have different personalities and can respond emotionally to issues such as fear or greed which can consequently influence their financial investment decisions. Table 4.2 shows behavioural finance decision-makers within the context of the financial system and the investment environment.

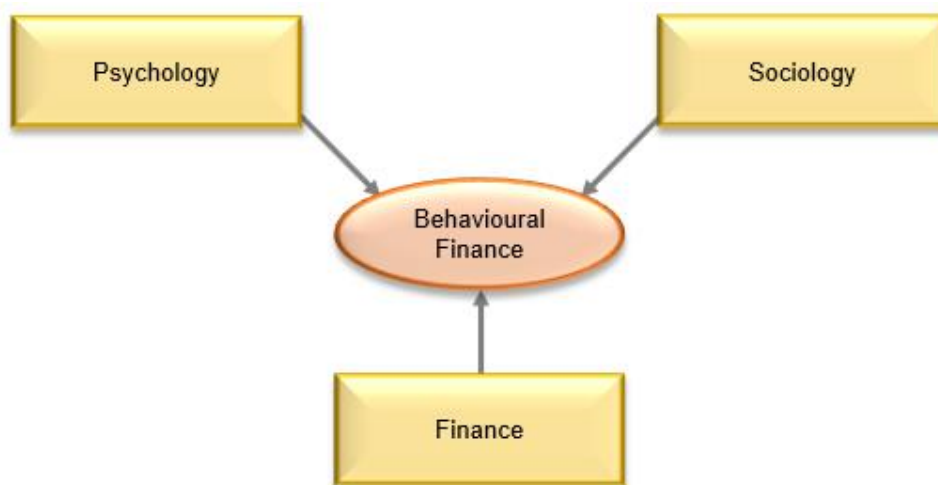
Table 4.2: Behavioural finance decision-makers

The behavioural finance decision-makers		
The Individual	The Group	The Organisation
Small investor	Portfolio of Investors (Unit-Trusts)	A financial institution
Portfolio manager	A Group of shareholders	A non-profit entity (University)
Board of trustee member		

Source: Adapted from Ricciardi and Simon (2000:2).

It is evident from Table 4.2 that behavioural finance is a tool that is widely used by various decision-makers in the financial services. Trifan (2008) suggests that the most frequent fallacy of classic economic models is the assumption that all economic agents, especially traders and investors, are rational machines that are able to process the quantity of information available to everyone at almost no cost, to compute and weigh out all possible risks, and make decisions in the blink of an eye. Trifan (2008:8) argues that such assumptions rule out the inability to comprehend certain information while, at the same time, the assumption of rationality ignores the human feelings involved in decision-making (Trifan, 2008:8). The behavioural aspects of psychology and sociology are integral catalysts within the field of behavioural finance (Ricciardi & Simon, 2000:2; Raza, 2014:157). Figure 4.4 illustrates the important interdisciplinary relationships with which behavioural finance is integrated.

Figure 4.4: Interdisciplinary relationships that integrate behavioural finance with psychology, sociology and finance



Source: Adapted from Ricciardi and Simon (2000:2).

It is evident from Figure 4.4 that behavioural finance is an integrated subject that incorporates psychology, sociology and finance. While conventional academic finance emphasises theories such as modern portfolio theory and the efficient market hypothesis, the emerging field of behavioural finance investigates the psychological and sociological issues that impact the decision-making process of individuals, groups, and organisations (Statman, 2015:124). According to Byrne and Utkus (2013), behavioural finance studies the psychology of financial decision-making. For Reilly and Brown (2011), behavioural finance involves the analysis of various psychological traits of individuals in respect of how these traits affect how they act as investors, analysts and portfolio managers. Behavioural finance attempts to explain, and increase understanding of, the reasoning patterns of investors; this includes the emotional processes involved and the degree to which they influence the decision-making process (Statman, 2015:124). Essentially, behavioural finance attempts to explain the what, why and how of finance and investing, from a human perspective.

Byrne and Utkus (2013) maintain that established finance theory has assumed that investors have little difficulty making financial decisions and that they are well-informed, careful and consistent. The traditional theory holds that investors are not confused by how information is presented to them and that they are not swayed by their emotions (Raza, 2014:160). Behavioural researchers have taken the view that finance theory should take account of observed human behaviour and, as such, they use research from psychology to develop an understanding of financial decision-making and create the discipline of behavioural finance (Forbes, 2009:132). There is no doubt that an understanding of how investor psychology impacts investment outcomes will generate insights that benefit the advisory relationship (Pompian, 2015:17). Standard finance has been the dominant theory within the academic community, however, scholars and investment professionals have started to draw insights from behavioural finance theory (Byrne & Utkus, 2013:4). Behavioural finance has been growing over the last twenty years, especially as a result of the observation that investors rarely behave per the assumptions made in traditional finance theory (Bansal, 2015:8).

Psychologists have put forward an array of decision-making behaviours called biases, coupled with the implication of these biases in relation to money and investing. Biases

relate to how consumers process information in order to reach decisions, and the preferences consumers have (Hammond, 2015:26). Byrne and Utkus (2013:4) posit that behavioural finance holds out the prospect of a better understanding of financial market behaviour and the latitude for investors to make better investment decisions based on an understanding of the potential pitfalls. According to Hammond (2015:26), much of finance theory is untested; to the contrary, the true test of a financial theory is how it can be applied in the real world.

Kahneman and Riepe (1998), as cited in Hammond (2015:26), view behavioural finance from a financial planning perspective, while Doviak (2015) attempts to discuss it from the advisor's perspective by providing strategies for applying behavioural finance to the financial planning practice. Doviak (2015:30) stresses that, while incorporating behavioural strategies is not for everyone, analysing a consumer's attitude and discussing the reasons for it – as well as ways to get around consumer attitudes – can lead to increased success in the planning field. Applying behavioural finance to financial planning practice shows that behavioural finance has truly reached the level at which it is applicable to professionals.

Buccioli and Zarri (2015:17) analysed large amounts of data to establish a correlation between personalities and the subsequent allocation of investments by consumers to find out if there is any discernible connection between personalities and the way in which consumers invest. Buccioli and Zarri (2015:17) established that those who scored low on tests for agreeableness or high for cynical hostility were significantly more likely to take greater risks with their investments. The research findings offer a profound understanding of investors since standard finance theory has assumed that investors decide on where to put their money in similar ways. However, research indicates that how consumers view their life and the world can have a sizable impact on their investments (Hammond, 2015:26). Professionals will be able to incorporate insights into their work in order to help consumers make more optimal decisions, despite their predispositions to act otherwise (Hammond, 2015:26). Apart from financial planning, the largest application of behavioural finance in investing is in investment decision-making and securities selection (Bansal, 2015:107). Given the assumptions around the issue of biases, one can safely conclude that it is easy for consumers to make mistakes in regard to their investment decisions. Fromlet (2001),

as cited in Hammond (2015:26), created a checklist for behavioural finance with a list of questions and reminders for consumers to consider before making decisions related to financial investments. The checklist is presented in Table 4.3.

Table 4.3: List of questions and reminders for consumers prior to making financial investment decisions

1. Check the source of information
2. Try to get exclusive information
3. Are financial advisors overconfident?
4. Compare positive and negative views
5. Be careful of anchoring to an expectation
6. How old is the information or forecast?
7. Consider how important messages are being reported (positive/negative)
8. Is this the latest news in line with my strategy?
9. Understand the numbers
10. Dare to question recommendations

Source: Adapted from Hammond (2015:26).

According to Hammond (2015:26), the checklist presented in Table 4.3 is valuable to consumers for multiple reasons. If consumers are considering an investment idea this checklist can serve as an initial screen for consumers to analyse information from all angles. Also, if consumers are considering advice given to them by an advisor, the consumers still need to be able to do their own due diligence and make sure that it is a good strategy. It is evident that the list provided by Hammond (2015:26) provides consumers with the right questions to consider and to ask in this regard. Furthermore, it is evident from the literature reviewed that consumer financial decisions are influenced by cognitive biases.

4.5.2 Cognitive biases

Kahneman and Riepe (1998), as cited in Hammond (2015:26), detailed several biases and general characteristics that investors may possess. The authors also describe what they believe to be the best way to overcome these biases. The following cognitive biases are relevant to this study: *loss aversion, status quo bias and the default option,*

hyperbolic discounting and procrastination, mental accounting, availability effect and trust (Chuah & Devlin, 2010:1).

4.5.2.1 Loss aversion

Consumers have been shown to be loss averse, generally appearing to abhor losing something approximately twice as much as they like gaining it (Chuah & Devlin, 2010:1). Such behaviour has been shown in several experimental studies in a broad range of contexts (Chuah & Devlin, 2010:1). This fear of loss can be explained by prospect theory, which states that an individual's value function – be it for money or otherwise – is inclined towards profit, but would try to avoid losses (Bansal, 2015:12). According to Zamir (2014:8), loss aversion is related to the disposition effect, which applies to consumers who would continue to hold shares that have decreased in value while disposing of shares that have increased in value. This is similar to the endowment effect, which is the tendency by consumers to place a higher price or value on an object if they own it than if they do not (Zamir, 2014:67). In summary, this means that what consumers are willing to pay for should be equal to what they are willing to be deprived of (Zamir, 2014:67).

4.5.2.2 Status quo bias and the default option

The term status quo bias explains the propensity to hold on to current choices and patterns of behaviour; in other words, to have an exaggerated preference for the status quo (Pompian, 2015:89). Closely linked to the status quo bias is the predisposition of individuals to stick with the default option offered, rather than make a conscious decision (Sewell, 2010:213). The default option is a significant part of what has been named choice architecture, which summarises how choices are framed, or presented, to consumers (Bansal, 2015:13). Effective choice “architecture”, as designed by financial advisers/planners, helps guide consumers towards what would generally be considered the most appropriate financial investment choice (Chuah & Devlin, 2010:1). In addition, the appreciation of alternative options by consumers can also be linked to the way in which the choice is presented, or “framed” as consumers would prefer positive rather than negative frames (Chuah & Devlin, 2010).

4.5.2.3 *Hyperbolic discounting and procrastination*

Intertemporal decisions are those in which the decision-maker makes value comparisons between immediate consumption and delayed gratification; a consumer's decision in such circumstances will be informed by their time preference (Fisher, 1996, as cited in Broekhuizen, 2010:15). Traditionally, economists have attempted to make sense of time preferences using the concept of an individual discounting rate (IDR), which is the rate at which the individual is willing to trade immediate gratifications for future outcomes (Chuah & Devlin, 2010:4). Moreover, the IDR reflects what a consumer would want as compensation for the delay. According to Chuah and Devlin (2010), the IDR will be higher if a consumer is orientated towards the present. Early discounting models have generally assumed that the consumer should be consistent in their intertemporal choices, so that their IDR is consistent over time and across situations (Chuah & Devlin, 2010:8). Furthermore, IDR is observed to deflate with the time horizon; this implies that the longer the delay the larger the factor by which a consumer discounts the value of the future outcome. The effects of hyperbolic discounting may be exacerbated by a tendency to procrastinate, such as when a fifty year old consumer is aware that prompt action to set aside money for future retirement needs would be in their interest, but the consumer nevertheless delays acting which results in procrastination (Fisher, 2001:6; Broekhuizen, 2010:3).

4.5.2.4 *Mental accounting*

Consumers face a wide array of complex financial choices that can have lasting effects on their economic wellbeing (Zhang & Sussman, 2018:3). Mental accounting occurs when sums of money are treated and valued differently depending on where they came from or where they are kept; this phenomenon is known to violate the standard economic assumption that money is "fungible", which means that all money is treated equally regardless of its source or destination and "does not come with labels on" (Sewell, 2010:216). Ramphal (2006) suggests that by enabling transactions to be evaluated in isolation from other transactions, consumers reduce the cognitive load on their decision-making, thus making decision-making easier. The author however warns that there is the possibility of consumer decisions becoming mentally disassociated from other decisions which might be more appropriately evaluated together (Ramphal, 2006). Mental accounting explores processes such as how

consumers group expenses into categories, assign funds to these categories, determine budgets, and perform elements of cost benefit analyses based on these categories. For example, expenses incurred at a grocery store may be grouped together in a spending category specific to groceries. It is evident that mental accounting can play a significant role in consumer financial decisions, and therefore in stock market participation.

4.5.2.5 Availability effect

According to Ricciardi and Simon (2000:4) as well as Javed, Bagh and Razzaq (2017:6), consumers judge the likelihood of an outcome occurring by how easily the outcome can be recalled or imagined. Javed *et al.* (2017:6) believe that consumers rely primarily on evidence that is most easily available to them when making decisions. As such, they usually overestimate the likelihood of outcomes that are particularly memorable, highly emotional or have happened recently (Belsky & Gilovich, 1999:86; Nazlan, Tanford & Montgomery, 2018:3). In respect of the availability effect, a consumer relies upon information that is readily available rather than examining the alternative; consumers are also influenced by the information they receive during the selection and identification of shares (Javed *et al.*, 2017:6). Furthermore, most consumers are likely to change their preferences according to available information and, as a result, irrelevant information ends up influencing consumer investment decisions (Javed *et al.*, 2017:6).

4.5.2.6 Trust

Research in economics has highlighted the role of intangible human influences including culture, and social capital regarding preferences, on consumer behaviour and other commercial interactions such as trust (Ricciardi & Simon, 2000:4). Faced with incomplete information and the potential for the opportunism of others, people rely on trust when considering the behaviour of their trading partners (Ricciardi & Simon, 2000:4). According to El-Attar and Poschke (2011), trusting behaviour has been proven to affect consumer portfolio choices between risky and risk free financial assets. In a case study of the Uganda Securities Market, Murungi (2011:4) reveals a significant correlation between awareness and trust amongst the investing public and a positive correlation between trust and stock market efficiency. Both awareness and

trust have an impact on stock market participation although trust was the more important predictor of stock exchange performance (Murungi, 2011:4). Having discussed investment theories and behavioural finance, it is necessary to discuss investment advice and financial planning as the foundations for ensuring consumer participation in the stock market.

4.6 SUMMARY

A selection of the literature on consumer buying behaviour was reviewed in this chapter. The chapter began by detailing the background on consumer behaviour and discussing three consumer behaviour models relevant to the study. Throughout the chapter, a link was established between consumer behaviour and participation in the stock market, which is the focus of this study. Consumer attitudes toward investment risk were discussed as an introduction to the discussion on behavioural finance. The cognitive biases which are part of behavioural finance, and relevant to consumers when making financial and investment decisions, were elaborated upon in this chapter. The ensuing chapter, Chapter Five, will further explore the determinants and drivers specifically applicable to stock market participation.

CHAPTER FIVE

ANALYSIS OF THE KEY AREAS INFLUENCING STOCK MARKET PARTICIPATION

5.1 INTRODUCTION

Chapter Four provided an overview of the existent literature on consumer buying behaviour, stock market participation and behavioural finance. Since this study focuses on the antecedents and outcomes of stock market participation, it is important to further consider the factors possibly influencing consumers' stock market participation in SA. Following the literature, it was established that specific determinants and drivers foster stock market participation. Chapter Five provides an overview of all the other key areas influencing stock market participation. In particular, the chapter divides the areas into two sections, namely, general stock market determinants and consumer-specific stock market drivers. Finally, the chapter notes that stock market participation is also linked to investor personalities; therefore, the chapter concludes with a discussion of investor personality types.

5.2 DEFINING STOCK MARKET PARTICIPATION

It is important to discuss stock market participation determinants and drivers as they are relevant to the study's primary objective which is to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in the country. However, firstly, stock market participation should be defined. According to Chan, *et al.* (2010), consumer participation refers to the degree to which consumers contribute to service production delivery. Brodie, Cowling and Nissen (2009) view consumer participation as the choices and actions that consumers make as part of their daily life, and the kind of society in which they want to live. Similarly, File, Judd and Prince (1992) suggest that consumer participation refers to the types and levels of behaviour in which consumers engage, in connection with the delivery of their needs. Consumer participation could be in the form of the acquisition of services and related information (Dabholkar, 1990:485) and has been noted as a key differentiating feature of the service process (Sampson, 2000:349). It is evident from the above definitions that consumers need to participate and interact with service providers in order for them to satisfy their needs

and meet their objectives. Stock market participation includes ownership and co-ownership of shares as well as the financial returns from these shares (Radtke, *et al.* 2015:9). This ownership and co-ownership of shares by consumers is driven by various factors that could include determinants and general drivers.

5.3 DETERMINANTS OF STOCK MARKET PARTICIPATION

The following section discusses various determinants of stock market participation, namely, undefined consumer preferences, heuristic decision-making, framing and overconfidence.

5.3.1 Undefined consumer preferences

The literature on behavioural finance indicates that consumers often do not arrive at an investment decision with concrete preferences. The most frequently cited work carried out in the USA found that consumers of retirement planning appear to have relatively weak preferences for the portfolio they select (Benartzi & Thaler, 2007:81). Given the choice between investment returns from retirement savings and the actual asset allocation, it is revealed that most consumers opt for the average distribution to be based on their own investment choice (Benartzi & Thaler, 2007:81; Tseng & Yang, 2011:453). According to Tseng and Yang (2011:453), such consumer decisions call into question the individual consumer's ability to choose an optimal asset allocation; therefore, they reflect a lack of knowledge and understanding of the choices offered. Investors search information such as digital information and seek financial advice for risk reducing strategies before making financial decisions (Tseng & Yang, 2011:453).

5.3.2 Heuristic decision-making

Heuristics are defined as the rules of thumb, which make consumer decision-making easier, especially in complex and uncertain circumstances (Ritter, 2003, as cited in Sarin & Chaudhury, 2017:57). According to Gigerenzer and Gaissmaier (2011:453), the study of heuristics analyses how consumers make decisions when optimisation is out of their control. Consumers of financial products do not always use systematic approaches to decision-making but they often rely on readily available internal information commonly referred to as a "gut feeling" (Sarin & Chaudhary, 2017:57). At some decision points, consumers tend to sacrifice decision quality and choose a

simpler, faster, and less expensive evaluation method where the gathering of information could result in long time delays and high costs (Obara, 2015:6; Lobao, Pacheco & Pereira, 2017:207). When making financial decisions, particularly when there is time pressure or factors such as lack of knowledge, it is difficult to assess the available choices (Kahneman & Tversky, 1979, as cited in Tapia & Yermo, 2007:8). There is a repertoire of knowledge on diversification strategies that consumers use to make investment decisions, such as decisions related to their retirement savings plans (Pompian, 2015:62). Heuristics provides an expedient tool for processing information by rapidly incorporating insights gained from past experiences, and it empowers consumers with a quick response that helps them (Pompian, 2015:62). However, heuristic decision-making has been found to negatively affect returns on unit trust investments (Obara, 2015:6) and it has been found to yield poorer portfolio returns than a market linked portfolio (Lobao *et al.*, 2017:207).

The relevance of heuristic decision-making insights into consumer behaviour regarding participation in the stock market is elaborated upon by considering the following examples, as suggested by Pompian (2015:62):

- Base-rate neglect. In base-rate neglect, consumers attempt to determine the potential success of an investment by predicting it based on positive past experiences. Consumers tend to rely on positive past investment experiences in order to make financial decisions. This thinking, however, ignores other unrelated variables that could substantially impact the success of the investment.
- Sample-size neglect. In sample-size neglect, consumers fail to precisely consider the sample size of the data on which they base their judgements when judging the probability of an investment outcome. Consumers incorrectly assume that small samples are representative of populations; consequently, they treat aspects reflected in such small samples as accurately describing universal data, even though the sample may not be representative of the data at large;
- Anchoring and adjustment. Anchoring and adjustment estimate a value with unknown magnitude; consumers generally begin by envisioning some initial default number, or an “anchor”, on which they rely to reflect subsequent

information and analysis. The anchor, once refined and reassessed, morphs into a final estimate. Furthermore, regardless of how the initial anchors were selected, consumers are likely to adjust their anchors insufficiently and produce biased approximations; and

- The availability bias. This is a rule of thumb that gets consumers to estimate the result of an outcome based on how common that outcome appears in their lives. Consumers who exhibit this bias view easily recalled possibilities as more likely than those prospects that are difficult to comprehend.

It is evident from the above discussion, and the suggested examples, that heuristic decision-making is a behavioural determinant in consumer behaviour regarding participation in the stock market.

5.3.3 Framing

The idea of framing is substantive in mental accounting analysis, which refers to the coding, categorisation, and evaluation of financial decisions (Hirshleifer, 2014:14). In framing, consumers alter their beliefs on money and investments according to the surrounding circumstances that they face (Panasiak & Terry, 2013:9). To frame is to select different aspects of perceived reality and to make the aspects more vivid in communicating it in such a way that projects a particular mental picture (Panasiak & Terry, 2013:9). Sometimes consumers create mental accounts to validate behaviour that seems appealing but that is in fact ill-advised and, at times, consumers derive value from mental accounting; for example, putting aside money for retirement may prevent some consumers from using that money prematurely. According to Pompian (2015:171), people mentally allocate wealth according to these three classifications: current income, current assets and future income.

The motivation to consume is high from the current income account, while sums allocated as future income are handled more conservatively. Framing bias acknowledges each consumer's desire to respond to prevailing circumstances differently, based on the context in which a choice is framed (Chuah & Devlin, 2010:7). A consumer's decision frame is the subjective view of the acts, results, and possibilities linked to a choice. The frame is controlled in part by the formulation of the problem and in part by the norms, habits, and personal characteristics of the consumer

(Chuah & Devlin, 2010:7). The consideration of alternative options can also be an outcome of the way in which the decision is presented since consumers prefer positive rather than negative frames (Panasiak & Terry, 2013:9). Although framing is often discussed with reference to positively versus negatively presented information, it applies to the presentation of information more generally (Chuah & Devlin, 2010:7). For instance, a fee or rate of return expressed as a percentage may call for a different behavioural response to the same information expressed in absolute monetary terms; moreover, consumers may react differently depending on whether the long-term or short-term results are presented to them (Tapia & Yermo, 2007:6).

According to Tapia and Yermo (2007:6), consumers are also affected by inertia or procrastination. This means that, when confronted with decisions about investment choices, consumers put off a decision until later. This has been shown to result in sub-optimal choices that may not meet the consumer's financial needs; these are therefore regarded as the consumer's failure to rebalance their investments. It is evident that framing as a behavioural determinant has an impact on consumer investment decisions.

5.3.4 Overconfidence

According to Chuah and Devlin (2010:7), overconfidence is a well-documented psychological bias; moreover, consumers have a natural tendency towards overconfidence. As human beings, consumers are more inclined to overestimate their own skills and predictions for success (Forbes, 2009:67). Mahajan (1992), as cited in Ricciardi and Simon (2000:4), defines overconfidence as an overestimation of the probabilities for a set of events. Consumers have a natural proclivity towards overconfidence, as has been proven by researchers and is well-documented as a psychological bias (Chuah & Devlin, 2010:7). According to Ricciardi and Simon (2000) as well as Bansal (2015), consumer confidence often affects the accuracy of their financial investment choices. For example, when given market reports of twenty listed shares and asked to predict stock price changes, consumers rated their own accuracy in prediction at 68% while the actual accuracy was only 47% (Bansal, 2015:109).

Fundamentally, overconfidence can be summarised as unwarranted faith in one's intuitive reasoning, judgements and cognitive abilities (Pompian, 2015:51). The

concept derives from a large body of cognitive psychological experiments and surveys in which subjects overestimate both their own predictive abilities and the precision of the information they have been given (Hirshleifer, 2014:15). When the confidence intervals that consumers assign to their investment predictions are too narrow, this type of overconfidence is called prediction overconfidence (Hirshleifer, 2014:15). For example, when estimating the future value of a share, overconfident consumers will consider far too little leeway into the range of expected outcomes, forecasting between a 10% rise and fall, while historic rates demonstrate more drastic standard deviations (Chuah & Devin, 2012:7). The consequence of this behaviour is that consumers may underestimate the downside risks to their investments. The type of overconfidence that is displayed when consumers feel certain of their judgements is known as certainty overconfidence. For example, having resolved that a firm is a good investment, consumers often become blind to the prospect of a loss, then they feel disappointed if the investment performs badly (Chuah & Devlin, 2010:7). According to Shefrin (2007:278), consumers who are overconfident about their investment skills are likely to trade too much, and those who make relatively more trades have lower returns than those who trade less frequently.

Consumers can be overly optimistic about the stock market and the potential for positive performance of the investments they make (Pompian, 2015:163). Many overly optimistic investors believe that poor investments will not occur and/or affect them (Pompian, 2015:163). Kahneman (2011), as cited in Pompian (2015:163), describes this optimism as a tendency by investors to use their own internal view and experiences on investments, whereas a broader view might be more appropriate when making financial decisions. Puri and Robinson (2007:72) show that optimism and stock market participation have a strong positive relationship, and that optimism can affect consumer decisions when deciding on asset allocation. In summary, the overconfident consumer buys and sells shares excessively; this results in poor returns while underestimating downside risks and, as a result, they suffer poor investment performance. On the whole, consumers concentrate more on minimising losses than they do on maximising positive results, even with long-term investments such as pension funds. Two possible effects of overconfidence are that it results in more trading, with high frequency trading leading to lower returns. It is evident from the previous discussion that overconfidence affects consumer investment decisions.

5.4 STOCK MARKET PARTICIPATION DRIVERS

The following section presents various stock market participation drivers. The participation drivers are presented in Table 5.1.

Table 5.1: Stock market participation drivers

Social interaction	Financial innovation	Time factor
Geographic effect	Gender	Political orientation
Financial advice	Consumer debt	Health and disability

Source: Researcher's own construction.

Table 5.1 shows the stock market participation drivers, namely, social interaction, geographical effect, the nature of financial advice given, financial innovation (sometimes called Fintech), gender, consumer debt, the investment time factor, political orientation as well as health and disability. The identification of fundamental drivers of stock market participation amongst consumers is important as a basis for understanding consumer behaviour regarding stock market participation in SA. According to Calvet, Celerier, Sadinni and Vallee (2016), one of the major challenges of household finance is the low level of stock market participation in developed economies. Calvert *et al.* (2016) argue that this low level of participation has large potential economic effects and influence on consumers' financial sustainability. Similarly, stock market non-participation results from the fact that most consumers do not invest in shares despite the significant return on investment (Manjula, 2013:37). In SA, it is noted that consumers struggle with a poor investment culture, and the government recognises the importance of addressing this problem (JSE, 2014:2).

Traditional finance theory posits that a consumer's drive to take financial risks depends simply on investment opportunities and risk aversion (Constantinides, 1995:67). Other consumer choice models allow for changing investment opportunities, transaction and information costs to influence consumer financial decisions (Constantinides, 1995:67). In addition to building wealth, stock market participation has been noted to facilitate consumption smoothing which can have a significant impact on consumer welfare (Manjula, 2013:37). According to Manjula (2013), risk aversion stands out as the single most significant driver of stock market participation since all other characteristics such as sociability, trust, political orientation, cognitive skills, life satisfaction and religion,

strongly explain the level of individual risk aversion. As a consequence, risk aversion seems to be an important channel through which other drivers of stock market participation operate (Manjula, 2013:37). Studies by Grinblatt and Keloharju (2001) as well as Stulz and Williamson (2003) first emphasised the impact of culture on stockholding; these studies brought the cultural aspect to the attention of the finance community (Manjula, 2013:37). Cultural, social and experiential factors influence the decisions of consumers with shared experiences (Sawady & Tescher, 2008). These factors are linked to, and incorporated into, the stock market participation drivers discussed in the sub-sections to follow.

5.4.1 Social interaction

Social interaction and its effect on stock market participation has been the subject of many studies in behavioural finance. According to Manjula (2013), stock market participation can be influenced by social interaction between individual consumers in several different ways and through different networks. Notably, the social environment in which consumers live has a critical role to play in influencing their participation in the stock markets. In the same way, a study conducted by Brown, Ivkovic, Smith and Weisbenner (2008) reveals that a 10% growth in a community's share ownership rate will increase the likelihood of stock market participation amongst individual consumers in that society by 4.2%. Furthermore, Brown *et al.* (2008) evince a causal relationship between individual and community stock market participation; they reveal that, on average, a 10% increase in community share ownership increases the probability of consumer stock market participation by 4%. Georgarakos and Pasini (2011) reveal that the level of consumer participation in the stock market is in direct proportion to the level of sociability of a community; moreover, higher levels of sociability in a society can meaningfully influence consumer participation in the stock market. In addition, Georgarakos and Pasini (2011) suggest that the negative effect of low stock market participation can be counterbalanced by higher social interactions. Hongitt and Stein (2004) describe two mechanisms through which social interaction can stimulate stock market participation:

- firstly, information can be transmitted through verbal communication or observational learning. Similarly, Dichter 1966, as cited in Manjula (2013), believes that word-of-mouth is one of the most important characteristics of

social interactions, which might lead consumers to participate in stock markets as satisfied consumers tend to advertise a product or service (verbally or by way of using a product or service); and

- secondly, consumers may also enjoy discussing investments with their peers and are likely to invest in shares if the participation rate is high amongst their social network.

Hongitt and Stein (2004) reveal that consumers who interact with their neighbours or attend the same church are more likely to own shares and participate in the stock market than are non-social consumers. Furthermore, the authors demonstrate that sociability has a stronger effect on participation in areas where the overall stock market participation rate is high; in addition, it was noted that the participation differences between social and non-social consumers have widened with the increase in overall stock market participation rates (Hongitt & Stein, 2004:2).

Kaustin and Knupfer (2012) reveal that consumer stock market entry decisions are influenced by the stock market performance of their social network in the preceding months. Similarly, Scheinkman (2008), as cited in Afsharha (2014), believes that social interactions refer to communications in which consumer participation could be influenced by the actions of other consumers. One of the ways in which peer pressure might influence stock market participation is the “keeping up with the Joneses” effect whereby individual consumers imitate their social circles and thus try to keep the same level of utility as their social network (Afsharha, 2014:12). Furthermore, the social network’s achievements or failures in stock markets have a profound influence on decisions made by other consumers in the same social network (Hongitt & Stein, 2004:3). Correspondingly, the strong performance of a social network in one month will highly encourage new consumers to venture into stock market investments in the following month (Kaustin & Knupfer, 2012:1). Interestingly, the outcome is limited to good investment performance, which has an encouraging effect on stock market participation, whereas poor investment performance does not have any prohibitive effect (Afsharha, 2014:12).

According to Hongitt and Stein (2004), potential investors might learn basic concepts of investment markets through observational learning and they would probably get involved in stock markets. The authors suggest that both social and non-social

consumers experience almost equal fixed stock market participation costs but, when stockholding is more common amongst social networks, participation costs will be more negligible by social individuals than non-socials. However, according to Hellström, *et al.* (2013), the effect of sociability in financial decisions is more prevalent amongst consumers with lower financial literacy. In addition, Hongitt and Stein (2004) suggest that financial decisions made by consumers could be more vulnerable to changes in other external factors, such as the role of the internet and online trading. The increase in internet penetration gives faster and cheaper access to information and internet access is a major consideration for stock market participants (Hongitt & Stein, 2004:3). Gumbo and Sandada (2018) concur that access to the internet is a significant predictor of stock market participation by individual investors. Georgarakos and Pasini (2011) reveal that the level of consumer participation in the stock market is in direct proportion to the level of sociability of a community; moreover, higher levels of sociability in a society can meaningfully influence consumers' participation in the stock market. In addition, Georgarakos and Pasini (2011) suggest that the negative effect of low stock market participation can be counterbalanced by higher social interactions.

Linked to social interaction a study by Guiso, *et al.* (2008) reveals that religion is an aspect that increases trust levels in a society. Religion can positively increase the chances of share ownership by increasing the level of trust and sociability (Guiso *et al.*, 2008:1540). According to the authors, the level of trust is 2% higher in religiously raised consumers and 20% higher when participating in religious activities such as church attendance. Measures used to reflect sociability, such as education, activity in organisations and clubs, religious participation and marital status, correlate with each other, in addition to correlating with stock market participation (Hongitt & Stein, 2004:2). Guiso and Jappelli (2008) conclude that financial awareness is partly determined by the way FSPs socialise with consumers and how information is disseminated, as previously explained in the communication section in Chapter Four of this study. It is evident from the previous discussion that social interaction is a contributor to consumer decision-making and participation in the stock market.

5.4.2 Geographic effect

According to Boubakri, Guedhami and Saffar (2015), geographic location is an important determinant of the investment ownership structure and the cost of equity capital. Geographical distance is also an important factor in determining stock market participation due to information asymmetry and the home bias effect (Aksoy, 2014:101). This means that consumers' stock market participation levels will be lower if they lack the relevant information and/or if their proximity to the stock market and investment sources are limited. The presence of stock market listed firms within a radius of 60 kilometres and having a stock market headquartered within the community are significantly correlated with share ownership by consumers (Brown *et al.*, 2008:27). Brown *et al.* (2008) investigated the importance of geography in explaining stock market participation; they provide evidence to support two distinct local area effects. The first is a community ownership effect, that is, individual consumers are influenced by the investment behaviour of members of their community. The second effect is that proximity to stock market listed firms by consumers also increases stock market participation by consumers.

Sit, Marrilees and Birch (2003) used the term "atmospheric" to explain the effect of geography on consumer decision-making. Sit *et al.* (2003) define atmospheric as an important environmental cue that provides consumers with an indication of the quality of a shopping centre; it includes items such as ambience, colour, music and the layout of the shopping mall. Different researchers on consumer buying behaviour have used different atmospherics to determine shopping mall attraction (Alqahtani, 2011:5). This result is consistent with a hypothesis that proximity to local companies may provide a pool of potentially profitable investments that is easier for more financially sophisticated consumers to discover, which in turn influences their decision to own shares. It is thus evident that a consumer's geographical location can impact his/her consumer decision-making and it can influence the behaviour of members of a community.

5.4.3 Financial advice

Consumers of financial products interface with financial advisers/planners and brokers before and after a decision to buy a financial product. Financial advice refers to any recommendations of a financial nature furnished to consumers to meet their financial

needs; it is usually sales and service oriented through selling financial products and providing financial advice to meet financial needs (Hassan, Sanchez & Yu, 2011:7; Botha, Rossini, Geach, Goodall, du Preez & Rabenowitz, 2012:44). According to Lewis and Messy (2012:25), financial advice is about providing consumers with advice that will assist them to evaluate financial products and choose financial products that are in their best interests. Advice is ubiquitous in the retail finance industry and, according to a broad survey of retail investors in Germany, more than 80% of investors consult a financial advisor (Collard, 2009:24). Further, a large cross-country survey in Europe showed that close to 90% of respondents in several countries specifically expect FSPs to provide advice, with the clear majority of consumers saying that they trust the advice they receive (Collard, 2009:24).

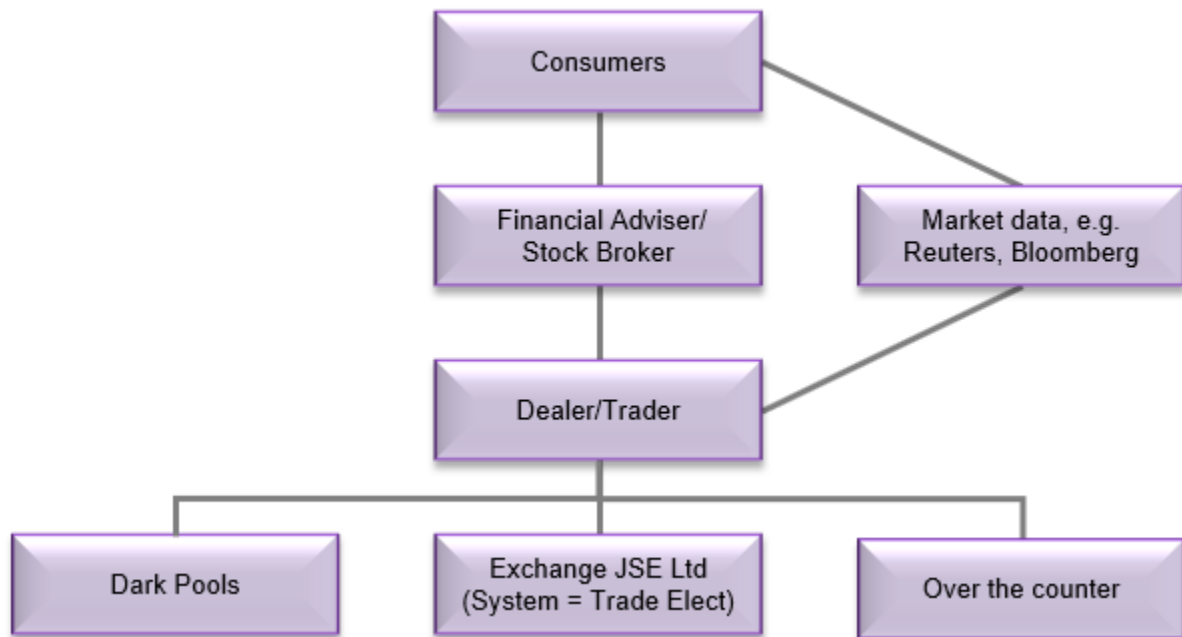
Lewis and Messy (2012) believe that the manner in which financial products are distributed may be a source of apathy for consumers because financial advisors selling financial products may be motivated by commission or fees. Furthermore, the lack of transparency of financial information by financial institutions, and the provision of misleading information, may cause apathy amongst consumers and lead to their non-participation (Botha *et al.*, 2012:4). Lewis and Messy (2012) propose that a lack of perceived transparency by service providers may be the reason why consumers do not invest in financial markets. According to Lewis and Messy (2012:18), the lack of financial institutions presenting financial products in a simplistic manner to consumers causes them not to understand financial products and the risks attached to financial products. These financial products are complex in nature and require that consumers are able to compare different kinds of financial products and the fees charged for them (Lewis & Messy, 2012:7).

Using trading as well as survey data from a sample of customers of a German bank, Hackethal, *et al.* (2010) found that over half of the surveyed consumers note that they consistently depend on the advice of their financial advisors. The relationship between financial advice and financial education is profound since financial education provides information about financial concepts and products, and financial advice provides financial recommendations in respect of financial concepts and products in order to meet consumers' financial needs (Lewis & Messy, 2012:25). Hassan, *et al.* (2011:88)

agree that financial education ensures that consumers are familiar with financial concepts and products that are recommended to them.

It is common practice in the financial services industry not to charge customers directly for advice but for customers to end up paying indirectly through distribution fees and commissions that flow from product providers to brokers and independent financial advisors (Collard, 2009:24). According to Hackethal *et al.* (2010), there is evidence that the fee and commission structure of investment products drives their sale to customers. Collard (2009:24) believes that the impact of commissions on the quality of advice depends not only on whether these are made transparent to consumers, but also on consumer wariness. Scientific research supports the view that some consumers are naïve about how conflicts of interest affect the quality of advice; for example, studies on consumer reactions to recommendations by financial advisers/planners suggest that some consumers are naïve about advisers'/planners' fees and commissions (Collard, 2009:24). Furthermore, financial advisers/planners may also have an interest in increasing the turnover in their clients' portfolios when they earn additional fees or commissions with every new purchase (Collard, 2009:24). On the stock market, most trading in shares is intermediated by financial advisers/planners and brokers who are financial representatives of FSPs or members of the JSE who trade on behalf of customers. The intermediation and trading process is illustrated in Figure 5.1.

Figure 5.1: The trading process



Source: Adapted from van Wyk *et al.* (2016:210).

It is evident from Figure 5.1 that consumers interact with financial advisers/planners when investing in the stock market or selling shares. The financial adviser/planner or broker can either place the order on the exchange's central order book or they can do so indirectly through a dealer (Van Wyk *et al.*, 2016:210). The dealer can either execute the transaction out of its own inventory, also referred to as the dark pool, or place the order on the exchange (Van Wyk *et al.*, 2016:210). The JSE has an automated trading system called Trade Elect, which allows consumer orders to be entered into the system by the consumer's appointed stock broker, and the orders are stored in the central order book. This book is anonymous, therefore, investors do not know the identities of their counterparts (JSE, 2016:2). The trading system matches the orders via the central order book. Over the counter (OTC) trades are performed on a bilateral basis; these take place directly between buyers and sellers, as illustrated in Figure 5.1 (JSE, 2016:2).

According to Georgarakos and Inderst (2011:7), in most European countries the majority of consumers expect FSPs to provide advice. It is equally known that in the USA unit trust funds and shares are overwhelmingly purchased after receiving financial advice; the role of advice is further strengthened by the increased complexity

of new financial products and by the gradual shift of responsibility to save for retirement away from welfare schemes towards households (Georgarakos & Inderst, 2011:7). While many consumers may use advisors or other intermediaries, consumers significantly differ in the extent to which they rely on recommendations, their financial capability and the trust they put in professional advice (Christman, 2010:30). Research indicates that consumers' levels of awareness of their rights has a significant effect on stock market participation (Christman, 2010:30). Rossini and Maree (2010) argue that different consumers need to rely on financial advice to a different degree, depending on their own financial resources. It is evident from the previous discussion that financial advice plays a part in consumer financial decisions, including participation in the stock market.

5.4.4 Financial innovation

The use of technology and financial innovation in financial services is ubiquitous and it impacts consumer decisions, including those related to the stock market. According to Calvet, *et al.* (2016:2), the introduction and development of financial innovation can impact consumer financial decisions. Better customisation of financial products might minimise conflicting interests which hinder consumer participation in the stock market; for instance, products offering a guarantee in capital at maturity might encourage less risk averse investors to participate (Calvet *et al.*, 2016:2). Leong and Sung (2018) as well as Schueffel (2016) suggest that FinTech is a term created by combining finance and technology-based innovation and re-bundling finance, settlement and financial services. According to Leong and Sung (2018) as well as Schueffel (2016), FinTech consists of two layers: the infrastructure layer (core technologies) and the service layer (actual financial services).

Financial innovation has brought with it challenges in financial services; for example, the availability of structured financial products increases risky asset market participation by attracting new categories of consumers (Calvet *et al.*, 2016:2). The increase in stock market exposure is larger for relatively poor consumers and consumers with an initially low risk share. According to the National Treasury Report (2011:63), some of the innovative ways used to deliver financial products or services to the poor in SA include the following:

- retail money transfers, where consumers can transfer cash on a consumer-to-consumer basis in retail stores;
- cash paybacks at Points of Sale, where consumers can receive cash backs when they are doing their shopping; and
- mini-ATMs, which operate like normal ATMs, but the machine issues a slip of the cash withdrawn by the customer that can be taken to a store owner to exchange for cash (Napier, 2010:148).

Studies such as those conducted by Bogan (2008), Guo and Lianji (2011) as well as Glaser and Klos (2013) have shown that, in general, easier access to the internet increases stock market participation, and the internet has made owning shares in the stock market easier by decreasing both information and transaction costs. According to Glaser and Klos (2013), there is a correlation between internet penetration and financial literacy which, in turn, drives stock market participation; those with high levels of financial literacy are more likely to participate in the stock market. Internet usage (Bogan, 2008) and financial literacy (Van Rooij, Lusardi & Alessie, 2011) have been shown to play a role in stock market participation. Bogan (2008) suggests that households that are more comfortable using the internet participated substantially more than households that are less comfortable using the internet. Similarly, Gumbo and Sandada (2018:642) concur that stock market awareness and access to the internet is a significant driver of stock market participation by individual investors. Thus, the financial innovation of role players in the financial services industry influences stock market participation.

5.4.5 Gender

Financial product designs differ according to the demographic characteristics of consumers. Different financial products are offered to consumers based on the consumer needs of certain sub groups of the population (Calvet *et al.*, 2016:2). Barber and Odean (2011) examined the link between gender and behavioural finance biases. Their study revealed that men are more susceptible to overconfidence bias than women, as is reflected in their shares trading behaviour. In general, it has been observed that women are more risk averse than men, while those who are younger are more risk seeking, and wealthier consumers exhibit a greater willingness to invest in shares than do the poor who are more risk averse (Clark & Strauss, 2008:23).

Research conducted in Australia has revealed that women chose more conservative investment plans, for their superannuation schemes, than men (Watson & McNaughton, 2007:136). However, some studies indicate that marital status and wealth play bigger roles than gender while, in some cases, these factors supplant the effects of gender (Watson & McNaughton, 2007:136).

An analysis of the US survey on consumer finance found that gender differences in Washington DC pension fund allocations could only be understood in combination with marital status; it was found that single women and married men were less likely than single men to choose an equity linked portfolio (Collard, 2009:3). In addition, married women were more likely than single women to choose riskier portfolios (Collard, 2009:3).

Yuce and Yap (2006), as cited in Shefrin (2007:278), observed the investment behaviour of male and female students who took part in an investment game where they invested \$1,000,000 (approximately R15 000 000) and formed portfolios of different financial assets. Risk aversion levels revealed that female students are statistically more risk averse than their male counterparts. The results also revealed that female students did not achieve the highest five or the lowest five returns; instead, they obtained middle range returns because they invested in more conservative instruments (Shefrin, 2007:278). In their examination of the trading accounts of men and women, Barber and Odean (2011) found that men trade approximately 50% more than women, and that both men and women reduce their portfolio gains through high frequency trading, with men trading by 94 basis points more per year than women. Marital status can also influence the frequency of trading, with the difference being bigger between single men and single women (Barber & Odean, 2011:44). Single men trade 67% more than single women, and single men reduce their gains by 144 basis points compared to single women (Barber & Odean, 2011:44).

The tendency for women to invest in less risky asset classes than men appears to be related to the gaps in financial resources as measured by net worth and expectation of an inheritance (Embry & Fox, 1997:38). The researchers found that, over a six-year period, men on average traded more than women and that single men on average traded 67% more than single women. Similarly, the explanations for gender differences observed in research have been summarised with reference to gender

inequalities in wealth and the different gender responsibilities that inform these disparities (Bajtelsmit & Bernasek, 1996:78). It is thus evident that gender plays a part in consumer participation in the stock market.

5.4.6 Consumer debt

A country's "saving by the household sector" is defined as that part of current income, after the payment of direct taxes, which is not consumed as part of the consumer's current expenditure (OECD, 2018:1). In accounting practice, the savings of a household will be equivalent to the increase in the net asset value of the household while an increase in the credit commitments of consumers will lead to a fall in their savings, unless this is reversed by stronger increases in the assets of households (OECD, 2018:1). An inverse relationship can be expected between increases in the use of consumer credit and the saving of private households over time. In SA, a relationship pattern can be observed, from the beginning of the 1980s, between the ratios of household debt to consumer disposable income and between household saving and the personal disposable income of households (Paile, 2014:18). Similarly, the regression in the saving ratio of households at the beginning of the 1980s coincided with the greater use of credit by households and an increase in the net wealth of households relative to their personal disposable income (Paile, 2014:18).

According to Japelli (2010:3), one of the risks of over-indebtedness is vulnerability to adverse shocks in the future. Japelli (2010:3) found that a recession may last longer with significant consequences because of household debt which can adversely affect financial institutions. Consumers who are over-indebted face interest rate risk which is reinforced by inflation, which will increase, thus leading to an increase in the amount of debt repayments (Japelli, 2010:3). Households with mortgage debt also face investment risk if the price of their house decreases, which will result in the household owning a property that is worth less than the total debt owed (Paile, 2014:19).

As linked to the discussion on financial literacy in Chapter Four, Griffiths (2007:1) acknowledges that consumers' lack of knowledge contributes to their risk of debt as they lack an adequate level of financial literacy in order to handle their financial affairs. This finding ties in with the results of a financial literacy study conducted in SA, which found that 44% of consumers experienced financial difficulties and could not make

ends meet with their income (Roberts, Stuwig, Gordon, Viljoen & Wentzel, 2012:14). Furthermore, it is observed that the coping mechanisms for poverty stricken households vary from borrowing from friends, family or a financial institution, which results in them cutting down on certain expenses and financial investments (Roberts *et al.*, 2012:14). Afsharha (2014:9) concurs that wealth has a significant role to play in stock market participation. According to Paille (2014:18), an acceptable debt becomes unsustainable and is counter-productive when total consumer debt exceeds 85% of GDP.

In order to reveal barriers to stock market participation, some studies focus on stockholding fixed costs (Vissing-Jorgensen, 2004, as cited in Afsharha, 2014:9). Transaction costs and fees paid to financial advisers/planners and stock brokers are examples of stockholding costs. Research demonstrates that these stockholding costs can lead to lower stock market participation amongst consumers (Bertaut, 1998:23). However, wealthy consumers are not hindered from participating in the stock market by commissions and fees since stock market participation rises significantly as net-wealth increases (Samuelson, 1969; Merton, 1969).

According to Bricker, Kevin, Moore and Sabelhaus (2014:2), households in the higher percentiles of net-wealth distribution are more likely to own shares than those with low net-wealth. Research also reveals that consumers who are amongst the wealthiest 10% are approximately twelve times more likely to own shares than those who are in the lowest quarter of wealth in a population (Afsharha, 2014:9). According to Bricker *et al.* (2012:2), the aggregate financial value of shares held by the top 10 wealthiest households are respectively much higher than the value of shares owned by less wealthy households. Accordingly, stock market participation declines amongst less wealthy consumers whereas stock market participation increases by 4% amongst the wealthiest 10% (Afsharha, 2014:9). It is evident from the previous discussion that South African consumers are heavily indebted, and consumer debt may have a negative impact on consumer participation in the stock market.

5.4.7 Time factor

Time is critical to consumer investment decisions as consumers can defer consumption, since the consumption that they expect to fund with current savings

often lies in the future (Collard, 2009:32). This means that money has time value since a Rand today is worth more than a Rand received one year later because it will most likely not be able to buy the same amount of goods as it can today (Van Wyk *et al.*, 2016:218). Central to the time value of money is interest, which is a consideration paid for the use of money; to the borrower, interest represents the cost of a loan while to the lender it is a source of income. According to Van Wyk *et al.* (2016:218), an interest rate can be thought of as:

- a required rate of return which is the minimum rate of return a consumer will agree to accept for the investment;
- the rate at which a future amount is reduced in order to establish its present value or its value today; and
- an opportunity cost which is the value that a consumer will forego by choosing a course of action. For example, if an investor has R5 000 and chooses to spend it rather than invest it, the investor will forego the interest that could have been earned on the investment.

According to Roberge, Flaherty, Almeida and Boyd (2017), consumers are becoming increasingly ephemeral in their orientation even while demographic trends point to longer life and the need for adequate provision of retirement income. Similarly, Scalliet, Karoui, Jeanblanc and Martellini (2003) believe that uncertainty over investment lock-in time is an important factor facing consumers of financial investments. The time an investor is willing to wait for an investment return and inflation, also related to time, influences stock market participation. The available research has also proven that time is an important component in consumer financial decision-making.

5.4.8 Political orientation

Political values have a bearing on consumer investment decisions in many different ways (Afsharha, 2014:19), and can thus influence stock market participation. Hong and Kostovetsky (2012) demonstrate that fund managers who support the Democratic Party in the USA have different approaches to portfolio allocation in comparison to those who support Republicans. Democratic Party supporters put less value on shares linked to companies which manufacture guns, defensive equipment, tobacco or natural resources (Afsharha, 2014:19). Similarly, according to Iloiu and Iloiu (2008),

there is a negative relationship between political instability and foreign direct investment. Wisniewski and Pathan (2014) reveal that removing political instability is an essential ingredient in fostering a conducive environment for direct foreign investment.

Another study in Finland (Kaustia & Torstila, 2010, as cited in Afsharha, 2014:19), reveals that Finns who vote for right-wing politicians are normally more likely to own shares than are their counterparts with different political views. Political orientation affects investing behaviour; moreover, there is a positive correlation between voting for right-wing parties and investing in stocks (Kaustia & Torstila, 2010). Political risk refers to the possibility that political decisions or events will affect the business environment in such a way that consumers will lose money or not make as much money as they expected when the investment was initially made (Iloiu & Iloiu, 2008:7). As an example of political risk in SA, the Nene Gate political scandal precipitated by the sacking of the then Minister of Finance resulted in the Public Investment Corp losing R99 billion within 48 hours of the axing of Finance Minister Nhlanhla Nene (News 24, 2016). It is thus evident that political orientation has a bearing on consumer investment decisions.

5.4.9 Health and disability

Research shows that the physical and mental health of consumers has a profound effect on their market entry decisions (Afsharha, 2014:21). Laakso (2010:20) reveals that households in poor health are less likely to hold financial assets compared to healthy households, and that poor health is also associated with smaller investment in risky assets such as shares. Using data from health and retirement studies in the USA, Rosen and Wu (2004), as cited in Afsharha (2014:21), demonstrate that health has a major role to play in the probability of stockholding. In addition, the health status of each consumer influences asset allocation strategies, with households that are in poor health being less likely to participate in the stock market (Afsharha, 2014:21). However, taking European countries into consideration, Atella, Brunetti and Maestas (2012) show that the effect of health risk on stock market participation is restricted to countries with less protective health care systems. Research suggests that highly educated consumers are more forward-looking; in this regard, they distribute financial assets in their portfolios not only by taking their current health status into account, but

also their future health condition, while less educated individuals with higher future health risks are more likely to keep risky assets (Afsharha, 2014:19).

According to the World Health Organisation (WHO, 2011), persons with disabilities experience worse educational and labour market outcomes, and are more likely to be poor than persons without disabilities. Furthermore, disabled consumers have lower employment rates and lower educational attainment than persons without disabilities. Similarly, World Health Survey data for 15 developing nations suggests that households with people living with disabilities spend relatively more on health care than they do on other consumer products when compared with households without disabled family members (WHO, 2011:2). For example, in Sierra Leone, it was found that households with people living with disabilities spent an average of 1.3 times more on health care than non-disabled households, and it was found that these households generally have fewer assets. Disabled consumers require a variety of services ranging from relatively minor medical and health-related interventions to sophisticated and expensive ones. Unmet needs may relate to activities such as access to financial services, participation in education, social activities and the lack of modification to facilities by service providers (WHO, 2011:2).

According to the South Africa Human Rights Commission (SAHRC, 2016), people with disabilities account for 5.1% of the population aged 5 years and older in SA. These consumers continue to lack access to adequate health and basic education, and they are at risk of economic isolation with no prospect of securing employment. People living with disabilities are also particularly vulnerable to segregation and abuse (SAHRC, 2016). It is evident from the reviewed literature that health and disability make a profound contribution to consumer financial decisions.

5.5 INVESTOR PERSONALITY TYPES

Investor personality types are relevant to this study because consumers with different personalities might have different views on investments and, therefore, they participate differently on the stock market. Ulher (2017:572) defines personality as a consumer's characteristic pattern of behaviours including their thoughts, feelings and motivation. John and Gross (2007) believe personality refers to the characteristics of the consumer that are responsible for consistent patterns of feelings, thought and

behaviour. According to Buccioli and Zarri (2015:15), non-cognitive skills such as consumer personality traits significantly influence consumers' investment portfolio choices.

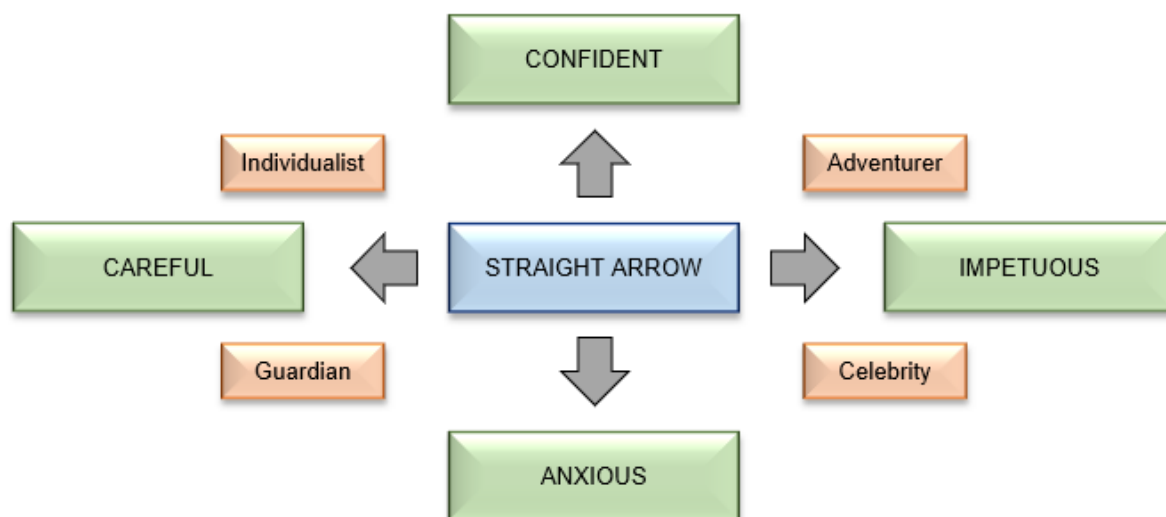
Researchers have attempted to empirically examine the relationship between investor personality types and investment behaviour in the stock market. Filbeck, Hatfield and Harvath (2005:172) use the Myers-Briggs Type Indicator to assess risk tolerance between people with different personality traits. The indicator assumes that different personality types have different risk tolerance levels, which shows that personality types can influence investments. It is important to note that various models of personality types exist.

5.5.1 Models of investor personality types

Studies have determined that there is a relationship between personality traits and the psychological biases of consumers, with the personality traits of consumers impacting their financial risk tolerance (Kubilay & Bayrakdaroglu, 2016:171). According to Isidore and Christie (2017:23), psychographic classifications are relevant to financial investment objectives and risk tolerance. A consumer's experience and attitude can play an important role in financial decision-making during asset allocation (Isidore & Christie, 2017:23). Furthermore, consumers who fit specific psychographic profiles are more likely to show certain behavioural biases which can give financial advisers/planners an opportunity to identify a consumer's behavioural tendencies before financial decisions are made (Isadore & Christie, 2017:23). Isadore and Christie (2017) suggest that, when the behavioural biases expressed by each consumer are recognised, financial advisers/planners would be well equipped to guide the consumer in making the right financial investment decisions. Barnewall's Two-Way Model is one of the most common psychographic investor models which intend to help financial advisers/planners engage with consumers of financial products. Pompian (2015:287) classified consumers under two banners, namely, passive and active consumers. Passive consumers show a need for security that exceeds their tolerance for risk, whereas active consumers would risk their own money in order to earn wealth since their tolerance for risk is higher than their need for security (Thomas & Rajendran, 2012:116). Correspondingly, active consumers prefer to maintain control of their own investments (Pompian, 2015:287).

As the main focus of this study is the investigation of consumer behaviour regarding stock market participation, this section will discuss the Five-Way Model, also known as the Bailard Biehl and Kaise (BB&K) model. According to Thomas and Rajendran (2012:124), the BB&K model is linked to preferences of investments made by the various personalities of consumers. The BB&K model, as cited in Pompian (2015:282), classified investor personalities along two axes: the level of confidence on the vertical axis, and the method of action on the horizontal axis. The model is graphically presented in Figure 5.2. The first axis of the model deals with how confidently a consumer sees life in general, including how a consumer views issues that are unrelated to money. It is observed that, when considering a variety of life choices, consumers will either be self-assured or suffer from self-doubt and anxiety. The second axis of the BB&K model relates to whether consumers are structured and analytical in their approach to life or whether they are driven by emotions (Thomas & Rajendran, 2012:115). The two aspects can be thought of as two axes of consumer psychology, with one axis called “confident-anxious” and the other “careful-impetuous.”

Figure 5.2: Representation of the BB&K Model



Source: Adapted from Pompian (2015:283).

Pompian (2015:283) explains each of the personality types as follows:

- Adventurer: The adventurer represents consumers who are willing to put all their savings into one type of investment, such as the stock market, all at once because they are confident. The adventurer is difficult to engage with and is prepared to take risks;
- Celebrity: These personalities represent consumers who are ego driven and want to be actively involved in all investment decisions and transactions, although they are not very knowledgeable about investments;
- Individualist: The individualist represents those consumers who tend to “go their own way” and who, mostly, run their own small practices as independent professionals. Individualist consumers make their own decisions in life with a degree of confidence, while also being careful, methodical and analytical;
- Guardian: This personality category represents consumers who are more mature with age, and beginning to consider retirement as they approach the end of their career. The guardian consumers are careful, conservative and lack confidence in their ability to understand where to make financial investments; and
- Straight Arrow: These consumers are well balanced. This group of consumers contain the average investor, relatively balanced between being risk takers and being conservative investors, as they are willing to be exposed to medium amounts of financial risk.

McCrae and John (1992), as cited in Zaid, Wajid, Zaid, Zaid and Zaid (2013:1344), suggest that there are five traits that can be found in almost any measure of personality and that the personality trait structure is universal. Research has also indicated that the “big five” traits are highly stable over time and appear to be shaped by biological factors (Zaid *et al.*, 2013:1344). Furthermore, McCrae and John (1992), as cited in Zaid *et al.* (2013:1344), conclude that history, cross-cultural replication and empirical validation across many methods and instruments make the five-factor model a discovery of personality psychology. There has been consensus that the five-factor model of personality, often termed the “big five” personality framework, is one of the most prominent models available in contemporary psychology to describe the various features of investor personality (Kubilay & Bayakdaroglu, 2016:171). According to

John and Srivastava (1999), as cited in Isidore and Christie (2017:23), the title “big five” is selected to emphasise that each of the factors is extremely broad as these five dimensions represent personality at the broadest level of abstraction, with each dimension summarising a large number of distinct personality traits.

The attributes of the five-factor model are:

- Extraversion is indicated by positive feelings and the inclination to belong to a social network. It represents the tendency to be sociable, active, upbeat and optimistic. Such consumers prefer groups, enjoy excitement and stimulation, and experience positive effects such as energy, zeal and excitement (Zaid *et al.*, 2013:1344; Kubilay & Bayrakdaroglu, 2016:171; Isidore & Christie, 2017:23). This attribute is relevant to the study of consumer behaviour regarding participation in the stock market as previous research has indicated that social interaction influences participation in the stock market;
- Agreeableness is the tendency to be trusting, compassionate, caring, generous, and empathetic. In essence, agreeable individuals are sociable and have a communal orientation toward others (Zaid *et al.*, 2013:1344; Kubilay & Bayrakdaroglu, 2016:171; Isidore & Christie, 2017:23). Agreeableness is relevant to this study since consumer trust has been found to have a positive influence on stock market participation;
- Conscientious individuals are self-driven and determined. They show dedication to duty and act dutifully, and they show self-discipline while being goal oriented. Consumers in this category exhibit goal directed behaviour, such as thinking before acting, delaying gratification, and following norms and rules; they have the ability to plan, organise and prioritise tasks (Zaid *et al.*, 2013:1344; Kubilay & Bayrakdaroglu, 2016:171; Isidore & Christie, 2017:23). Conscientiousness is relevant to this study since it is linked to the aspect of time, with the time horizon of investments influencing stock market participation;
- Neuroticism measures stability and emotional adjustment, or stability and emotional maladjustment. People who have the tendency to experience fear, nervousness, sadness, tension, anger and guilt are at the high end of neuroticism. Individuals scoring at the low end of neuroticism are emotionally

stable and even-tempered (Zaid *et al.*, 2013:1344; Kubilay & Bayrakdaroglu, 2016:171; Isidore & Christie, 2017:23). Neuroticism is relevant to this study since it is linked to attributes of behavioural finance that have been found to impact financial decisions, including participation in the stock market; and

- Openness to experience refers to an individual's tendency to be original in their thinking, in addition to self-awareness, exhibiting aesthetic values and being intellectually curious. Furthermore, consumers with high levels of openness to experience are open minded and willing to explore new ideas and unconventional values (Zaid *et al.*, 2013:1344; Kubilay & Bayrakdaroglu, 2016:171; Isidore & Christie, 2017:23). Openness is relevant to this study since it is linked to consumer awareness via communication from the financial services industry, which has been found to influence consumer participation in the stock market.

Personality traits could clearly influence the way in which consumers make decisions and, in turn, how they make decisions regarding stock market participation. Sreedevi and Chitra (2011) developed the following seven personality traits based on insights from the "big five" personality model: *emotional stability*, *extraversion*, *risk*, *return*, *agreeability*, *conscientiousness* and *reasoning*. According to Sreedevi and Chitra (2011:47), the most important trait that influences financial investments is emotional stability; they also propose that the discriminating variables of investing in shares were extraversion, emotional stability, family size, returns and age. Studies reveal that emotional stability and returns are strongly correlated with stock market investment, and that the influence of personality traits on investment decision-making is comparable to demographic variables (Sreedevi & Chitra, 2011:47). It is evident from the personality models reviewed herein that these are all linked to the aspects of behavioural finance focussed on in this study. The literature review reveals that personality traits have an impact on consumer financial decision-making, and they have an influence on determining a consumer's investment objectives.

5.6 SUMMARY

Chapter Five provided a definition of stock market participation, outlined general determinants of stock market participation and presented an analysis of key consumer-specific drivers of stock market participation. The chapter also discussed

various investor personality types and linked different consumer personalities to investment decisions. Following the complete literature review presented in Chapters Two to Five, Chapter Six will present a hypothetical model on consumer behaviour regarding stock market participation in SA.

CHAPTER SIX

HYPOTHETICAL MODEL OF THE STUDY: CONSUMER BEHAVIOUR TOWARDS STOCK MARKET PARTICIPATION

6.1 INTRODUCTION

Chapter Five of this study provided an overview of some of the key areas of stock market participation, namely, the determinants and drivers not specifically presented in the hypotheses but which are relevant to this study and thus partly intertwined with the study's variables. Therefore, the aspects discussed in Chapter Five also link to the primary objective of this study. Following Chapter Five's discussion of these key areas of stock market participation, it is important to now present a literature review on the specific variables used in the model of this study.

Chapter Six seeks to provide support for the basis for the proposed hypothesised model of the study. As previously explained, the primary objective of this study is to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in the country. This chapter discusses the hypothesised model and elaborates on all related variables by paying attention to previous research findings of studies on consumer participation in the stock market, as well as previous research findings linked to the variables of the study. In particular, the chapter presents the proposed model for this study and discusses, with support, the independent, intervening and dependent variables.

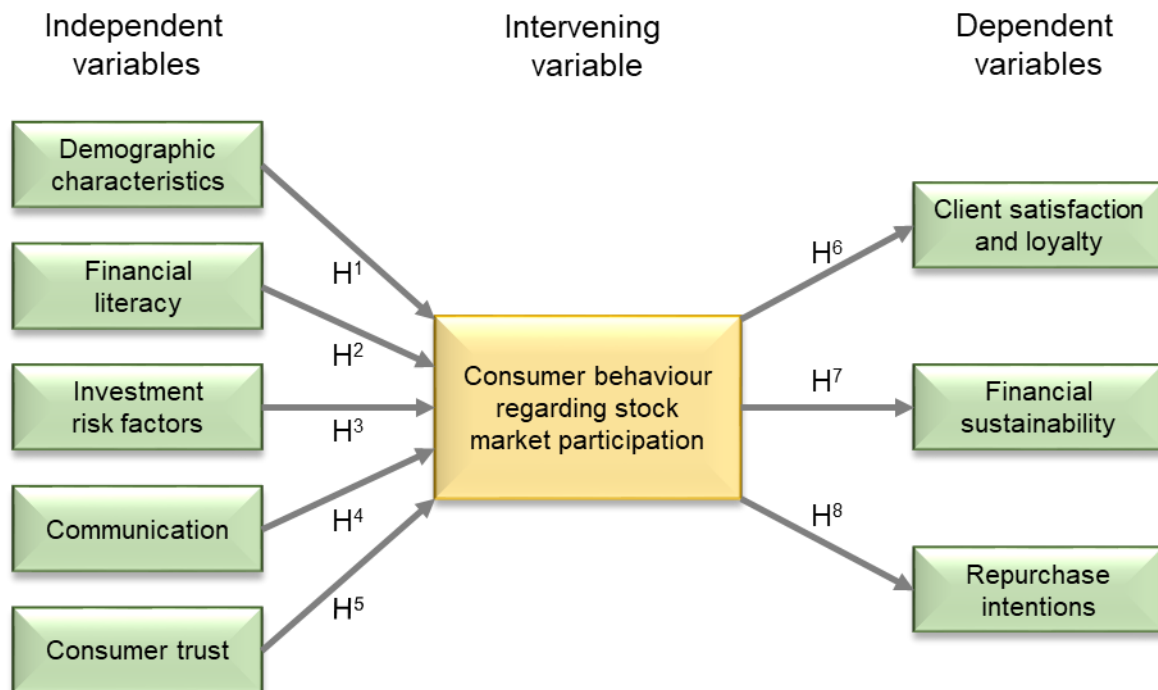
6.2 PROPOSED MODEL OF THE STUDY

In this study, a hypothesised model is used to investigate the effects of consumer behaviour regarding participation in the stock market. According to Grant and Onsalo (2014), a researcher's choice of a hypothesised model is not influenced by intuition; rather, it is informed by the researcher's beliefs and understandings about the nature and epistemology of knowledge relative to the observer and possible roles to be adopted, including the research instruments to be used. Without a theoretical framework, the trajectory for a study is nebulous since a hypothetical model is the

foundation from which all knowledge for a study is constructed (Grant & Onsaloo, 2014:2).

Figure 6.1 presents the hypothesised model showing the relationship between the independent, intervening and dependent variables. The research hypotheses that are empirically tested in the study are also outlined in this chapter. A variety of influences on and outcomes of consumer participation in the stock market are modelled in Figure 6.1. These influences could be divided into independent, intervening and dependent variables. The independent variables incorporated into the model are demographic characteristics, financial literacy, investment risk factors, communication and consumer trust. The intervening variable of the model is consumer behaviour regarding stock market participation. The dependent variables of this study include client satisfaction and loyalty, financial sustainability and repurchase intentions.

Figure 6.1: Hypothesised model of consumer behaviour regarding stock market participation



Source: Researcher's own construction.

The proposed theoretical model shows that consumer behaviour regarding stock market participation is influenced by five independent variables: demographic characteristics, financial literacy, investment risk factors, communication and consumer trust. Figure 6.1 shows that consumer stock market participation is the intervening variable. Similarly, Figure 6.1 indicates that the asserted outcomes of stock market participation are client satisfaction and loyalty, financial sustainability and repurchase intentions. The variables for this study are presented in Table 6.1.

Table 6.1: Variables for the study of consumer stock market participation

Independent variables	Intervening variable	Dependent variables
Demographic characteristics	Consumer stock market participation	Client satisfaction and loyalty
Financial literacy		Financial sustainability
Investment risk factors		Repurchase intentions
Communication		
Consumer trust		

Source: Researcher's own construction.

Table 6.1 seeks to present all the variables of this study linked to the research hypotheses as shown in the hypothesised model (Figure 6.1). It illustrates the influences on (independent variables) and outcomes of (dependent variables) consumer stock market participation (intervening variable).

6.3 INDEPENDENT VARIABLES OF THE STUDY

6.3.1 Demographic characteristics

According to Hauser and Duncan (1959:72) as well as Kotler and Armstrong (2014:187), demography refers to the study of the size, as well as the territorial distribution and composition of its population which includes characteristics such as gender, age, race and social class. Kotler and Armstrong (2014:187) observe that demographic segmentation divides customers into segments based on demographic values such as age, gender, family, occupation, education and religion. Each of these variables are useful pieces of information for segmenting markets (Martin, 2011:15).

Furthermore, segmentation seeks to complement consumers with products that satisfy their individual set of needs and behaviour patterns (Martin, 2011:15).

According to Lamb, *et al.* (2015), demographic characteristics are strongly related to consumer buyer behaviour and are predictors of how the target market will respond to a specific marketing mix. According to Schiffman and Kanuk (2015), demographic characteristics such as age, gender, marital status, income, occupation and educational level are most often used as the basis for market segmentation. Various studies, such as the work of Schiffman and Kanuk (2015:372), have shown that consumers in different social classes vary in terms of their product choice, lifestyles, buying habits and values. Furthermore, social class is usually measured by an index comprised of several demographic variables such as education, income, occupation and residence. Schiffman and Kanuk (2015:373) argue that individuals tend to behave in a manner consistent with the class to which they belong or to the one just above them. In this study, demographic characteristics refer to age, gender, income level, education level, family or household structure, cultural background and family or household size.

Agrawal and Jain (2013) studied investor buying behaviour of urban and rural consumers of financial assets with a specific focus on mutual funds. Their research findings revealed that age, gender, occupation, education and income have a significant impact on the buying behavioural patterns of rural and urban investors (Agrawal & Jain, 2013:115).

In their investigation of the relevance of geography in explaining stock market participation, Brown, *et al.* (2008) provide proof to support two disparate local area outcomes. The first is a community ownership effect, which presupposes that individuals are informed by the investment behaviour of members of their community (Brown *et al.*, 2008:4). The second, according to Brown *et al.* (2008), is that proximity to stock exchange listed companies also increases consumer participation in the stock market. Brown *et al.* (2008:4) found that the impact of stock market participation of community members is strongest for less financially sophisticated households and it is strongest within peer groups defined by age and income variables. Furthermore, the availability of stock exchange listed companies within close proximity, and similarly if

a firm's head office is within the community, will significantly correlate with the share ownership of individuals (Brown *et al.*, 2008:4).

Sawady and Tescher (2008) disagree with behavioural finance theorists who judge and typecast the many choices made by low-income consumers or the poor as irrational, especially when it comes to fundamental financial choices. According to Sawady and Tescher (2008), this perception projects how difficult it is for an outsider to fully comprehend the dynamics that shape the lives and circumstances of poor and low-income consumers; at the same time, it reveals how cultural, social and experiential factors impact the choices of consumers within a group that shares a given demographic characteristic. According to Sawady and Tescher (2008), FSPs that wish to provide services to low income and poor consumers should be mindful of the implicit messages engrained in the consumer experience. Manjula (2013) claims that age, gender, occupation, education and income have a profound impact on the behavioural consumption patterns of rural and urban investors. Irrespective of gender differences, both male and female participation is positively impacted by family influence, while community influences relate primarily to males (Manjula, 2013:37).

Almenberg and Dreber (2015) reveal that men and women have a different attitude towards participating in the stock market as women are more reluctant to participate in the stock market than are men. Furthermore, men show a higher stock market participation rate than women (Almenberg & Dreber, 2015:140). According to Kaur and Vohra (2012:283), women's participation in the stock market is limited because they have little knowledge of stocks and the working of the stock market. Guo (2001:37) concludes that better-educated people are more likely to hold stocks, even after they have been limited to manage only finance issues such as their wealth, current income, and unemployment risk.

The age of a consumer has been found to have a significant influence on stock market participation and on investment risk tolerance (Sung & Hanna, 1996:11; Fagereng, Gotlieb & Guis, 2017:741). According to Fagereng *et al.* (2017:741), consumers tend to participate in the stock market early in life and invest a relatively large part of their financial wealth in shares; however, as consumers get closer to retirement they rebalance their investment and gradually reduce exposure to shares and, eventually, they exit the stock market at retirement. Income level and source of income have been

found to have a meaningful influence on stock market participation and financial risk tolerance (Yao, Wang & Sharpe, 2011:879). The poorer segment of the population is the less educated and, therefore, more susceptible to poor financial decision-making by not fully appreciating the consequences of their actions (BankSeta, 2017:9). Yao, Sharpe and Wang (2011) suggest that a salary earner is more risk tolerant than the retired consumer since the intention to take higher risks decreases significantly when a consumer gets older. Therefore, age is related to stock market participation as it is a critical component in how consumers adjust their exposure to the stock market.

McDaniel and Terblanche (2006), as cited in Al-Jeraisy (2008), maintain that demographic considerations exert a particular important influence on marketing in SA. Therefore, there is a relationship between demographic characteristics and consumer participation in the stock markets. For example, the emergence of the middle class in SA is an important mechanism in the consumer and financial markets.

Based on these arguments, it is hypothesised that:

H¹: There is a significant relationship between demographic characteristics and consumer stock market participation.

6.3.2 Financial literacy

Financial literacy refers to consumers' financial knowledge, skills and attitudes that translate into financial behaviours which enable consumers to meet their financial goals (Sebstad, Cohen & Stack, 2006:6). Similarly, the Organisation for Economic Co-operation and Development (OECD, 2011:3) defines financial literacy as an individual's knowledge of financial concepts and the skills to translate this knowledge into behaviours that result in financial outcomes. Hall (2008:13) concurs that financial literacy refers to a consumer's understanding of financial concepts, their ability to make financial decisions and set financial goals, as well as their knowledge of when to seek financial information. PISA (2012:13) defines financial literacy as the financial knowledge and skills, motivation and confidence to apply financial knowledge and skills in a manner that improves the consumer's financial situation. Lewis and Messy (2012:16) further maintain that financial literacy refers to the consumer's financial awareness, knowledge, skills, attitudes and behaviour towards make informed financial decisions that would benefit them. In this study, financial literacy refers to a

consumer's knowledge of financial concepts, attitudes and skills that would enable them to operationalise this knowledge into behaviour that would result in good financial outcomes (Hung, *et al.* 2009:1; OECD, 2011:3).

Interest in financial literacy is ubiquitous with most countries, notably Canada, Ghana, Kenya, the UK, and the USA, campaigning to have financial literacy given more recognition in order to improve the levels of financial knowledge amongst broader communities (Lusardi, 2008:1). Financial literacy is likely to be positively correlated with planning skills, and is thus expected to increase the probability of participating in financial investment (Zeka, 2017:176). There is also evidence that the financial literacy of individuals can have a positive influence on the adequacy of their retirement funding (Folk, Beh & Baranovich, 2012:70; Lusardi & Mitchell, 2011:7).

In a study to assess the extent of awareness of financial market activities in Ghana, Acquah-Sam and Salami (2013) reveal that consumers have little knowledge about stock market activities and that their level of comprehension of stock market activities is significantly linked to stock market participation. Lusardi and Mitchell (2014) further conclude that well-educated consumers are more likely to buy and hold shares, even after they have been limited to manage only finance issues such as their wealth, current income, and unemployment risk. Research in the USA has indicated that financial illiteracy is widespread, and individuals lack knowledge of even the most basic economic principles (Lusardi & Mitchell, 2014:6).

According to PISA (2012:8), consumers with higher levels of financial literacy may demand financial products that are of such high quality that they would also promote financial innovation and competition in the financial market. Such consumers respond to a financial crisis in a predictable manner, by managing financial risks and making informed financial decisions (PISA, 2012:8). Furthermore, consumers with higher levels of financial literacy are in a better position to make informed financial decisions, to determine the value of financial products and to demand quality service and advice (Botha *et al.*, 2012:26).

According to Klapper, Lusardi and Panos (2012:28), financial literacy relates to more participation in the stock market and is negatively related to the use of informal sources of borrowing. Similarly, Widdowson and Hailwood (2007), as cited in Taylor and

Wagland (2011:102), believe that low levels of financial knowledge may result in consumers not understanding the risk exposures and, as such, they may purchase inappropriate financial products. Lewis and Messy (2012:16) concur that consumers with low levels of financial literacy do not have the ability to make complex financial decisions, while FinMark Trust (2014) indicate that the results of low levels of financial literacy are usually at the core of consumer debt. Another impact of low levels of financial literacy is that consumers may be vulnerable to the marketing tactics of FSPs (FinMark Trust, 2014:5), therefore, they may be persuaded to buy financial products that are not in their best interests (Orton, 2007:7). In the light of the above, it is evident that consumers with low levels of financial literacy find it difficult to make informed financial decisions.

Collard (2009:23) posits that although there is no commonly-shared definition, financial literacy involves the knowledge and skills required to make investment decisions to promote one's own long-term interests. Consumers have access to an increasing range of financial products, but often do not have the ability to determine which products are suited to their personal circumstances (JSE, 2014:2). A string of research papers, and policy reports across the world, suggest that many consumers do not possess sufficient financial capabilities (Collard, 2009:23), and it has been shown that many adults do not possess basic knowledge of interest rates, inflation or risk, all of which are essential to making well-informed investment decisions (Collard, 2009:23).

According to Van Rooij, *et al.* (2011:1), those who have low financial literacy are significantly less likely to invest in shares. This lack of knowledge is, however, not uniform across the whole population, although it has been found that better educated consumers have a higher level of relevant knowledge (Van Rooij *et al.*, 2011:1). Effective consumer financial education leads to empowering consumers to improve their financial decision-making, promotes proactive financial behaviour and protects against destructive behaviour (JSE, 2014:2). Financial literacy can help vulnerable groups like women and the elderly overcome some of the challenges they face as it forms an integral part of consumer wellbeing and empowerment (JSE, 2014:2). Financial literacy is also crucial for Africa to foster inclusive growth as stock exchanges should adopt the international definitions of financial education and financial literacy,

as defined by the Organisation for Economic Co-operation and Development (OECD), and as adopted by National Treasury, the FSB and ASISA (JSE, 2014:2).

According to the JSE (2014:2), it is a universal expectation that consumer empowerment needs to consist of the following three parts: financial education, financial inclusion and financial consumer protection. SA views financial education as a national imperative (JSE, 2014:2). The National Consumer Financial Education Policy (NCFEP) provides a framework for collaboration and co-ordination of financial sector stakeholders as well as data and measurement for financial education programmes (JSE, 2014:2). The national strategy takes a risk-based approach and identifies high risk groups across the four domains of financial control, financial planning, product choice and financial knowledge. South African legislation also defines the vulnerable groups which financial education programmes should target in order to be aligned with broader transformation legislation, as it defines which groups to target in terms of demographic considerations (JSE, 2014:2). Although the country boasts an overall literacy rate of 88%, financial literacy remains a challenge in the South African context (BankSeta, 2017:9). In the light of the above discussion on financial literacy and stock market participation, it is necessary to acknowledge that the government of SA and various financial services firms are at the forefront of promoting consumer financial education.

FinMark Trust (2008), as cited in the BankSeta report (2017:9), reveals that the greatest desire for financial knowledge lies in the use of savings products. FinMark Trust (2014) further indicates that key financial terms are generally not understood, particularly around debt, understanding of financial products and general awareness of basic financial knowledge (BankSeta, 2017:9). Financial literacy is a key driver in developing a robust savings culture into the future and has important implications for FSPs endeavouring to stimulate individuals to invest (BankSeta, 2017:11). Understanding key financial concepts such as budgeting is key to ensure a sustainable savings culture as the lack of financial literacy contributes to the low savings culture (BankSeta, 2017:11).

According to Georgarakos and Inderst (2011:7), in order to generate a significant effect on consumer appetite to hold shares, households with low financial capability must put trust in advice and in legal protection. For consumers with higher capabilities

or those who do not trust advice, financial aptitude and a high perception of their legal rights jointly produce a high willingness to hold shares (Georgarakos & Inderst, 2011:7). For educated consumers, or those who do not view financial decisions as sophisticated, what matters in shareholding decisions is the perception of how well their rights as consumers of financial products are protected (Georgarakos & Inderst, 2011:7). These disparities in perceptions have a profound impact on the consumer's willingness to buy shares even when they rely on advice or on their own judgement.

According to the Ministry of Finance (2014:2), savings are disturbingly low in SA as relative to the country's peers in the BRICS group; with no savings, consumers are likely to borrow more in order to deal with shocks to their income and expenditure. As of 2013, the national gross savings rate, as a percentage of GDP, stood at 13.5% which is a decline from 14.2% in 2012. Households contributed a meagre 1.7% to the gross savings rate, although the number has remained stable in recent years. Debt to disposable income in SA has almost doubled from 1980 to 2013, from 41.9% to 75.2%; moreover, as the savings rate fell in the same period, indebtedness rose significantly. In comparison to other BRICS countries, SA ranks the lowest in gross savings (Ministry of Finance South Africa, 2014:2). According to the World Bank (2017), China's gross saving rate was 47%, India and Russia stood at 30% and SA at 15%. It is interesting to observe that countries with higher savings rates tend to have higher growth rates. According to Lusardi (2008:1), the failure to plan for retirement, the lack of participation in the stock market as well as the poor creation of financial debt and credit behaviour can all be linked to ignorance of basic financial concepts.

Consumers with low levels of financial literacy tend to shy away from the stock market while richer and more educated consumers participate in the stock market and are less likely to make financial mistakes than their less educated counterparts (Lusardi, Alessie & Van Rooij, 2011:449). Similarly, consumer overconfidence in their financial knowledge is positively correlated with stock market participation (Xia, Wang & Li, 2014:1233). Consumers who are overconfident about their financial literacy are more likely to participate in the stock market while consumers who are under-confident show a negative correlation to stock market participation (Xia, *et al.* 2014:1233).

According to Balloch, Nicolae and Philip (2014), although there are different consumer behavioural traits that explain the level of investments by means of stock market

participation, the lack of financial understanding takes on a prevailing role. Similarly, Van Rooij, Lusardi and Alessie (2011) concur that financial decision-making is affected by an individual's level of financial literacy, with individuals who lack financial understanding less likely to participate in the stock market. In addition, Kadoya, Khan and Rabbani (2017) reveal that a lack of financial literacy is the reason behind consumer reluctance to participate in the stock market in Japan. Garcia and Tessada (2013:14) suggest that education has a larger impact on the probability of holding simple financial assets; they further suggest that formal education can drive consumers to participate in the stock market. Furthermore, financial education has a positive impact on individuals' willingness to tolerate financial risk (Garcia & Tessada, 2013:14).

Based on these arguments, it is hypothesised that:

H₂: There is a significant relationship between financial literacy and consumer stock market participation.

6.3.3 Investment risk factors

Investment risk refers to the probability that an actual return on an investment will be lower than the investor's expectations (Jordan *et al.*, 2012:22). Furthermore, it is the measurable uncertainty that an investment will not generate the expected returns. According to Botha *et al.* (2015:221), investment risk refers to the asset devaluating or risk of capitalising and spending. Furthermore, the more risk one takes the higher the investment gains one should expect and vice versa. For the purpose of this study, investment risk is defined as the probability or likelihood of occurrence of losses relative to the expected return on any investment (Jordan *et al.*, 2012:22).

Guiso, *et al.* (2008) maintain that when deciding whether to buy stocks, investors are concerned about the risk involved. Furthermore, the perception of this risk is a function of the objective characteristic of the stocks and the subjective characteristic of the investor (Sarkar & Sahu, 2018:30).

Manjula (2013), Daniela (2010) and Gardini and Magi (2007) postulate that some of the risk investment factors that have an impact on stock market participation are risk aversion, defection and consumer debt. According to Manjula (2013:38), the strongest

single driver of stock market participation, or the decision to forego investing in stocks, is risk aversion. The degree of risk aversion is the extent to which a consumer is willing to choose a risky high return deal in comparison to a low-return bargain; risk aversion implies that a consumer is unwilling to take a risk (Afsharha, 2014:7).

According to Afsharha (2014:7), risk aversion has a significant role to play in stock market participation; furthermore, the firm's revenue is not the only determinant of share prices because share prices might change as consumers change their degree of risk aversion. Daniela (2010:798) reveals that consumers can have financial education and knowledge of financial investment, however, their participation in listed shares can still remain low due to risk aversion. Atkinson *et al.* (2006) and Hall *et al.* (2006, as cited in Collard, 2009:3) state that consumers with no savings, and low-income earners, have been found to be especially risk averse. In relation to pensions, a study by Clery, McKay and Phillips (2007:93) reveals that most people believe that a private pension scheme linked to the stock market is too much of a risk.

Daniela (2010:798) further argues that consumers would rather invest in consumer products, and that their daily living needs absorb almost all the resources they have. Similarly, Gardini and Magi (2007:93) concur that risk averse consumers chose to move their investments from financial markets to real estate. Furthermore, Lin and Lu (2015:118) found that passive investors have a stronger need for securities investments and that they exhibit a lower risk tolerance than active investors. The research findings regarding financial capability indicate that some risk-averse consumers may invest in some products unaware that there is any financial risk involved (Atkinson *et al.*, 2006, as cited in Collard, 2009:2). Collard (2009:2) found that most consumers did not have a clear idea of what the risks were and many felt that long-term investments were riskier, mainly because they would not be able to access their money in the case of unexpected events; in addition, it was found that most believe that there was no capital at stake in low risk investments.

The evidence reveals that the willingness to take financial risks drops substantially amongst consumers who are retired or nearing retirement (Collard, 2009:2; Kannadhasan, 2015:175). Daniela (2010), however, believes that consumer participation in the stock market is low because of low financial risk tolerance. Daniela (2010) further argues that consumers invest what they have primarily in consumer

products, and that their daily living needs absorb almost all the resources they have. Similarly, Gardini and Magi (2007) provide empirical evidence regarding stockholding behaviour in terms of the decline in stockownership and a considerable rise in real estate investments. Furthermore, Jagongo and Mutswenje (2014) imply that individual investment behaviour is focused on choices pertaining to the purchasing of small amounts of shares.

Consumer debt, as an investment risk factor, has been found to have a negative impact on household savings to such an extent that consumer disposable income and financial assets have not accumulated to the same extent as household debt since 1995 (Engelbrecht, 2009:112). An inverse relationship exists between increases in household use of consumer debt and their savings over time (Engelbrecht, 2009:112). According to the South African Savings Institute (SASI, 2014), household savings have demonstrated a negative trend due to consumer behaviour that does not promote a savings culture in the country.

Pompian (2015:28) suggests that even in a perfect world, when a decision-maker must choose to take only one amongst a number of possible actions, the ultimate consequences of each, if not every available action, will depend on uncertainties that would need to be resolved in the future. Attitudes to risk also change over time as needs alter and people's capacity to afford to lose varies (Collard, 2009:2). Consumer financial decision-making in a state of risk and uncertainty has been a subject of financial risk tolerance research (Gilliam, Chatterjee & Grable, 2010:31). Grable (2000:625) refers to risk tolerance as the maximum amount of uncertainty that a consumer is willing to accept when making a financial decision. Semenov and Kuznetcov (2015) concur that financial risk tolerance is a consumer's willingness to take financial decisions that have unknown and potentially costly outcomes. Similarly, Davies (2017) believes that financial risk tolerance is an investor's willingness to take perceived risk. In this study, risk tolerance refers to the extent to which a consumer is prepared and willing to trade-off potential future investment returns. Grable (2017) views financial risk tolerance as the trade-off a consumer of financial products is willing to make between the perceived risk and expected return of different investment decisions. In this study, risk tolerance is essentially the extent to which a consumer is prepared and willing to trade-off potential future investment gains. Therefore,

understanding financial risk tolerance, and determining an individual's willingness and capacity to take on risk, is an essential part of financial and economic planning (Larkin, 2012:2).

In most countries, FSPs are legally required to assess the risk tolerance of investors before the investor engages in any trading activity (Roszkowski & Davey, 2010:42). According to Weber and Klement (2018:1), risk tolerance may differ amongst individual consumers as a function of socioeconomic and biological differences but shows stability across an investor's lifespan, financial instability, and other personal circumstances. Thus, financial risk tolerance has been at the centre of multiple studies and, according to Deo and Sundar (2015:80), a consumer's risk tolerance level is a significant determinant of their investment behaviour. Furthermore, risk tolerance becomes the mediator that translates perceptions of risk and situational needs and constraints into decisions and actions (Weber & Klement, 2018:1). Since perceived risks and expected returns are influenced by hopes and fears, there is a need to assess the two behavioural finance attributes in their own right.

Financial risk tolerance is related to gender, as research shows that women are more risk-averse than men; in addition, women are reluctant to participate in the stock market as stocks are considered risky assets (Almenberg & Dreber, 2015:141). Similarly, Halko, Kaustia and Alanko (2012:67) have suggested that gender is a strong predictor of risk and that the returns of households headed by men are influenced by their higher level of risk tolerance, since men are more likely to have riskier assets.

Based on these arguments, it is hypothesised that:

H³: There is a significant relationship between investment risk factors and consumer stock market participation.

6.3.4 Communication

According to Malhotra (2012:5), communication is the process by which an idea or news is communicated through certain channels over time amongst the members of a social system. Littlejohn and Foss (2005:273) defines communication as the process whereby media organisations produce and transmit messages, as well as the processes by which those messages are sought, used and consumed. In this study,

communication is defined as the unique tool that marketers and businesses use to attract consumers in order that they respond in a desired way (Schiffman & Kanuk, 2015:103).

Schiffman and Kanuk (2015) argue that communication can evoke emotions that can put consumers in a more receptive frame of mind and it can encourage purchasing in order to solve problems or avoid negative outcomes. Communication from consumers to firms, such as service providers, will ensure that a firm generates information on the business environment conditions, opportunities, consumer needs and competitor intelligence (Rootman, 2011:208).

In a study on stock market investments amongst middle class and government employees, Thampatty and Krishnan (2014:507) established that misconceptions regarding the stock market are a hindrance to participation in stock market investment. Wanyana (2011:7-8) found that the relationship between investor awareness and perceived risk attitudes are negatively related to stock market participation. The research findings of Padmaja (2013) also reveal that a lack of awareness contributes to non-participation in the buying of unit trusts. It has also been determined that social communication plays a positive role in influencing the stock market participation rate as well as acting as a multiplier to stimulate stock market participation (Gao, Meng & Zhao, 2019:1931).

Based on these arguments, it is hypothesised that:

H⁴: There is a significant relationship between communication and consumer stock market participation.

6.3.5 Consumer trust

Corbitta *et al.* (2003) define trust as the expectation that the relevant parties will respond in accordance with commitments, negotiate honestly, and not take advantage, even when the opportunity arises. Thomas (2009:346) views trust as “an expectancy of positive outcomes, outcomes that one can receive based on the expected action of another party”. In this study, consumer trust is referred to as the expectation or positive impressions to secure collective benefits from mutual interactions (Krot & Lewicka, 2012:225).

However, the empirical findings of Keen (1997), as cited in Corbitta *et al.* (2003), reveal that the most profound long-term impediment to realising the potential of internet marketing to consumers was the lack of consumer trust, both in terms of business honesty and business capacity to fulfil Internet orders. Therefore, trust is a basic tenant of every business relationship, and it has a significant influence on consumer activities (Corbitta *et al.*, 2003:203). The loss of trust in financial intermediation has prompted some investors to abandon the stock market altogether, which has led to the remaining investors taking a more cautious approach to stock market investing (Dorn & Weber, 2013:1). Dorn and Weber (2013) further believe that a long and robust trend towards more delegated equity investing in non-retirement accounts was disrupted. Murungi (2011) found that the investing public was aware of and had trust in the efficiency of the securities market.

Corbitta *et al.* (2003) argue that trust intention may positively influence participation behaviour. El-Attar and Poschke (2011) concur that trusting behaviour has been proven to affect households' portfolio choice between risky and risk-free financial assets. Also, households with less trust were found to invest more in housing and less in risky financial assets (El-Attar & Poschke, 2011:727). Guiso *et al.* (2008) found evidence consistent with a lack of trust being an important factor in explaining limited stock market participation. Therefore, less trusting individuals are less likely to buy shares and, when they do buy shares, they will buy fewer shares (Guiso *et al.*, 2008:2559). Conversely, the European Central Bank (2011) suggests that financial advice is pervasive and it is a significant influencer of households' willingness to invest in risky assets.

Most income groups do not trust stock brokers and financial advisers/planners who they think only care about securing a high commission for themselves; furthermore, these income groups believe financial institutions to be self-centred and as benefiting business more than actual customers (SASI, 2010:3). Black Africans were found to prefer group social savings schemes such as a Stokvel, Motselo or saving societies rather than formal banking financial investments (SASI, 2010:3). Georgarakos and Inderst (2011:7) found that, for consumers who need to rely on advice, trust in advice becomes a key determinant of their willingness to buy shares since advice matters most when they trust it. Guiso *et al.* (2008:1) concur that in order to encourage

shareholding amongst consumers with low financial capabilities, trust in advice is a key prerequisite. In addition, research on stock market participation also suggests that financial advice matters most for consumers who are less knowledgeable about financial matters and, in that case, trust in financial advice is a key prerequisite for stock market participation (ECB, 2011:103). Georgarakos and Inderst (2011:1) also found that trust in financial advice has a significant impact on the decision of less educated households to buy shares and other information-sensitive products.

Giannetti and Wang (2014:35) maintain that even small increments in the probability of being cheated due to exposure to fraud may lead less trusting individuals, with high costs of betrayal, to sell their stockholdings. According to Giannetti and Wang (2014:35) a lack of trust increases risk aversion and could thus decrease household stock market participation. Hence, Giannetti and Wang (2016:2591) provide unambiguous evidence that consumer stock market participation decreases following corporate financial scandals and fraud, all of which result in a lack of consumer trust. Aziz (2005:5) states that measures must be put in place to raise consumer awareness of financial dishonesty and how to use financial products in ways that are safe from fraud. Consumer protection is important in the financial market because the underperformance of financial products has an impact on the financial wellbeing of consumers (National Treasury, 2011:41). Furthermore, consumer protection needs to involve approaches that prevent consumer abuse and promote consumer confidence in the financial market (Aziz, 2005:3). Lewis and Messy (2012:22) further argue that consumer protection is important to inspire confidence in the financial market. Furthermore, the Treating Customer Fairly Initiative ensures that consumers are treated fairly through all stages of the financial product lifecycle, namely, design, marketing, advice, point of sale and after point of sale (National Treasury, 2011:42).

In SA, the financial advisory and intermediary services industry is regulated in terms of the FAIS Act 37 of 2002. The safety and soundness of financial institutions are important for the protection of consumers as they have insufficient information regarding a financial institution's business at the time of contracting with it (FSB, 2016:3). The financial soundness of financial institutions is also relevant for the economy as the failure of one institution may affect the stability of the financial system. Therefore, regulatory requirements should be designed to address trust issues and

financial intermediaries should comply with the minimum standards set out in the rules of business conduct (FSB, 2016:3). The objectives of financial regulation can be summarised as follows: to protect consumers, to ensure the solvency and financial soundness of the country's financial institutions, to promote fairness, efficiency and transparency in the securities markets, and to promote a stable financial system by monitoring, mitigating and managing systemic risk (Van Wyk *et al.*, 2016:113).

Ultimately, consumers must have sufficient faith in the legal institutions that govern financial markets in order for them to have trust and confidence in financial products (FSB, 2012) because less trusting consumers are less likely to buy shares (Guiso *et al.*, 2008:1). The decision to invest in shares requires not only an assessment of the risk return trade-off, but also an act of trust that the data are reliable and that the system is fair, as well as trust in the system that delivers those payoffs (Guiso *et al.*, 2008:1). Corbitta *et al.* (2003:205) also concur that negative attitudes towards perceived risk can have a negative effect on the customer's trust intention, alternatively, trust intention may positively influence stock market participation.

Based on these arguments, it is hypothesised that:

H⁵: There is a significant relationship between consumer trust and consumer stock market participation.

6.4 CONSUMER FINANCIAL DECISIONS AND STOCK MARKET PARTICIPATION AS AN INTERVENING VARIABLE

Since consumers make financial decisions about many financial products, it is important that they can identify financial products so as to choose those that meet their financial needs (Tsotsou, 2008:4). Botha *et al.* (2012:2) maintain that consumers should also be aware that their financial decisions will impact other areas of their lives. Swart (2007:1) highlights that these areas include consumers not having sufficient cash at retirement and not being able to support their families financially. According to Bajtelsmit and Rasteli (2008:13), in order to make effective financial decisions, the assumptions that consumers have regarding financial investment must be correct. They must also be willing to make sacrifices in order to achieve their financial goals. Makwaka (2013:10) postulates that consumers' financial decisions are also influenced by emotions such as anger, pride, regret and joy.

Moreover, Ennew and Waite (2007:129) as well as Mimura, Koonce, Plunkett and Pleskus (2015:63) suggest that consumers make financial decisions when they recognise a financial need by searching for the relevant information on how to fulfil said financial need. This may include information from their past experiences or from external sources (Ennew & Waite, 2007:129; Mimura *et al.*, 2015:63). These external sources may be friends, family members or business representatives that provide consumers with information on the financial products or services they require (Mimura *et al.*, 2015:63). Based on the information received, consumers will evaluate the financial products or services that fit their needs (Ennew & Waite, 2007:129; Mimura *et al.*, 2015:63). Consumers will evaluate the prices of the relevant financial products or services, the reputation of the relevant institutions and how products or services fulfil their needs (Mimura *et al.*, 2015:63). Furthermore, consumers must then make financial decisions regarding which financial products or services to purchase. According to Ennew and Waite (2007) as well as Omarini (2016), when consumers are satisfied with financial products or services, they will purchase the products or services again and they will inform others about the product.

Households with less exposure to the importance of financial planning are less likely to spend time and effort on improving their investment decisions, regardless of the participation costs (Chien & Morris, 2017:5). According to Chien and Morris (2017), good financial decision-making could help households hedge against their income risks and achieve a better life. Thus, the investment decision matters for the welfare of households. Chien and Morris (2017) suggest that if households cannot make the right investment decisions and, thereby, jeopardise their return on savings, then households are not only likely to save less but they could fail to accumulate enough assets for retirement. Sivaramakrishnan, *et al.* (2017:820) maintain that stock market participation is an important economic outcome. In this study, stock market participation refers to the degree to which consumers should or prefer to invest at least a portion of their wealth in shares in order to take advantage of the return on their investment. Although it is not necessarily the case that stock market participants are more financially sophisticated than nonparticipants, understanding the participation decisions made by households is important to both academic researchers and policymakers (Chien & Morris, 2017:5). Conversely, there can be substantial welfare loss from not participating in the stock market, as exposure to equities, and hence to

the equity premium, may be an important determinant of the long-run return to individual savings (Cocco *et al.*, 2005, as cited in Sivaramakrishnan *et al.*, 2017:820). This also implies that consumer financial sustainability could be achieved through stock market participation.

6.5 DEPENDENT VARIABLES OF THE STUDY

6.5.1 Client satisfaction and loyalty

Schiffman and Kanuk (2010), as cited in Mbuthia (2014), view client satisfaction as the client's perception of the performance of the product or service in relation to their needs. Lamb, Hair, McDaniel, Boshoff and Terblanche (2016) further state that consumer satisfaction is the feeling that a product has fulfilled or exceeded the customer's expectations. Hill and Alexander (2009) concur that consumer satisfaction is a measure of how products perform in relation to a set of consumer requirements; they suggest that consumer satisfaction is generally viewed as a way of meeting or exceeding expectations. Similarly, Krivobokova (2009) refers to client satisfaction as the feeling of satisfaction that a consumer feels when validating expectations with the actual quality of the purchased product. According to Odindo and Devlin (2007:15), satisfaction can be defined as a post-purchase evaluation of a product or service given the consumer's pre-purchase expectations. Moreover, Sharmin (2012:31) refers to customer satisfaction as an emotional response to the experience provided by products or services purchased, retail outlets and the overall marketplace.

Furthermore, Cersosimo and Nistico (2008:386) refer to loyalty as a seamless client experience wherein clients have a clear and visualised idea of what brand satisfies their needs. According to Lovelock and Wirtz (2011:316), client loyalty is the client's willingness to continue to do business with a particular firm over the long-term, preferably on an exclusive basis, and their willingness to refer the firm's products to friends and family. For the purpose of this study, client satisfaction and loyalty is referred to as the feeling that a product has fulfilled or exceeded the customer's expectations and the customer's willingness and devotion to continue patronising a firm over the long-term.

Dehghan and Shahin (2011:43) argue that those consumers that exhibit extreme levels of loyalty toward a product or service activity tend to engage in frequent purchases and spend more money since client loyalty can be enhanced by creating a perfect client experience (Frow & Payne, 2007:98; Lemke, Clark & Wilson, 2011:851). Therefore, loyal clients would always anchor their choices based on the service experience and they are more likely to have the preferred brand at the top of their minds (Cersosimo & Nistico, 2008:386).

The fulfilment of promises is a significant part of achieving client satisfaction and retention since the reputation of a service provider is determined by its ability to fulfil its obligations and its promises (Angelova & Zekiri, 2011:234). Therefore, client satisfaction has a profound and direct impact on loyalty, which bolstered by verbal communication, while loyalty and retention have a positive influence on profitability (Bielen & Demoulin, 2007:175). There is unanimity that a distinguishing line can be drawn between client satisfaction and financial benefits to the firm, even though satisfaction on its own will not guarantee customer retention (Fisher, 2001:77, as cited in Daikh, 2015:3). Mbutia (2014) maintains that high levels of client satisfaction have been linked to higher returns and lower risk in the stock market. Krivobokova (2009) suggests that the greater the satisfaction of the consumer, the more willing the consumer will be to buy from the same provider again.

According to Marinao (2017:45), factors that drive satisfaction are: perception of price and post-purchase performance, quality of the service received, perceived value, trust and empathy, as well as the evaluation of what is received against what is expected. Similarly, Evangelos and Yannis (2010) concur that customer satisfaction is a baseline of standards and excellence of performance for many firms, and it helps to identify potential market opportunities. According to Marinao (2017:45), client satisfaction has been widely recognised as a determining factor of customer loyalty and a firm's sustained profitability. Furthermore, a satisfied customer shows greater resistance to price elasticity, thereby improving a firm's reputation and the consumer's willingness to return and to recommend the firm to friends and family. In addition, Ilieska (2013:327) argues that good customer satisfaction has an effect on the profitability of nearly every business. Chang (2015:678) specifies that satisfaction is one of the key

factors affecting customer loyalty, while recognising that satisfied customers publicise the firm and are more likely to remain loyal.

There is a substantive relationship between participation in the stock market and client satisfaction and loyalty. However, a few of the existent studies have indicated a correlation between consumer satisfaction perceptions and the buying of shares and listed securities. Various researchers, such as Fornell, Mithas, Morgeson and Krishnan (2006:3) as well as Gruca and Rego (2005:115), as cited in Mbuthia (2014:75), maintain that high levels of customer satisfaction have also been linked to higher returns and lower risk in the stock market. Krivobokova (2009:565) suggests that the greater the satisfaction of the buyer's company, the more willing the buyer will be to buy from the same provider once again.

Jagongo and Mutswenje (2014:92) conducted a study on establishing factors that influence investment decisions at the Nairobi Stock Exchange (NSE). Their research findings confirm that there seems to be a certain degree of correlation between client satisfaction and participation in the stock market. The research concludes that the most important factors to influence individual investment decisions are: reputation of the firm, past performance, firm's status in industry, as well as its expected corporate earnings and profit. Therefore, it is crucial that stock market participation is selected as effective for customer satisfaction and loyalty in this study.

Based on these arguments, it is hypothesised that:

H⁶: There is a significant relationship between consumer stock market participation and customer satisfaction and loyalty.

6.5.2 Financial sustainability

According to Hira (2016:357), financial sustainability refers to having the ability to manage financial resources so as to meet family financial needs throughout one's lifecycle and through the ups and downs of the economy at large. Hira (2016:357) further maintains that the size, allocation and composition of a household's financial resources (a function of financial habits, values, beliefs and practices) play a critical role in achieving such financial stability.

BANKSETA (2012:3) reported that SA have a low level of savings, which resulted in negative socio-economic consequences. Low savings impact particularly on the banking industry's capital inflows and the economy; this results in low levels of liquidity and consumers are less likely to be able to fund their socio-economic needs (Guma & Bonga-Bonga, 2016:1). Consumers play an important role in the stock market because a big share of their investments is invested in the country, which stimulates economic growth (JSE Report, 2014). BANKSETA Report (2012) suggest that SA's savings culture, in comparison to that of other developing countries, is noted as poor, whilst its propensity to consume remains consistently very high. Conversely, adequate savings – which are important for the generation of capital – has a direct impact on economic growth and is vital in achieving macroeconomic stability.

According to Statistics South Africa (Stats SA 2015), household savings as a percentage of disposable income has dropped; this poor savings culture has far reaching implications and can leave people with no liveable income at retirement. Similarly, Manjula (2013:37) agrees that limited stock market participation by consumers has many implications, and it has been in the interest of household finance for decades. The role of limited stock market participation has been recognised in wealth accumulation and in the unequal distribution of wealth (Manjula, 2013:37).

According to JSE (2016), the benefits of investing in shares include diversification, tax benefits, capital growth, and so forth. There are two types of returns that an investor can expect to earn from an investment. The first is income return, which represents periodic cash flows generated by the investment including the dividends paid for ordinary shares and periodic interest paid for bonds (JSE, 2016; ASIC, 2018; Amadeo, 2019:2). According to JSE (2016), the second type of return is price change, which is the increase or decrease in price of the asset in relation to the purchase price or the market price in the previous time period. Another benefit of investing in shares is that it is a liquid asset. Similarly, ASIC (2019) suggests that the stocks traded in the market also have greater liquidity than other securities, which means that they can easily be converted into cash by selling the equities with other traders in the market.

Based on these arguments, it is hypothesised that:

H7: There is a significant relationship between consumer stock market participation and financial sustainability.

6.5.3 Repurchase intentions

Yap and Kew (2007) define repurchase intentions as an individual's judgement about buying a designated service from the same firm again, considering the consumer's current situation and likely circumstances. According to Chiu, Chang, Cheng and Fang (2009:6), repurchase refers to the probability or willingness of consumers who already completed an initial purchase to continue to use and do business with the same firm at a later stage under consideration of present and possible situations. In this study, repurchase intentions is defined as the likelihood that the user will repurchase the good or service in the future (Bojei & Hoo, 2012:39; Magliolo, 2012).

Jiang and Rosenbloom (2005) suggest that consumers with higher loyalty are most likely going to be involved in repeat purchase engagements, contribute more revenue to the firm with higher levels of consumption, prepare to spend more on research before buying, recommend to friends and families, and they are not likely to move to competitors because of incentives offered by said competitors. Consistency in maintaining customer purchases and repurchase intentions is one of the greatest challenges faced by service firms (Turel, Serenko & Bontis, 2007:66). Researchers concur that it is much better for service providers to provide quality services to existing customers than it is to look for new customers; moreover, the power to deliver optimal service quality will give the service and product providers a competitive advantage (Turel *et al.*, 2007:66). The measurement of customer repurchase intentions is, therefore, an important component for managers and researchers. There is a considerable amount of research that ties customer repurchase intentions to outcome variables such as customer retention, reduced customer defections, an increase in share-of wallet, reduced complaint rates and lead referrals (Turel *et al.*, 2007:66).

There is also overwhelming evidence to suggest that consumers' repurchase intentions is linked to stock market participation. Many firms pay out a part of their profits to shareholders; in this regard, the more frequently the firm pays dividends the more the shareholders reinvest and participate in the stock market (Magliolo, 2012). It is evident that consumers' repurchase intentions contribute positively to the generation

of shareholder value. Although customer repurchase intentions is key to a firm's success, it is just one of the many variables that can affect consumer participation in the stock market (Henkel, Houchaine, Locatelli, Dingh, Zeithml & Bittner 2006:46). Henkel *et al.* (2006) suggest that satisfied clients in the service industry are likely to do repeat business with the provider. Magliolo (2012) as well as Guma and Bonga-Bonga (2016) suggest that there is a relationship between consumer participation in the stock exchange, investment inflows and the growth in assets under management. Many companies pay out a part of their profits to shareholders and the more consumers invest on the stock market the more financial service providers grow their investment capacity (Magliolo, 2005:22; Haque, Fuad & Mahamud, 2017:60).

Based on these arguments, it is hypothesised that:

H⁸: There is a significant relationship between consumer stock market participation and repurchase intentions.

6.6 SUMMARY

Chapter Six presented the proposed model to be tested in this study. This chapter discussed all the independent variables of the study and presented the empirical evidence from previous studies that support the formulated hypotheses related to each of these variables. Thereafter, the chapter elaborated on the study's intervening variable, namely, consumer stock market participation. Furthermore, the chapter discussed the dependent variables and provided justification for the hypotheses applicable to these variables. Consequently, a hypothesised model was developed to investigate consumer behaviour regarding stock market participation by considering the antecedents and outcomes of stock market participation. The chapter reviewed the relevant literature, which lead to the development of the hypothesised model. The chapter further provided the operationalisation of the variables used in this study. Furthermore, empirical evidence was provided to support the hypothesised relationships presented in this chapter. In the ensuing chapter, Chapter Seven, the research design and research methodology used in this study will be presented as well as the data collection techniques and data analysis procedures that used in the study.

CHAPTER SEVEN

RESEARCH DESIGN AND METHODOLOGY

7.1 INTRODUCTION

The hypothesised model for this study and the findings of previous research related to the variables of the study were discussed in Chapter Six. Chapter Six also established the basis for the hypotheses of the study. The purpose of the current chapter is to explain the research methodology that was applied to carry out the research in order to achieve the goals of the study. The chapter outlines the research design and paradigm employed in this study, as well as the sample selection applicable to the study. This is followed by a discussion of how the measuring instrument was designed, pretested and administered. Furthermore, the data collection and analysis, reliability and validity of the research are discussed herein. The chapter also outlines the ethical considerations of the study.

7.2 PURPOSE OF THE STUDY

Research purpose and research questions are the suggested starting points for developing a research design because they provide important information regarding the substance that a researcher aims to assess (Berry & Otley, 2004; Saunders, Lewis & Thornhill, 2009; Yin 2012, as cited in Wahyuni, 2012:72). The purpose of this study is to promote consumer behaviour regarding stock market participation and to heighten the need for financial sustainability, which would improve the welfare of consumers and the growth of the South African economy. Furthermore, this study will shed light on the limited stock market participation that has been found to have implications for the financial sustainability of consumers. Therefore, the study strives to identify influences and outcomes of stock market participation in order to effectively promote positive consumer behaviour towards participation in the stock market.

7.3 RESEARCH DESIGN

Research encompasses defining and redefining problems, formulating hypotheses or suggested solutions, as well as collecting, organising and evaluating data, making deductions and reading conclusions, while carefully testing the conclusions in order to

determine whether they fit the formulated hypotheses (Daniel & Sam, 2011:17). Quinlan (2011:205) suggests that the methodological framework of a research project is a narration of all the ways and means by which the research was actually carried out. Thyer (2010:27) refers to research methodology as the research process; it involves identifying a problem, formulating a hypothesis, collecting data to test the hypothesis, and then testing the hypothesis through the use of statistical procedures. Daniel and Sam (2011:41) concur that research methodology is the science of studying how research is done scientifically, and how to analyse and report the various steps that are generally adopted as well as analysing the research problems along with the logic behind these. Thus, it is necessary for the researcher to understand the assumptions underlying the various techniques employed to conduct the research (Daniel & Sam, 2011:42).

A **research design** is based on a framework which provides direction so that the investigation is conducted in the most efficient **manner (Chawla & Sodhi, 2011:48)**. Thyre (1993:94), as cited in Leavy (2017:122), describes a traditional research design as a blueprint or detailed plan for how a research study is to be completed; it includes ensuring that variables are operational so that they can be measured, selecting a sample of interest to study, collecting data to be used as the basis for testing the hypotheses and analysing the results. Leavy (2017:123) concurs that a research design is a plan through which a researcher decides upon and communicates with others regarding the choice of the study design to be used, how information will be collected and analysed, as well as how the findings will be communicated.

According to Kumar (2014:13) and Srivastava and Rego (2011), the three basic types of research designs are: exploratory, descriptive and explanatory. An exploratory research design concentrates primarily on understanding the focus and identifying the variables of the study (Srivastava & Rego, 2011; Kumar, 2014:13). According to Grove, *et al.* (2015:33), descriptive research is the exploration and description of phenomena in real life situations; it also provides an accurate account of characteristics of particular individuals, situations or groups.

According to Kumar (2014:13), explanatory research attempts to clarify why and how there is a relationship between two aspects of a situation or phenomenon. This study uses an explanatory research design. The selection of this research design for the

current study is motivated by the fact that the main objective of the study – and its relevant hypotheses – is to establish the relationships between demographic characteristics, financial literacy, investment risk factors, communication and consumer trust as influences of stock market participation, as well as client satisfaction and loyalty, financial sustainability and repurchase intentions as outcomes of stock market participation. Creswell (2014:11-12) views research designs as types of enquiry within qualitative, quantitative and mixed methods approaches that provide specific direction for procedures in a research design. The study adopts a quantitative research design so as to provide bounds with regard to how data will be collected and analysed, as relative to the purpose of the study. Also, quantitative research design permits the exploration of the relationship between variables of the study through exploratory research.

7.4 RESEARCH PARADIGM AND METHOD

Jonker and Pennink (2010), as cited in Wahyuni (2012:69), refer to a research paradigm as a set of fundamental assumptions and beliefs as to how the world is perceived; this then serves as a thinking framework that guides the behaviour of the researcher. According to Denzin and Lincoln (2000) as well as Creswell (1994), as cited in Kasim, Alexander and Hudson (2016:186), the two main research paradigms advocated for in the research process and the existent literature are: positivist (which relates to the quantitative research method) and interpretivist (which stresses the qualitative research method).

7.4.1 Qualitative research method

According to Guest, Namey and Mitchell (2012:1), behavioural science researchers utilise the qualitative research method to address and answer questions related to the way in which humans organise, relate to and interact with the world. Furthermore, scholars use qualitative research to provide answers to questions regarding the ‘why’ and ‘how’ of human behaviour, opinion and experience, which are difficult to establish through the quantitative method of research (Guest *et al.*, 2012:1). According to Johnson and Christensen (2010:31), the qualitative research method is exploratory and discovery-oriented. Similarly, Denzin and Lincoln (2011:3) suggest that qualitative research is interpretative, naturalistic and materialistic. Atieno (2009:14) argues that

the qualitative research method focuses on the utilisation of words, pictures and non-numerical data to provide answers to a research investigation. Furthermore, qualitative research allows researchers to interpret and provide answers to research questions by observing subjects in their natural settings (Denzin & Lincoln, 2011:3).

Contrarily, Brennen (2013:1) asserts that the qualitative research method is controversial, contradictory, ambiguous, challenging, time-consuming and difficult to conduct. In addition, qualitative research does not provide answers that are easy, truths that are simple or measurements that are precise. Houser (2014:78) concurs that the weakness of the qualitative research method is visible in its inability to utilise large sample sizes, its failure to generalise results to a large population and its inability to ethically maintain the privacy of its subjects. In the light of these limitations, the qualitative research method is found to be irrelevant to this study.

7.4.2 Quantitative research method

According to Leedy and Ormrod (2013), the quantitative research approach is linked to the traditional, experimental or positivist paradigm; it usually ends with confirmation of the hypotheses that were tested. Wiid and Diggins (2013) concur that quantitative research is concerned with testing hypotheses in order to allow the results to be generalised from the sample to the broader population. Wiid and Diggins (2013:86) suggest that quantitative research is the collection of data that involves larger and representative samples, followed by the mathematical calculations of results. Furthermore, quantitative research involves a large quantity of data wherein the researcher looks for patterns of behaviour (Ang, 2014:8). According to Ang (2014), the quantitative research method usually starts from logically driven propositions or hypotheses that are tested using the empirical data collected. Therefore, it is easier for a study to be replicated for reassurance and verification if quantitative research methods are employed (Kumar, 2011:104).

Neuman (2011), as cited in Wahyuni (2012:71), maintains that positivist researchers seek to obtain law-like generalisations, termed nomothetic, by conducting value-free research to measure social phenomena. According to Creswell (2009), as cited in Wahyuni (2012:71), positivists believe that different researchers observing the same factual problem will generate a similar result by carefully using statistical tests and

applying a similar research process in investigating a large sample. As part of the deductive approach taken in this study, the survey technique was used as a tool to collect empirical data from the respondents (Zumitzavan & Michie, 2015:29). The survey method generally concerns the opinions, attitudes, motives, values and norms of the research units. The survey strategy is one of the most useful methods to apply in order to draw general conclusions, if the relevant samples have been selected appropriately (Zumitzavan & Michie, 2015:29). According to Morgan (2013:9), when quantitative research uses a deductive approach, researchers rely on the survey method to ensure that the results apply to a broader range of generality in ways that treat every research participant alike and objectively, so that the researchers can determine whether the observations match the hypotheses of the study. Hence, survey interviewing as a “quantitative *method*” is well-suited to deductive hypothesis testing because it can measure a relatively large number of variables and investigate the relationships amongst them (Morgan, 2013:55), which makes it essential to utilise for the purpose of this study.

Therefore, the positivistic paradigm is the most appropriate research philosophy to follow in this study, with due recognition being given to the research problem and the hypotheses of this study, as well as the applicable research design. Therefore, this study will adopt a quantitative research approach as data will be collected from a large sample and analysed through using statistical techniques. Also, the quantitative research method allows for the formulation, testing and evaluation of the research hypotheses. The comparative analysis between qualitative and quantitative research is shown in Table 7.1.

Table 7.1: Comparative analyses between qualitative and quantitative research

Research aspect	Qualitative	Quantitative
Focus of research	<ul style="list-style-type: none"> Understand and interpret 	<ul style="list-style-type: none"> Describe and explain
Researcher involvement	<ul style="list-style-type: none"> High – researcher is participant or catalyst 	<ul style="list-style-type: none"> Limited – controlled to prevent bias.
Research purpose	<ul style="list-style-type: none"> In-depth understanding; theory building. 	<ul style="list-style-type: none"> Describe or predict; build and test theory.

Research aspect	Qualitative	Quantitative
Sample design	<ul style="list-style-type: none"> • Nonprobability 	<ul style="list-style-type: none"> • Probability
Sample size	<ul style="list-style-type: none"> • Small 	<ul style="list-style-type: none"> • Large
Research design	<ul style="list-style-type: none"> • May evolve or adjust during the course of the project. • Often uses multiple methods simultaneously or sequentially. • Consistency is not expected. • Involves a longitudinal approach. 	<ul style="list-style-type: none"> • Determined before commencing the project. • Uses single method or mixed methods. • Consistency is critical. • Involves either a cross-sectional or a longitudinal approach.
Participant preparation	<ul style="list-style-type: none"> • Pre-tasking is common 	<ul style="list-style-type: none"> • No preparation desired to avoid biasing the participant.
Data type and preparation	<ul style="list-style-type: none"> • Verbal or pictorial descriptions • Reduced to verbal codes (sometimes with computer assistance). 	<ul style="list-style-type: none"> • Verbal descriptions • Reduced to numerical codes for computerised analysis.
Data analysis	<ul style="list-style-type: none"> • Human analysis following computer or human coding; primarily non quantitative. 	<ul style="list-style-type: none"> • Computerised analysis; statistical and mathematical methods dominate.

Source: Adapted from Cooper and Schindler (2011:163).

It is evident from Table 7.1 that qualitative research is viewed as unstructured and less precise, and it is not simple enough to generalise the study findings. Having discussed both quantitative research and qualitative research methods, the quantitative method is considered appropriate for this study.

A research approach concerns how theory is treated in formulating a research process. According to Schutt (2019), there are basically two research strategies which researchers can follow, namely, the deductive approach and the inductive approach. A deductive approach is theoretically driven; this implies that it starts with a theory

then testing some of its implications with data (Ang, 2014:7). Schutt (2019) and Ang (2014:7) suggest that the deductive approach is most often a strategy used in quantitative research. Researchers may start by collecting data in order to develop a theory that explains the patterns in the data; this is referred to as the inductive approach. The inductive research process is used more frequently in qualitative research. In this study, a deductive approach, together with theory, was used to establish some relationships between concepts. This is narrowed down to specific hypotheses (Ang, 2014:7). These hypotheses are then tested using data and the test will determine whether or not the hypotheses are supported, and whether it is necessary to modify the theory in the light of the results (Saunders *et al.*, 2009:117; Ang, 2014:7).

7.5 SAMPLE SELECTION

7.5.1 Target population

Gravetter and Forzano (2012:138) suggest that a population is a set of individuals who are of interest to the researcher. According to Wiid and Diggins (2013:186) and Daniel (2012:9), a population consists of a comprehensive number of individuals who become objects of observation, with the results from the study being generalised to the entire population. In addition, Kelinger and Lee (2000), as cited in Grove *et al.* (2015:46), describe a population as all elements (individuals, objects or substances) that meet certain criteria for inclusion in the study. Since it is usually not possible to reach all members of a target population, one must identify the portion of the population which is accessible.

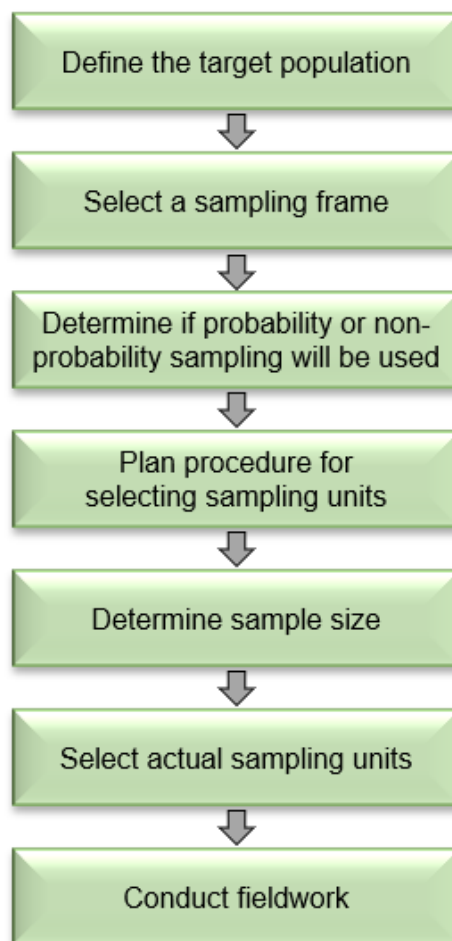
The target population of this study was all South African consumers located in four of the nine provinces, namely, Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng, based on location and the availability of financial products and financial services' institutions. These four provinces were suitable since the provinces contribute differently to the national economy (levels and areas of contribution), and since the consumers residing here could be potential respondents: consumers of financial products and services, with their annual income within the three identified income classification categories (Table 1.2).

7.5.2 Sampling method and sample identification

According to Gravetter and Wallnau (2013:6), Gravetter & Forzano (2012:138) a sample is a set of individuals selected from a population. the sample is usually intended to represent the population in a research study. Daniel (2012:1) refers to sampling as the section of a subset of a population for inclusion in a study. In quantitative research, a sampling plan is developed to increase the representativeness of the target population. According to Grove *et al.* (2015:37), sampling is a process of selecting participants who are representatives of the population being studied. Similarly, a central aim of quantitative research sampling is to generate a sample that is statistically representative of the target population (Rose, Spinks & Canhoto, 2015:198).

Figure 7.1 shows the stages that can be followed in selecting a sample.

Figure 7.1: Stages in the selection of a sample



Source: Adapted from Zikmund, *et al.* (2010:391).

It is evident that the selection of a population sample is methodical and that it follows an articulated process. It is not possible to reach all members of a target population for this study, so the stages in the selection of a sample outlined in Figure 7.1 will be followed in this study.

According to Zikmund *et al.* (2010:68) and Quinlan (2011:208), sampling is the process of drawing conclusions based on the measurements of a selected sample of the population under study and these measurements include the size of the population, the time allocated for the research and the requirements of the research.

The two distinct sampling methods that are normally used in research are probability sampling and non-probability sampling (Bryman & Bell, 2015:182; Daniel, 2012:6). According to Daniel (2012:6), probability sampling gives every element in the target population a known and non-zero chance of being selected. Similarly, Bryman and Bell (2015:182) concur that a probability sample refers to a sample that has been selected using random selection so that each unit in the population has a known chance of being selected. Wolf *et al.* (2016:329) further maintain that randomised selection is used to ensure that units are selected according to their inclusion probabilities. According to McIllinger and Hanson (2017), the types of random sampling include: simple random sampling, stratified sampling, cluster sampling and systematic sampling.

In contrast, a non-probability sample can be defined as a sample that has not been selected using a random selection method (Bryman & Bell, 2015:182). A non-probability sample does not give units in the population equal chances of being selected. Non-probability sampling happens when units are selected on the basis of personal judgement or convenience (Babin & Zikmund, 2016:348); furthermore, it does not give some elements in the population a chance to be selected for the sample (Daniel, 2012:66). In non-probability samples, the chances of selecting each element from the population is not known (Babin & Zikmund, 2016:348) and it is quite challenging to respond to questions where statistical inferences about the characteristics of the population are required (Saunders *et al.*, 2009:213). According to Hair, Celsi, Money, Samouel and Page (2015:175-176), non-probability sampling techniques include:

- Convenience sampling involves selecting sample elements that are most readily available to participate in the study and can provide the required information.
- Judgement sampling is also referred to as purpose sampling – it involves selecting elements in the sample for a specific purpose.
- Snowball or referral sampling refers to instances in which the initial respondents are typically chosen using probability methods. The researcher then uses the initial respondents to help identify other respondents in the target population; and
- Quota sampling, which strives for the total sample to have proportional representation of the strata – in this sampling method, the selection of elements is done on a convenience basis. Moreover, in quota sampling, the researcher defines the strata of the target population, determines the total sample size, and sets the quota for sample elements from each stratum.

In this study, convenience and quota sampling methods of non-probability sampling are used to select potential respondents. Convenience sampling is chosen on the basis of the availability of respondents, while quota sampling is chosen by the researcher to focus on a subgroup that is of interest to the study. The researcher specifies the characteristics of the elements to be selected but leaves the actual choice of elements to the discretion of the person collecting the information (Hair *et al.*, 2015:175). For the purpose of this study, the characteristics of the sample were the emerging middle, lower middle and upper middle class consumers of financial products and services from the Eastern Cape, the Western Cape, KwaZulu-Natal and Gauteng provinces. Consumers of financial products and services, whose annual income classification falls within the three categories mentioned above (see Table 1.2), from the selected four provinces, were included in the sample of this study (Standard Bank SALGA, 2016).

7.5.3 Sampling frame, response rate and sample size

Hair *et al.* (2015:167) describe sampling frame as an accurate, complete listing of all the elements in the population targeted by the researcher. According to Babin and Zikmund (2016:385), a well-managed sampling frame that contains accurate information on individual respondents provides the greatest potential for

generalisability. In this study, a representative sample frame consists of all consumers of financial products and services with specified income categories, from four provinces (Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng) in SA.

According to Klugman and Lamb (2019:291), calculating sample size is necessary to ensure that there is a sufficient number of responses (referred to as the response rate) which needs to be high enough in order for the results to be both meaningful and accurate. Fink (2003:42) also refers to the response rate as the number of actual respondents divided by the number of eligible respondents. In general, the larger the response, the better the research outcome, for instance, more than 50% is considered very good, and more than 40% is considered acceptable (Klugman & Lamb, 2019:291). For the purpose of this study, in order for the total sample to have a representation of the strata and to accommodate sufficient response as well as non-response rates, convenience sampling was employed to select the study elements. This implies that the respondents in the relevant annual income classification categories for each of the four regions were carefully selected by the researcher. Table 7.2 shows an illustration of the minimum sample size.

Table 7.2: Minimum sample structure of the study

Targeted Groups	Sample Size
Eastern Cape	150
Western Cape	175
KwaZulu-Natal	200
Gauteng	200
TOTAL	725

Source: Researcher's own construction.

The quantitative study permits for the use of a large sample size so as to ensure that the study findings can be generalised to the broader population. Hair, *et al.* (2014:574) suggest that a minimum sample size of 500 respondents will be required in cases in which more than seven constructs are being examined. In this study, there are nine constructs that were measured, as indicated in hypothesised model (see Figure 1.1). The selected sample size is large enough to draw adequate data for the validation of

the results and to reach a perceptive interpretation concerning consumer behaviour regarding stock market participation. In this study, for example, calculations indicate that there is a need of a minimum sample size of 725 with an expected response rate of 70%. This indicates that, for the purpose of this study, an initial sample size of $1035=725/0.7$ is selected in order to allow for possible non-response. Therefore, 1035 consumers of financial products or services were selected for the study.

Morton, *et al.* (2012:106) suggest that the expected response rate needs to be taken into consideration. Furthermore, Klugman and Lamb (2019) suggest that calculating the sample size should take the expected response rate into consideration. Fink (2003:42) suggests that, in some surveys, response rates between 95% and 100% are expected, while in others 70% is considered an adequate response rate. A response rate of 70% is considered acceptable for this study. This implies that the researcher needs to make allowance for non-responses to a survey, so that these can be calculated into the required sample size. By achieving a high response rate, the probability of non-response error is reduced; in turn, the probability of obtaining biased estimates is also reduced (Beebe, Lachmann, Markese, Buck, Chen, Cohen, Andrews, Feldstein & Jaffe, 2012; Keiding & Louis, 2016).

A total number of 725 questionnaires were distributed to respondents in the four provinces selected for this study (Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng). The questionnaires received from respondents amounted to 510. Therefore, this study achieved an acceptable response rate of 70%. Table 7.3 provides an illustration of the sample size and response rate.

Table 7.3: Sample size and response rate

Questionnaires	Respondents
Initial sample size	1035
Minimum sample size	725
Usable questionnaires received	510
Response rate	70%

Source: Researcher's own construction.

7.5.3.1 Missing data

A comprehensive evaluation and verification process for missing data was done in order to enable and simplify data processing. The verification process allowed the researcher to identify questionnaires that were bad (missing pages), torn and inadequately completed by respondents. A total number of two hundred and fifteen (215) out of seven hundred and twenty-five (725) questionnaires collected from respondents were incomplete and spoiled; these questionnaires were excluded from data capturing and were regarded as missing data. Thus, the genuineness of the results of this study was guaranteed.

7.6 DATA COLLECTION METHODS

Data collection is the process of selecting subjects and gathering data that is required for a research investigation (Gray, Grove & Sutherland, 2016:493). According to Gray *et al.* (2016), the researcher may need to develop or refine a questionnaire, prepare for the data entry, and revise a data collection plan in order to manage the factors that affect data collection – such as cost and time. Data collection methods can be classified into two categories: primary and secondary data collection.

7.6.1 Primary data

According to Collis and Hussey (2009:112) and Gray *et al.* (2016:55), primary data is original data collected from the source by means of conducting experiments, surveys or interviews; primary data can either verify or nullify secondary data as it is a timely source of current information. Primary data is very important and key to any study as it provides answers to research questions (Babbie, 2016:161). For this study, the researcher administered the survey in person with the assistance of trained fieldworkers. Questionnaires (hard copies) were distributed to more than 750 respondents in four provinces in order to accommodate the challenge of non-responses and missing data. The consumers of financial products and services from the targeted provinces completed a self-administered questionnaire. Distribution and collection of questionnaires occurred at recreational spaces during April – June 2019.

7.6.2 Secondary data

Secondary data is not original data collected from a source; it is data that has previously been collected and published (Collis & Hussey, 2009:112). According to Oliver (2004:1), the gathering and collection of secondary data is integral to the conceptual framework of a study. Thyer (2010:68) believes that secondary data is information gathered from an existing source and can be classified as historical data. Similarly, Beri (2013:12) concurs that secondary data is existing and second-hand data collected in order to answer new research questions and problems. Saunders *et al.* (2009), as cited in Zumitzavan and Michie (2015:30), maintain that secondary data can be divided into three main sub-categories, namely, documentary, survey-based data and those compiled from multiple sources. In this study, secondary data was gathered and collected from publications, books, databases, reports and internal records. A comprehensive body of literature was consulted through the Nelson Mandela University (NMU) Library and its online databases. The NMU online databases, including EBSCO Host, Sabinet, Science Direct, and Business Source premier, as well as its journals, were the main sources of secondary information.

7.7 QUESTIONNAIRE DESIGN

The survey method is most commonly associated with the written questionnaire (Van der Walt *et al.*, 2008, as cited in Zumitzavan & Michie, 2015:29). According to de Vas (2002), as cited in Zumitzavan and Michie (2015:29), a questionnaire refers to a technique of data collection in which individuals are requested to answer the same set of questions in a prearranged order. Sansoni (2011:4) defines a questionnaire as a measuring instrument that seeks to elicit answers about the variables of a study with the purpose of seeking specific information from the respondents.

According to Burton and Mazerolle (2011:29), there are four steps in the development of a survey instrument. Step one involves defining constructs and determining domain content, step two involves generating items and validating the appropriateness of said items, step three involves designing and conducting studies in order to test the scale. Lastly, step four involves finalising the scale based on the data collected in step three.

Bulpitt and Martin (2010) suggest that a questionnaire was used as the research instrument for data collection in this study. When employing a questionnaire in

research, the origin and purpose of the questionnaire must be fully explained to the respondents and the questions must follow a logical sequence, whether the questionnaire is self-administered or not. For the collection of primary data in this study, a self-constructed and self-administered questionnaire has been used as the research instrument.

According to Bulpitt and Martin (2010) the use of a self-administered questionnaire in this study removes the effect of the observer and it tends to be less expensive. The questionnaire has been structured in such a way that respondents would be able to answer it easily. The questions were not arranged in any particular order; instead, they were randomly set in the questionnaire in order not to influence the responses. Respondents will be asked to answer the questions without consulting additional information or using any instruments. The questionnaires will be collected from respondents immediately after they answer the questions. No respondent would be asked to write his/her name on the questionnaire in order to protect the identity of each respondent.

According to Crowther and Lancaster (2009:152), the researcher needs to consider the following factors when implementing and administering a questionnaire:

- is the method of administering the questionnaire face-to-face or electronic and non-face-to-face?
- is the method of distribution, returning or collection of the questionnaire face-to-face, telephonic, postal or internet based? and
- which method is going to be used to capture and record the responses?

The questionnaires used in this study were accompanied by a covering letter highlighting the main objective and the purpose of the study. The cover letter also included information assuring respondents of their right to remain anonymous and of the confidentiality of the data collected. The covering letter, written on a Nelson Mandela University letterhead, has been signed by the research coordinators and the jpo researcher. The completed questionnaires were physically collected from the respondents by the researcher and fieldworkers. In order to account for the completed questionnaires, a record of such questionnaires is kept by the researcher.

The questionnaire used in this study consists of two sections:

- Section A uses a seven-point ordinal Likert-type scale to gather consumers' perceptions on the five independent variables, consumer stock market participation and the dependent variables (90 statements); and
- Section B consists of nominal-scaled questions meant to solicit background information from the respondents (biographical characteristics). For the purpose of this study, the questionnaire gathered data on each respondent's gender, age, educational and income level, as well as their source of income and household structure (six items).

The key variables in Section A of the questionnaire were: demographic characteristics, financial literacy, investment risk factors, communication and consumer trust. Table 7.4 illustrates the variables and the number of related items per variable contained in the measuring instrument.

Table 7.4: Measuring instruments: Number of items per variable

Variables	No. of items
Demographic characteristics	10
Financial literacy	10
Investment risk factors	10
Communication	10
Consumer trust	10
Stock market participation	10
Client satisfaction and loyalty	10
Financial sustainability	10
Repurchase intentions	10

Source: Researcher's own construction.

The following section presents a summary of the respondents' demographic profiles, as captured by the research instrument.

7.7.1 Demographic profile of respondents

Table 7.5 provides the demographic composition of the respondents who participated in this study. A total of 725 questionnaires were distributed by the researcher, 510 of which were useable. This indicates a response rate of 70%. All useable questionnaires were inspected, edited and coded. The purpose of this process was to ensure that the data is accurate, consistent, uniformly entered and properly arranged so as to facilitate coding. All the questionnaires were given a reference number in order to facilitate the data capturing for the purposes of statistical analysis.

Table 7.5: Composition of the respondents in demographic terms

Demographics	Range	N	%
Gender	Male	256	51
	Female	254	49
	Total	510	100
Age	20-29	122	24
	30-39	119	23
	40-49	143	28
	50-59	78	15
	61+	48	10
	Total	510	100
Education level	Matric	95	19
	National Certificate	29	6
	National Diploma	54	10
	Post graduate diploma	41	8
	Bachelor degree	188	37
	Post graduate degree	92	18
	Other	11	2
	Total	510	100

Demographics	Range	N	%
Source of income	Employment	374	73
	Self employed	102	20
	Pensioner	13	3
	Inheritance	21	4
	Total	510	100
Income level	R1000 – R24 999	135	27
	R25 000 – R49 999	129	25
	R50 000 – R99 999	135	27
	R100 000+	73	14
	Other	38	7
	Total	510	100
Family structure (household)	Single	247	27
	Widowed / divorcee	85	28
	Partner / married no children /no children	41	9
	Partner / married with children	97	13
	Married with more than 3 children	40	23
	Total	510	100

* Some missing values (respondents did not select an option) led to all totals not adding to N = 510 or 100%.

Table 7.5 shows that 51% of the respondents were male and the other 49% were female. The majority of the respondents (75%) are younger than 50 years old. Table 7.5 further reveals that the majority of the respondents (73%) attained a tertiary qualification. As indicated in Table 7.5, the majority of the respondents (73%) are employed, 20% are self-employed and a mere 7% live on their retirement funding and/or inheritance. Table 7.5 further reveals that 73% of the respondents earn more

than R25 000 per month. The majority of the respondents (73%) are single, widowed or divorced with no children, while 27% are married with children.

7.7.2 Measuring instrument scales

The demographic characteristics, financial literacy, investment risk factors, communication, consumer trust, stock market participation, financial sustainability, client satisfaction and loyalty as well as repurchase intentions are the focus areas of the questionnaire used for this study. Questionnaires were distributed to the targeted sample in order to collect data that measures the influences on and outcomes of stock market participation. All questionnaire items were linked to a five-point Likert-type scale. Five response options, namely, strongly disagree, disagree, indifferent, agree and strongly agree were used to score the responses to each questionnaire item. Items from both self-developed measuring instruments and instruments with proven psychometric properties were used to measure the variables included in the model depicted in Figure 6.1.

7.7.2.1 Variables of the measuring scale

(a) Stock market participation

Stock market participation refers to the degree to which consumers should or prefer to invest at least a portion of their wealth in shares in order to take advantage of the return on their investment. This variable is an intervening variable which was measured by a ten item scale with items which are self-developed and adapted from Van Rooi, Lusardi and Alessie (2007).

(b) Demographic characteristics

Demographic characteristics is defined as the age, gender, income level, education level, family or household structure, cultural background and family or household size. This is an independent variable, with the items self-developed and adopted from the work of Almenberg and Dreber (2015) as well as that of Yao, *et al.* (2011).

(c) Financial literacy

Financial literacy refers to a consumer's knowledge of financial concepts, attitudes and skills that enable individuals to operationalise this knowledge into behaviour that would result in good financial outcomes. This is an independent variable, the items of which are self-developed and adopted from Van Rooi, *et al.* (2007).

(d) Investment risk factors

Investment risk is defined as the probability or likelihood of occurrence of losses relative to the expected return on any particular investment. This is an independent variable, the items of which are self-developed and adapted from Collard (2009) as well as Gardini and Magi (2007).

(e) Communication

Communication is defined as the unique tool that marketers and businesses use to attract consumers to respond in a desired way. This is an independent variable, and the items measuring this variable are self-developed and adapted from Thampathy and Krishnan (2014) as well as Padmaja (2013).

(f) Consumer trust

In this study, consumer trust is defined as the expectation or positive impressions to secure collective benefits from mutual interactions. This is an independent variable, the items of which are self-developed and adopted from the work of Corbitta *et al.* (2003), Mayer and Gavin (2005:875-877) and Guiso *et al.* (2008).

(g) Client satisfaction and loyalty

In this study, client satisfaction and loyalty is defined as the feeling that a product has fulfilled or exceeded the customer's expectations, and the customer's willingness and devotion to continue patronising a firm over the long-term. This is a dependent variable, the items of which are adopted from Srinivasan, Anderson and Ponnavaolu (2002).

(h) Financial sustainability

Financial sustainability refers to having the ability to manage financial resources to meet family financial needs throughout one's life cycle and through the ups and downs of economy at large. This is a dependent variable, the items of which are self-developed and adopted from Manjula (2013).

(i) Repurchase intentions

Repurchase intentions refers to the likelihood that the user will repurchase the good or service in the future. This is a dependent variable with items that have been self-developed and adapted from Kim, Galliers, Shin, Ryoo and Kim (2012:381).

7.7.2.2 Instruments used for the demographic profile of the respondents

In this study, individual demographic variables were measured to evaluate their effects on the respondents' views regarding participation in the stock market in SA. A two- to seven-point response scale is used for all selected demographic variables.

Gender was measured with a single-item measure and scored on the following two-point scale:

1 = Male 2 = Female

Table 7.5 reveals an almost equal balance in the gender of the respondents, as 51% were male and 49% were female.

Age was measured with a single-item measure, and scored by the following five-point scale:

1 = 20 to 29 years
2 = 30 to 39 years
3 = 40 to 49 years
4 = 50 to 59 years
5 = 60 and more years

Table 7.5 reveals that the majority of the respondents (75%) were younger than fifty years of age.

A single-item instrument was used to measure the **education level** of the respondents, and it was scored on a seven-point scale as follows:

- 1 = Grade 12 (Matric)
- 2 = National Certificate
- 3 = National Diploma
- 4 = Postgraduate Diploma
- 5 = Undergraduate Degree
- 6 = Postgraduate Degree
- 7 = Other

Table 7.5 shows that the majority of respondents (73%) hold a tertiary qualification.

A single-item instrument was used to measure the main **source of income** for the respondents. Each respondent was asked to indicate his/her source of income. The following four-point scale was used in this regard:

- 1 = Employment
- 2 = Self employment
- 3 = Pensioner
- 4 = Inheritance

Table 7.5 reveals that employment was the main source of income for the majority of the respondents (73%).

Income level was measured with a single-item instrument. Respondents were asked to indicate their levels of income on a five-point response scale, as follows:

- 1 = R1000 – R 24 999
- 2 = R25 000 – R49 999
- 3 = R50 000 – R99 999
- 4 = R100 000 +
- 5 = Other

Table 7.5 reveals that more than seventy-three percent of the respondents (73%) were earning incomes ranging from R25 000 to R100 000 and more per month.

A single-item instrument was used to measure **current family/household structure**. Each respondent was asked to indicate their current family household structure. The following five-point scale was used in this regard:

1 = Single

2 = Widowed/divorced

3 = Partner/married with no children or none living at home

4 = Partner/married with 3 or fewer children living at home

5 = Partner/ married with more than 3 children living at home

Table 7.5 shows that the majority of the respondents (73%) are single, widowed or divorced with no children.

7.8 THE CRITERIA FOR EVALUATING THE MEASURING INSTRUMENT

Validity and reliability are most frequently associated with quantitative approaches of research and evaluation, primarily because explicit tools and techniques have been developed and tested (Wallace & Van Fleet, 2012:15). Reliability and validity ensure that the measuring instrument is adequate for the collection of primary data (Kirch, 2008:891).

7.8.1 Reliability

According to Wallace and Van Fleet (2012:16), reliability refers to the extent to which conclusions are repeatable or replicable. Furthermore, a basic principle of reliability is that if the same approach to gathering and analysing data is repeated in another study with an acceptable level of precision in a directly comparable environment, the results will be the same (Wallace & Van Fleet, 2012:16). O'Dwyer and Bernauer (2014:120) maintain that there are two distinct approaches to estimating instrument reliability: one that requires multiple administrations of an instrument, namely, test-retest and equivalent forms methods; and others that rely on a single administration of an instrument, such as internal consistency methods, including split-halves and Cronbach's alpha methods.

The **test-retest method** for estimating reliability requires, at the least, the administration of an instrument to the same group (O'Dwyer & Bernauer, 2014:120).

Furthermore, a test-retest reliability coefficient of +1 for an instrument indicates that the data provided by two administrations are perfectly reliable; conversely, a correlation of zero indicates that the instrument is perfectly unreliable (O'Dwyer & Bernauer, 2014:120). Cooper and Schindler (2011:280) suggest that the reliability of the survey instrument is concerned with the extent to which an instrument is free from random error; they further indicate that reliable survey questionnaires tend to work well at different times and under different conditions. According to Zikmund *et al.* (2010:305), a research instrument is reliable when different attempts at measuring something produce the same results.

The **equivalent forms method** is similar to the test-retest method in that it requires the administration of an instrument. This method uses the correlation coefficient as the reliability estimate with the aim of avoiding practice effects by administering parallel forms of the same instrument and then calculating the reliability coefficient as the correlation between individuals' scores on each form (O'Dwyer & Bernauer, 2014:121). Therefore, reliability is the measure to which test scores are dependable and stable across conditions (Reynolds, Livingstone & Wilson, 2009:431).

Internal consistency reliability refers to the consistency of results at one point in time (Galvan & Galvan, 2017:69). According to O'Dwyer and Bernauer (2014:121), internal consistency methods require only one administration of an instrument. Thus, these methods prevent practice effects, eliminate the costs associated with re-administering the instrument and avoid the need for additional access to the individuals or groups being studied. Galvan and Galvan (2017:69) further suggest that internal consistency reliability is almost generally examined by calculating a statistic known as Cronbach's alpha, where coefficients can range for 0.00 to 1.00, with values above 0.75 usually considered to indicate adequate internal consistency reliability for research purposes. In this regard, Zeanah and Zeanah (2009:243) maintains that a Cronbach's alpha of above 0.60 and 0.70 is adequate, and that it is an acceptable indication of reliability. The Cronbach's value is utilised by researchers to describe and assess the internal consistency of a measuring instrument (Bajpai, 2011:50).

In this study, the research questionnaire was tested prior to the collection of data and the assessment of the internal reliability of the questionnaire was done by calculating its Cronbach's alpha values.

7.8.2 Validity

According to Wallace and Van Fleet (2012:16), validity refers to the extent to which conclusions accurately reflect reality. This implies that validity has to do with the extent to which conclusions are true or accurate. Therefore, validity is proof and evidence that the instrument measures what it is intended to measure (Babbie & Mouton, 2015:122). Similarly, Somekh and Lewin (2011) concur that validity makes it possible that the measurement instruments gather the relevant information, as required to answer the research question. Furthermore, validity is the extent to which a research instrument precisely reflects the real meaning of the concept being studied, determines whether the instrument truly measures that which it was intended to measure and determines how truthful the research results are (Bashir, Afzal & Azeem, 2008:35). Wallace and Van Fleet (2012:16) postulate that internal validity involves the extent to which the relationships amongst variables are accurately, while external validity focusses on the extent to which conclusions can be generalised and applied to other environments. According to Somekh and Lewin (2011:328), the validity of a measuring instrument serves the following three functions: to represent the universe of content, to establish relationships with a particular variable and to measure affective behaviour.

Content validity is the extent to which the variables of an instrument are reflective of a given construct (Yaghmale, 2003:25). According to Galvan and Galvan (2017:72), content validity is determined by having one or more experts evaluate the contents of a measure and this is especially important to determine the content validity of achievement tests. Furthermore, Polit and Beck (2012:489) believe that content validity is the completeness of the content to be measured, and that validity is an essential source of evidence (Delgado-Rico, Carrtero-Dios & Ruch, 2012:451).

Construct validity refers to the extent to which variables are accurately identified and described, therefore, it is largely a function of the extent to which the investigator is mindful of and honest about the limitations of operational definitions of variables (Wallace & Van Fleet, 2012:16). Shea and Yanow (2012:92) concur that the general logic underlying the validity of a given variable, referred to as construct validity, concerns whether the particular indicator used by the researcher measures what it is supposed to measure. According to Drost (2012:116), construct validity refers to the

extent to which researchers transform an idea or behaviour into functioning and operating reality and how well variables capture the operationalisation of a construct. John (2015:68) concurs that construct validity reveals the degree to which presumptions are justifiably prepared from implementation to hypothetical constructs on which the operationalisation is based. Generally, construct validity has two sublevels: convergent validity and discriminant validity (Allen, 2017:1821). According to Allen (2017), convergent validity is based on measuring similarities in order to determine the relatedness of at least two theoretical concepts. Allen (2017) further suggests that discriminant validity is primarily concerned with the determination of theoretical differentiation.

Criterion-related validity is determined by calculating a correlation coefficient in order to describe the relationship between variables. Thereafter, the resulting correlation coefficient is referred to as a validity coefficient; values above 0.30 indicate adequate validity for research purposes (Galvan & Galvan, 2017:70). Drost (2012:116) believes that validity is the extent of correspondence between a test measure and one or more external criterion usually measured by their correlation. In this study, the construct validity of the measuring instrument is assessed by means of factor analysis in order to establish variables that are related in such a way that, together, they form a construct and relationships amongst the measured variables.

7.9 PRETESTING THE MEASURING INSTRUMENT

A pilot study refers to an often smaller version of a proposed study. Researchers frequently conduct these in order to refine the study sampling process or the measurement variable (Hertzog, 2008, as cited in Grove *et al.*, 2015:45). According to Blessing and Chakrabarti (2009:114), the purpose of a pilot study is to detect potential mistakes and errors in the measuring instrument that may negatively impact on the quality and validity of the research findings. Similarly, Ary, Jacobs, Sorensen and Razavieh (2009:95) believe that a pilot study is a trial run of the measuring instrument, which is aimed at reducing flaws in and ensuring the appropriateness of the questionnaire. The purpose of a pilot study is to increase the clarity of the questionnaire so that respondents will not have difficulties in understanding and answering questions (Zumitzavan & Michie, 2015:31). It also provides better understanding of frame of reference relevant to the questionnaire and question

wording. It may also help to test the validity of the data collected (Balnaves & Caputi, 2001; Saunders, *et al.*, 2009, as cited in Zumitzavan & Michie, 2015:29).

Correspondingly, Bryman and Bell (2015:273) believe that the purpose of a pilot study is to ensure that the survey and the research process as a whole runs smoothly. Yin (2016:39) concurs that a pilot study is important for testing and refining the measuring instrument as it allow researchers to pinpoint unclear and biased questions, language mistakes and provides researchers an opportunity to learn the behaviour and attitudes of the respondents towards the study.

For the purpose of this research, a pilot study was carried out in order to pre-test the measuring instrument. A total of 30 questionnaires were distributed to consumers in Port Elizabeth and East London in the Eastern Cape. The pilot study created awareness of the study and enabled the researcher to understand consumer perceptions of the study. The pilot study helped minimise errors and increased the efficiency of the measuring instrument and, as a result, relevant and error-free data was gathered.

Improvements and fine-tuning of the questionnaire items were made in response to the remarks and recommendations made by the respondents. These revisions were only minor, and related to grammer and technical formatting.

7.10 DATA ANALYSIS

According to Neuman (2003:8), data can be defined as information that a researcher gathers according to applicable standards and procedures. Albers (2017:ix) argues that every quantitative study collects some type of data that must be analysed in order to draw conclusions regarding the study topic. In this study, the analysis of the primary data was done in five phases: computing of Cronbach's alpha values for the internal consistency reliability of the measuring instrument, exploratory factor analysis, descriptive statistics, multiple regression analysis and correlation analysis.

7.10.1 Descriptive statistics

Data analysis starts with the calculation of descriptive statistics and by describing and summarising data in a way that is simple and easy to understand (Zikmund *et al.*,

2010:593). There are two types of statistical techniques that are used to analyse data, namely, descriptive and inferential statistics. Upon completion of data collection by the researcher, the data needs to be analysed and interpreted (Gravetter & Forzano, 2012:396; Collis & Hussey, 2009:221). Descriptive statistics is a group of statistical methods used to summarise, describe or display quantitative data (Gravetter & Forzano, 2012:396; Collis & Hussey, 2009:221). Inferential statistics are a group of statistical methods and models used to make inferences about a population from quantitative data to a sample (Gravetter & Forzano, 2012:396; Collis & Hussey, 2009:221). In this study, descriptive statistics, such as the mean, standard deviation and frequency distributions, is used to summarise Section B of the questionnaire, which consists of demographic information such as the gender, age and source of income for the respondents. Furthermore, descriptive statistics are used to reduce the biographical data of the participants into percentages and averages; the data can also be organised into frequency distributions by which various charts can be used to elaborate on the data. Descriptive statistics are also calculated to summarise the data relating to the study's variables.

7.10.2 Factor analysis

According to Shani and Noumair (2015:219), factor analysis is a data reduction tool that removes redundancy or duplication from a set of variables. Finch (2019) postulates that the purpose of using factor analysis is to gain insight into the latent structure underlying a set of observed indicator variables. Finch (2019) further maintains that the goal of a factor analysis is to learn how the indicators group together with factors and thereby to gain a greater understanding of what the indicators are actually measuring.

7.10.2.1 Exploratory factor analysis (EFA)

Finch (2019) states that EFA describes tools for exploring relationships between observed variables. According to Burton and Mazerolle (2011:30-31), EFA is key to instrument development as it allows researchers to construct a survey with a minimum number of required constructs. Similarly, EFA is performed when the researcher is uncertain about how many factors may exist amongst a set of variables (Zikmund *et al.*, 2010:593). According to Burton and Mazerolle (2011:31), EFA provides the

researcher with data that will help reduce the number of items in a proposed survey so that the remaining items can best explain the constructs under investigation. Cramer (2003:13) concurs that factor analysis is used to assess whether the responses from a measuring instrument can be grouped together in order to establish a general indication of that perception. EFA should be employed when dealing with large samples (Tolmie, Muijs & McAteer, 2011:174); in this respect, the cases should not be less than 100 per analysis and there should be a minimum of five cases in each variable under study (Cramer, 2003:15). In this study, EFA is utilised to establish the underlying and essential dimensions of as well as the relationships between the measured variables of the study.

(a) Factor loadings

Allen (2017:517) maintains that after removing any potentially problematic items before analysing the factor structure, it is helpful to assess which items load on what combinations of extracted factor. Furthermore, Allen (2017:517) argues that loadings in an EFA are a measure of variance in any particular item that is caused by the latent factor. Therefore, factor loadings represent the strength of the relationship between a latent variable and the measured variable (Miksza & Elpus, 2018:219). Miksza and Elpus (2018:219) further suggest that loadings can be interpreted as correlation coefficients and are generally considered to be meaningfully large if they are at least 0.30 or 0.40. According to Burns and Burns (2008:444), high loadings represent surface attributes which are strongly impacted by the factor and, when a sample is being used, its size is important in determining whether a loading is statistically significant and expected to exist in the population from which the sample was drawn. In this study, factor loadings of 0.5 and above were considered statistically significant and were thus considered for further analysis.

Suen and Ary (2014:186) purport that factor loadings assume values from +1.00 to -1.00. Therefore, researchers must understand and take into consideration the cut-off point of factor loadings that are statistically significant to the study. Furthermore, Asthana and Bhushan (2016:206) as well as Costello and Osborne (2005:4-5) explain that 0.30 is considered a minimum loading of an item, 0.40 is considered important and 0.50 and greater is considered to be a practical and significant loading in an EFA

matrix. Therefore, the rule of thumb for factor loadings in this study is 0.5 and above for further study analysis.

(b) Factor rotation

According to Osborne and Banjanovic (2016), factor rotation was developed to help researchers clarify and simplify the results of factor analysis. Zikmund and Babin (2010:628) believe that factor rotation is a mathematical way of simplifying the results obtained through factor analysis. Osborne and Banjanovic (2016) further suggest that this method starts by actually conducting an orthogonal rotation (because it produces more easily interpretable results) in order to clarify the pattern of loadings. There are two major categories of rotations: orthogonal rotations, which produce uncorrelated factors (Osborne & Banjanovic, 2016), and oblique rotations, which produce factors that are correlated; this implies that factors are not completely independent from one another (Allen, 2017:529). Consequently, the best and most commonly used orthogonal rotation is the Varimax which is capable of increasing interpretability by rotating factors which result in discrimination between high loading and low loading items. This rotation methods was used in this study.

(c) Naming of factors

According to Shani and Noumair (2015:219), the coefficients of a factor pattern indicate the correlations of the variables with the respective factors, and furnish the basis for naming them; the name selected comes from the variables having the largest correlations with the factor under consideration. A factor, for example, should generally be named on the basis of the items which contribute the most to that factor, such as those variables with loadings greater than 0.4 or 0.6.

7.10.3 Regression analysis

According to Chatterjee and Hadi (2012:xiii), regression analysis has become one of the most widely used statistical tools for analysing multi factor data. Furthermore, it is appealing because it provides a conceptually simple method for investigating functional relationships amongst variables. Ciaburro (2018:6) supports this notion by describing regression analysis as a statistical process done to study the relationship between a set of independent variables (referred to as explanatory variables) and the

dependent variable (known as the response variable). A regression analysis can have the following two objectives (Ciaburro, 2018:6):

Explanatory analysis: to understand and weigh the effects of the independent variable on the dependent variable according to a particular model; and

Predictive analysis: to locate a linear combination of the independent variable to predict the value assumed by the dependent variable optimally.

According to Keith (2015:94,97), there are two ways that are often used in multiple regression: the sequential regression, which is used to determine which variables are an important influence on some outcome, and stepwise multiple regression, which is used for prediction and attempts to explain the variance on the variables under study.

7.10.3.1 Multiple regression analysis

Gravetter and Forzano (2012:415) explain that the statistical process of finding the most accurate prediction of equations with multiple predictors is multiple regression analysis. Mitchell and Jolley (2010:626) concur that multiple regression is a statistical technique that can take the data from several predictors and an outcome variable to create a formula that weighs the predictors in a way that provides the best possible estimates of the outcome variable, given those predictors. The purpose of multiple regression is to investigate, simultaneously, the effects of a number of independent variables on a single dependent variable (Zikmund *et al.*, 2010:592). In addition, Wiid and Diggins (2013:304) indicate that multiple regression analysis is used if the researcher wants to determine the relationship between a specific dependent variable and a number of independent variables.

According to Aron, Coups and Aron (2014:95), multiple regression is used to estimate scores on a dependent variable from scores derived from two or more independent variables, and that theoretical models are normally tested using multiple regression models. Therefore, the multiple regression model is more realistic.

With multiple regression, the independent variable is used to increase the accuracy of the estimate of the dependent variable (Coldwell & Herbst, 2004:109). Multiple

regression analysis is used in this study to predict and explain the relationships between the variables depicted in the model of the study.

7.10.4 Correlation analysis

According to Moutinhi and Hutcheson (2011:56), in business, the researcher is interested in determining whether there is any association (relationship) between two or more variables, and to ascertain the strength of the association.

Correlation analysis involves measuring the strength of the relationship between two variables (Moutinho & Hutcheson, 2011:56). Correlation analysis is more relevant for measuring the magnitude of the relationship between two sets of interval ratio variables (Aron *et al.*, 2008:68; Lind, Marchal & Wathen 2012:465; Zikmund & Babin, 2010:591). The most commonly used measure of association is the correlation coefficient (Moutinho & Hutcheson, 2011:56). According to Lind *et al.* (2012:534), when independent variables are correlated there is multicollinearity which makes it difficult to make assumptions about individual regression coefficients and to deduce their effects on the dependent variable (Lind *et al.*, 2012:534). In this study, correlation analysis was used to assess the nature and strength of relationships between the independent, intervening and dependent variables identified in the study.

7.10.4.1 Pearson's product moment correlations

The Pearson correlation coefficient measures the degree to which there is linear association between two internally scaled variables (Moutinhi & Hutcheson, 2011:56). Wiid and Diggines (2013:282) believe that correlations measure the extent to which a change in one continuous variable can be linked to a change in another continuous variable, and that a correlation analysis conducts a test of the direction and strength of a relationship between two continuous variables (Mitchell & Jolley, 2012:623). According to Moutinhi and Hutcheson (2011:56), a positive correlation reflects a tendency for a high value in the first variable to be associated with a high value in the second variable, whilst a negative correlation reflects an association between a value in the first variable and a low value in the second variable. The correlation analysis produces a correlation coefficient (r). This value indicates the strength and direction of a relationship between two continuous variables (Wiid & Diggines, 2013:282). According to Mitchell (2010), the correlation coefficient can range from -1 to 1.

Furthermore, Gravetter and Forzano (2012:525) believe that there are two different correlations to measure different types of relationships; these are Pearson's product moment correlation and the Spearman correlation. Pearson's product moment correlation measures and describes the direction and degree of relationships between two variables, whereas the Spearman correlation measures and describes the degree of a relationship between two variables that have been measured on an ordinal or ranking scale (Gravetter & Forzano, 2012:525). Pearson's product moment correlations are the most commonly used correlations in behavioural science research and can be used as a parametric test that measures the association between two continuous variable measures on a ratio or interval scale (Collis & Hussey, 2009:273). Kombrot (2005) provides guidelines for interpreting Pearson's product moment correlation coefficients, as detailed in Table 7.6.

Table 7.6: Guidelines for interpreting Pearson's product moment correlation coefficients

1.0 to -0.5: Strong negative relationship
0.5 to -0.3: Moderate negative relationship
0.3 to -0.1: Weak negative relationship
0.1 to 0.1: No or very weak relationship
0.1 to 0.3: Weak positive relationship
0.3 to 0.5: Moderate positive relationship
0.5 to 1.0: Strong positive relationship

Source: Adapted from Kombrot (2005).

In this study, multiple regression analysis and correlation analysis is used to observe the existence and strength of relationships amongst variables.

7.11 ETHICAL CONSIDERATIONS

Ethical considerations such as the right to privacy, confidentiality and being transparent will be addressed in this section. These considerations are necessary for the purpose of ensuring the privacy as well as the security and dignity of the

respondents, in addition to safe guarding the research data. Amongst the most significant issues to be considered regarding research ethics is consent, confidentiality and data protection. According to Hickey (2018), ethics is the moral principle and guiding conduct about human behaviour. Similarly, Fouka and Mantzourou (2011:3) suggest that ethics involve the protection of the dignity of subjects and the dynamics of decision making with regard to what is right and wrong. The study of ethics leads to the development of norms which focus on values that are essential to trust relationships, accountability, mutual respect and fairness; it ensures that researchers are held accountable to the public (Akaranga & Makau, 2016:9; Resnik, 2015:2). In this study, research ethics were observed by applying for ethical approval from the Nelson Mandela University Research Ethics-Human Committee. In addition, the covering letter of the questionnaire assured the participants of their privacy as well as the anonymity and confidentiality of the data collected. Since the study's focus was on gathering the perceptions of consumers on stock market participation, any personal information collected were only used for statistical purposes. Individual responses could not be linked to specific respondents. In order to uphold ethical standards, the following was considered:

- Ethics approval was obtained from the relevant Ethics Committee.
- The purpose of the research was communicated to all the respondents. The respondents were invited to participate voluntarily and were allowed to withdraw at any time during the data collection process without penalty. Each respondent ticked a declaration/statement of consent before participating in (completing the questionnaire of) the study.
- Respondents provided responses according to their personal opinions, remained anonymous, were not required to provide their personal details, and data collected remained confidential.

7.12 SUMMARY

This chapter provided a description of the research design and methodology applied to this study. The target population, sampling technique, sample frame, sample size and sampling frame were all explained. The sample size of this study was selected, with a total of 725 questionnaires being distributed – 510 of these questionnaires were useable, which represents a 70% response rate. The development of the measuring

instrument and how it was administered was also explained in this chapter, as well as the procedure used to conduct the pilot study. The items in the measuring instrument were generated from secondary sources and adapted for use in this study. The measuring instrument was a self-administered questionnaire that was approved by the ethics committee of Nelson Mandela University. The criteria for evaluating the measuring instruments in terms of reliability and validity were also discussed in this chapter. Cronbach's alpha correlation coefficients were calculated in order to test the reliability of the questionnaire. In order to determine the construct validity of the questionnaire, an EFA was undertaken.

Furthermore, the chapter provided a description of the steps and techniques used in the collection and analysis of data for this study, as well as an explanation of the descriptive statistics used to summarise the sample data. The data obtained from the measuring instrument was thus subjected to statistical techniques and analyses. The statistical techniques used in this study included the following: descriptive statistics, EFAs, factor loading, factor rotation, Pearson's product moment correlations, regression analysis, multiple regression analysis and correlations analyses – all of which were discussed in this chapter. The results of the various statistical analyses will be discussed in the following chapter. Chapter Eight will provide a complete analysis of the data gathered in this study.

CHAPTER EIGHT

EMPIRICAL RESULTS OF THE STUDY

8.1 INTRODUCTION

Chapter Seven outlined and discussed the research design and methodology used in this study. Chapter Seven also discussed the applicable research paradigm for the study, and it offered an explanation of how the measuring instrument was designed and administered. Furthermore, the sampling selection, questionnaire design, data collection and analysis methods employed in the research were also discussed in Chapter Seven. The descriptive statistics used to summarise the sample data were also discussed and the chapter outlined the ethical considerations of the study.

This chapter, Chapter Eight, discusses the empirical results of the study in relation to consumer behaviour regarding stock market participation in SA. The results of the reliability and validity assessment of the measuring instrument used are also presented in this chapter. Chapter Eight also presents the results of the descriptive, exploratory factor analysis, as well as the results of the regression and correlation analysis in relation to the variables and the empirical testing of the relationships between the independent, intervening and dependent variables of the study.

8.2 THE HYPOTHESES AND THE MODEL OF THE STUDY

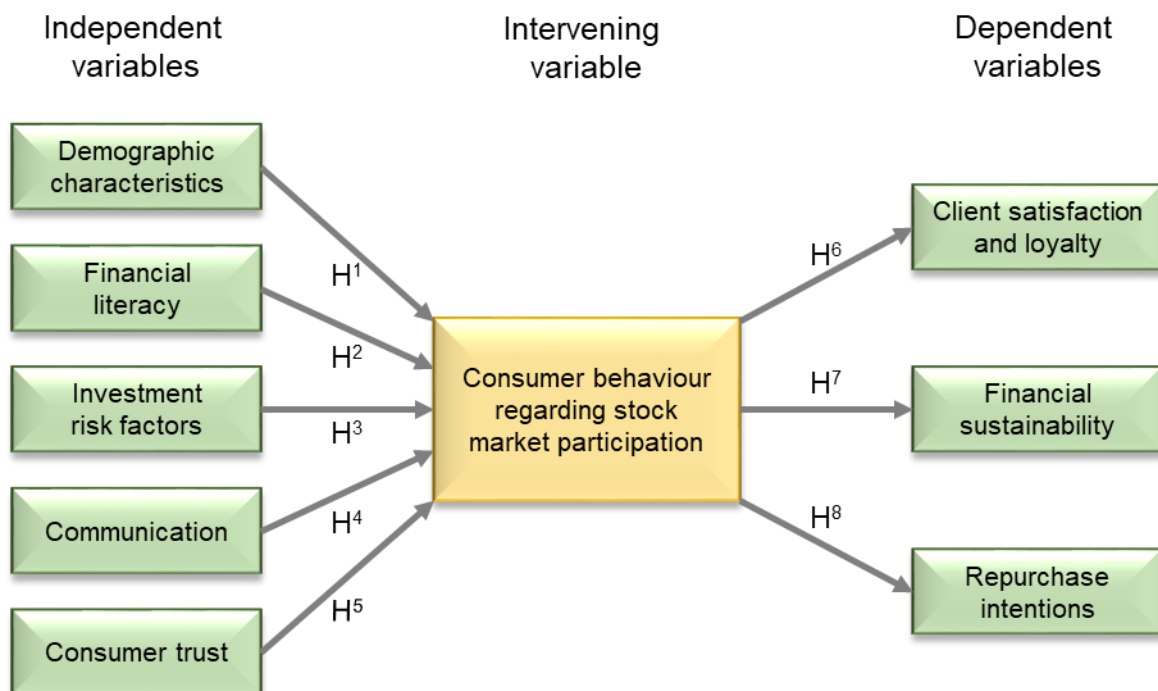
The influences and outcomes relevant to stock market participation will be tested through the hypotheses listed below, and reduced to an easily discernible theoretical model of the study, as presented in Figure 8.1.

The hypotheses for the study are:

- H¹: There is a significant relationship between demographic characteristics and consumer stock market participation.
- H²: There is a significant relationship between financial literacy and consumer stock market participation.
- H³: There is a significant relationship between investment risk factors and consumer stock market participation.

- H⁴: There is a significant relationship between communication and consumer stock market participation.
- H⁵: There is a significant relationship between consumer trust and consumer stock market participation.
- H⁶: There is a significant relationship between consumer stock market participation and client satisfaction and loyalty.
- H⁷: There is a significant relationship between consumer stock market participation and financial sustainability.
- H⁸: There is a significant relationship between consumer stock market participation and repurchase intentions.

Figure 8.1: Theoretical model of consumer behaviour regarding stock market participation



Source: Researcher's own construction.

8.3 DATA ANALYSIS RESULTS

The theoretical framework that has been reviewed in the previous chapters was used during the data analysis stage in order to avoid unauthentic results in this study. The primary data analysis was performed using a computer programme called STATISTICA (version 12). The data analysis consisted of the following five distinct phases:

- The first data evaluation phase entails the analysis of the reliability of the measuring instrument. The initial and final Cronbach's alpha values were calculated to measure the internal consistency of the instrument used in the study.
- The second data evaluation phase is the evaluation of the construct validity, which was determined by means of factor analysis. EFA was conducted to determine the degree to which a construct is not associated with other constructs on a theoretical basis.
- The third data evaluation phase relates to the calculation of descriptive statistics to summarise the study variables by presenting measures such as means and standard deviations.
- The fourth data evaluation phase necessitates the performance of multiple regression analyses in order to determine the influence of independent variables on the intervening variable, and the influence of the latter on the dependent variables, as indicated in the theoretical model. This analysis technique was also used to assess the hypothesised relationships.
- The fifth data evaluation phase is the correlation analysis which was determined by utilising the Pearson's correlation coefficient to test the strength of the relationships between variables in this study.

A summary of the abbreviated variables that will be used in the study is shown in Table 8.1.

Table 8.1: Abbreviations of variables

VARIABLE	ABBREVIATION
Demographic characteristics	DC
Financial literacy	FL
Investment risk factors	INV
Communication	CM
Consumer trust	CT
Stock market participation	SM
Client satisfaction and loyalty	SL
Financial sustainability	FS
Repurchase intentions	RI

Source: Researcher's own construction.

8.3.1 Reliability of the instrument

According to Struwig and Stead (2013), reliability refers to a consistent technique used repetitively to produce the same results each time it is applied. Furthermore, the technique is focused on the reliability of the measurement to constantly replicate results which are consistent (Diamantopoulos & Schlegelmilch, 2006:34; Leedy & Ormrod, 2010:93). According to Taber (2017), reliability includes internal consistency, which implies a degree of generalisation across the items within the measurement. In this study, the internal consistency of each of the factors was assessed by calculating Cronbach's alpha values using the computer programmes Microsoft Excel and STATISTICA (Version 12).

8.3.1.1 Internal reliability of the instrument

Internal consistency gives an approximation of the sameness of sets of items from a similar test (DeVellis, 2006:44). It is believed that the coefficient of internal reliability gives an approximation of the dependability of measurement and instruments measuring the same construct are expected to correlate (DeVellis, 2006:44). The most widely used method for estimating internal consistency reliability is Cronbach's alpha, which is used to establish a measuring instrument's reliability (Bryman & Bell,

2007:164). According to Tavaskol and Dennick (2011:53) as well as Bonett and Wright (2014), the Cronbach's alpha value system is a reliability coefficient that proves how well the items in a set are positively correlated to one another. Coefficients at or above 0.80 are often measured to be satisfactorily dependable in order to make decisions about individuals based on their observed scores, although a higher value such as 0.90 is preferred (Webb, Shavelson & Haertel, 2006:1). However, researchers generally agree that for instruments of attitude and preference assessment, Cronbach's alpha of 0.6 or greater is an acceptable value for reliability tests. The acceptance of a value >0.6 is consistent with most literature on Cronbach's alpha values (Tavaskol & Dennick, 2011:53; Bonett & Wright, 2014:68; Taber, 2017:9).

In this study the internal consistency of each of the factors was assessed by calculating their Cronbach's alpha, where the value >0.6 was considered to represent a sufficient standard of reliability. The results in this study show Cronbach's alpha values of between 0.6 and 0.9. According to Zikmund, Babin, *et al.* (2010), this indicates that all instruments have a fair degree of reliability. Table 8.2 indicates that the Cronbach's alpha values obtained in this study were all above 0.7, except for Financial literacy (FL) which achieved a value of 0.6, as depicted in Table 8.2. This is acceptable for the purpose of the study as the cut-off point of Cronbach's alpha values is >0.6 .

Table 8.2 reveals that the study retains DC, FL, INV, CM, CT, SM, SL, FS and RI since their Cronbach's alpha values were above the cut-off point (0.6).

Table 8.2: Initial Cronbach's alpha values of the measuring instrument: Theoretical model

Measuring instrument	Alpha value
Demographic characteristics (DC)	0.85
Financial literacy (FL)	0.67
Investment risk factors (INV)	0.77
Communication (CM)	0.84
Consumer trust (CT)	0.91
Stock market participation (SM)	0.93
Client satisfaction and loyalty (SL)	0.86
Financial sustainability (FS)	0.90
Repurchase intentions (RI)	0.94

Source: Researcher's own construction.

8.3.2 Validity of the measuring instrument

Robson (2011) concurs that validity is the extent to which an instrument measures what it asserts to measure, assesses the extent to which the research instrument measures what it is designed to measure, and establishes whether the results obtained meet all of the requirements of a scientific research method. According to Pallant (2011) and Creswell (2014), validity tests are mainly divided into four types: content validity, face validity, construct validity and criterion-related validity.

In this study, discriminant validity was considered for statistical analysis and the data was tested for validity using factor analysis in order to determine the quality of dimensions within the survey. According to Gatigana (2010:67), in order for a construct to be discriminant its correlations between estimated constructs should be one. Factor analysis was considered as the best method of choice as it reduces large numbers of variables into smaller sets of variables. It also establishes underlying dimensions between measured variables and latent constructs, thus allowing the formation and refinement of theory, and it provides construct validity evidence of self-reporting measures.

8.3.2.1 Factor analysis

Finch (2019) suggests that the purpose of using factor analysis is to gain insights into the latent structure underlying a set of observed indicator variables. Finch (2019) further maintains that the goal of a factor analysis is to learn how the indicators group together with factors and, thereby, to gain a greater understanding of what the indicators are actually measuring. DeCoster (1998), as cited in Yong and Pearce (2013:80), argues that EFA is used to discover the number of variables influencing other variable(s) (for example, an intervening variable) and to analyse which variables correlate. Finch (2019) concurs that EFA is a tool for exploring relationships between observed variables and latent variables, which are also known as factors.

Kline (2014:5-6) describes factor loadings as correlations of variables with factors and refers to factors as constructs or dimensions which account for relationships between variables and which are defined by their factor loadings. Kline (2014:6) denotes that it is usual to regard factor loadings as high if they are greater than 0.6 values and moderately high if they are above 0.3 values. Hair, Babin, Money and Samouel (2007), as cited in Antonides (2017:703), suggest that only factor loadings with absolute values greater than 0.4 are acceptable in factor analysis. For the purpose of this study, factor loadings of 0.5 and above were considered statistically significant and were thus considered for further analysis.

Liu *et al.* (2003), as cited in Sun and Sun (2015:232), classified the significant loadings as strong (0.75), moderate (0.50 to 0.75) and weak (0.30 to 0.50), based on absolute loading values. Conversely, Castello and Osborne (2005), as cited in Sun and Sun (2015:232), suggest that a factor with fewer than three items (0.30) is generally weak and unstable, whilst five or more strongly loading items (0.50) are desirable and indicate a solid factor. The factor loadings of three items per factor is adequate and is taken into consideration for further analysis in this study.

The second data analysis phase involved two sets of EFA. The first EFA encompassed views of consumers (of financial products and services) on demographic characteristics (DC), financial literacy (FL), investment risk factors (INV), communication (CM) and consumer trust (CT). The second EFA was concerned with consumers' views of consumer behaviour regarding participation in the stock market (SM) and the prospective outcomes of stock market participation (SM), such as client

satisfaction and loyalty (SL), financial sustainability (FS) and repurchase intentions (RI).

(a) Views of consumers of financial products and services on demographic characteristics, financial literacy, investment risk factors, communication and consumer trust

Table 8.3 reveals that all ten items (CT1, CT2, CT3, CT4, CT5, CT6, CT7, CT8, CT9, CT10) expected to measure 'consumer trust' and four of the ten items (CM7, CM8, CM9, CM10) expected to measure 'communication' as well as one of the ten items (INV5) expected to measure 'investment risk factors' loaded on factor one (1). This means that respondents viewed these items as measures of a single construct, namely, 'consumer trust', since the consumer trust items dominated this factor's item loadings.

Table 8.3 further indicates that eight of the ten items (DC1, DC2, DC4, DC5, DC6, DC7, DC9, DC10) that were expected to measure 'demographic characteristics' loaded on factor two (2). This means that respondents viewed these items as a single construct termed 'demographic characteristics'. Two items (DC3, DC8) that were expected to measure 'demographic characteristics' did not load to a significant extent ($p < 0.4$); this led to the deletion of these items, which were subsequently not used in the analysis.

Table 8.3 also reveals that two of the ten items (FL4, FL5) that were expected to measure 'financial literacy' and two of the ten items (INV4, INV6) that were expected to measure 'investment risk factors' loaded onto factor three (3); these items are termed 'financial risk tolerance'. This indicates that respondents did not perceive 'investment risk factors' as a single construct but as a dimension termed 'financial risk tolerance'. This implies that the study respondents are open-minded and tolerant of financial risk towards stock market participation.

Table 8.3 further reveals that five of the ten items (CM1, CM2, CM3, CM5, CM6) that were expected to measure 'communication' and one of the ten items (INV1) that were expected to measure 'investment risk factors' loaded onto factor four (4). The respondents perceived these items as a single construct, 'communication', since most items of this factor related to communication. One 'communication' item (CM4) did not

load to a significant extent ($p < 0.5$); this led to the deletion of this item which was not used in subsequent analyses.

Three items (FL2, FL7, FL8) which were intended to measure 'financial literacy' and one of the ten items (INV9) expected to measure 'investment risk factors' loaded onto factor five (5). Since most items that loaded onto this factor are financial literacy-related, it is evident that respondents viewed these items as a single construct termed 'financial literacy'.

In addition to the three non-loading items mentioned above, four items that were expected to measure financial literacy (FL1, FL3, FL9, FL10) and five investment risk factor items (INV2, INV3, INV7, INV8, INV10) did not load to a significant extent ($p < 0.5$) and were deleted due to a lack of sufficient validity. One item expected to measure 'financial literacy' (FL6) cross-loaded; this item was deleted, as it lacks sufficient validity for further analysis.

Table 8.3 also indicates that, as a result of the comprehensive EFA, four items expected to measure the 'investment risk factors' (INV4, INV6) and 'financial literacy' (FL4, FL5) variables loaded together onto one factor and were not interpreted by respondents as expected. Hence, these items were interpreted and perceived by respondents as measures of a single construct termed 'financial risk tolerance'.

Table 8.3 further reveals that the study retains the following independent variables: DC, FL, FRT, CM, and CT, since their factor loadings were above the cut-off point of 0.50 and the acceptable number of items per factor were also above the cut-off point of 3 items.

Table 8.3: Factor loadings of consumers' views regarding the independent variables

Variable	Factor 1 Consumer trust	Factor 2 Demographic characteristics	Factor 3 Financial risk tolerance	Factor 4 Communication	Factor 5 Financial literacy
CT 8	0.780	-0.136	0.007	0.062	0.021
CT 1	0.778	0.062	0.041	0.235	0.131
CT 7	0.778	-0.084	-0.035	0.085	0.012
CT 9	0.743	-0.114	0.029	-0.008	-0.008
CT 2	0.733	0.125	-0.049	0.188	0.189
CT 6	0.689	-0.031	-0.216	0.076	0.217
CM 8	0.665	0.202	0.189	0.284	0.046
CM 10	0.665	0.139	0.150	0.303	0.158
CT3	0.661	0.111	-0.049	0.148	0.370
CT5	0.654	-0.117	0.136	-0.135	-0.270
CT10	0.649	-0.160	0.141	0.119	0.027
CM 9	0.648	0.099	0.191	0.152	-0.074
CT4	0.627	-0.013	0.307	-0.043	-0.147
CM 7	0.542	0.224	0.079	0.396	-0.055
INV 5	0.502	0.239	0.439	-0.111	0.116
DC 4	-0.044	0.771	0.016	0.103	-0.064
DC 7	0.025	0.746	0.295	0.122	-0.115
DC 6	-0.080	0.744	0.153	0.171	0.006
DC 5	0.005	0.741	0.120	-0.066	-0.319
DC 1	0.179	0.692	-0.236	0.261	-0.075
DC 10	-0.009	0.618	-0.246	0.189	0.205
DC 9	-0.054	0.566	0.070	0.196	0.303
DC 2	0.168	0.564	-0.272	0.183	0.027
FL 4	0.021	-0.101	0.772	-0.050	-0.005
FL 5	-0.037	0.056	0.764	-0.025	0.011
INV 4	0.461	0.060	0.542	0.162	-0.098
INV 6	0.234	-0.025	0.501	0.264	-0.047
CM 1	-0.065	0.078	-0.157	0.810	0.124

Variable	Factor 1 Consumer trust	Factor 2 Demographic characteristics	Factor 3 Financial risk tolerance	Factor 4 Communication	Factor 5 Financial literacy
CM 5	0.227	0.114	0.059	0.809	0.040
CM 6	0.221	0.226	0.120	0.771	-0.015
CM 2	0.173	0.037	-0.089	0.656	-0.083
CM 3	0.137	0.006	0.164	0.651	-0.270
INV 1	0.250	0.236	0.141	0.582	0.133
FL 8	0.115	-0.228	-0.170	-0.015	0.769
FL 7	0.094	-0.357	0.230	-0.028	0.682
FL 6	-0.063	-0.554	0.243	0.035	0.559
FL 2	0.269	-0.103	0.072	-0.049	0.539
INV 9	0.162	0.203	-0.300	0.097	0.521
FL 9	0.180	0.326	-0.116	0.333	0.466
INV 8	0.163	0.015	-0.131	0.382	0.421
INV 10	0.328	0.147	-0.153	0.136	0.388
FL 10	0.319	0.273	-0.138	0.468	0.343
DC 8	-0.142	0.278	0.064	0.279	0.319
INV 7	0.365	0.175	0.232	-0.108	0.267
DC 3	0.147	0.145	-0.275	0.337	0.213
INV 3	0.497	0.147	0.099	0.331	0.212
INV 2	0.489	0.218	0.412	0.221	0.037
FL 1	0.462	0.204	0.495	-0.029	-0.026
FL 3	0.238	0.257	0.478	0.100	-0.074
CM 4	0.253	-0.147	0.479	0.152	-0.463
Expl.Var	8.858	5.254	3.950	4.863	3.846
Prp.Totl	0.177	0.105	0.079	0.097	0.077

Loadings are significant at >.500000

(b) Consumers' views of stock market participation and the outcomes of stock market participation

Table 8.4 indicates that all ten items (SM1, SM2, SM3, SM4, SM5, SM6, SM7, SM8, SM9 and SM10) expected to measure 'stock market participation' and five of the ten items (SL1, SL5, SL6, SL9, SL10) expected to measure 'client satisfaction and loyalty' as well as four (FS1, FS2, FS3, FS4) of the ten items expected to measure 'financial sustainability' loaded onto factor one (1). This indicates that respondents viewed these items as measures of a single construct termed 'stock market participation', since the majority of the items were linked to stock market participation.

Table 8.4 reveals that all ten items (RI1, RI2, RI3, RI4, RI5, RI6, RI7, RI8, RI9, RI10) expected to measure 'repurchase intentions' loaded on factor two (2). This indicates that respondents viewed these items as a single construct, namely, 'repurchase intentions'.

Table 8.4 indicates that four of the ten items expected to measure 'client satisfaction and loyalty' (SL2, SL3, SL4 and SL7) loaded on factor three (3). This means that respondents viewed these items as measures of a single construct termed 'client satisfaction'. One item (SL8) expected to measure 'client satisfaction and loyalty' did not load to a significant extent ($p < 0.05$); this item was thus deleted and was not used in any subsequent analyses.

Table 8.4 further shows that six (FS5, FS6, FS7, FS8, FS9 and FS10) of the ten items expected to measure 'financial sustainability' loaded on factor four (4). The respondents perceived these items as a measure of a single construct referred to as 'financial sustainability' in this study's results.

Table 8.4 also indicates, from the comprehensive EFA, that respondents did not interpret the items developed to measure 'client satisfaction and loyalty' as expected. Only four of the ten items (SL2, SL3, SL4, SL7) expected to measure this variable loaded onto a single factor, however, these four items related to satisfaction and not loyalty. Respondents thus perceived these items as measures of a single construct termed 'client satisfaction'.

Table 8.4 further reveals that the study retains the SM intervening variable and the dependent variables CS, FS, and RI since their factor loadings values were above the cut-off point of 0.50 and the acceptable number of items per factor were above the cut-off point of 3 items.

Table 8.4: Factor loadings of consumers' views regarding stock market participation and outcomes of stock market participation

Variable	Factor1 Stock market participation	Factor2 Repurchase intentions	Factor3 Client satisfaction	Factor4 Financial sustainability
SL 9	0.791803	0.127911	-0.006540	0.224758
SM 8	0.789758	0.261320	0.094485	0.092658
FS 1	0.748309	0.248491	0.142866	0.365560
SM 1	0.734103	0.253407	0.056803	0.098859
SM 9	0.727931	0.222917	0.245748	0.109164
SL 1	0.704129	0.210612	0.069013	0.176666
SM 2	0.687032	0.243237	0.110206	0.250544
FS 3	0.679991	0.388178	0.184669	0.215126
FS 2	0.673966	0.411382	0.147959	0.277152
SL 5	0.655611	0.168775	0.179106	0.045431
SM 10	0.629675	0.145229	0.324106	0.328579
SL 6	0.600728	0.245497	0.284408	-0.204989
SM 7	0.571846	0.253120	0.363009	0.117272
FS 4	0.569576	0.165492	0.010282	0.293791
SM 3	0.569283	0.119436	0.440806	0.323498
SM 6	0.528759	0.375005	0.341864	0.047456
SM 4	0.523530	0.095326	0.409574	0.330657
SM 5	0.513682	0.140741	0.354574	0.358084
SL 10	0.510768	0.151940	0.437792	0.266245
RI 3	0.090190	0.875373	0.078197	-0.026896

Variable	Factor1 Stock market participation	Factor2 Repurchase intentions	Factor3 Client satisfaction	Factor4 Financial sustainability
RI 4	0.064121	0.787777	0.314840	-0.023819
RI 2	0.314577	0.780695	0.040819	0.217623
RI 1	0.080749	0.767812	0.172695	0.160275
RI 8	0.207652	0.744531	0.129911	0.248509
RI 9	0.315945	0.732209	0.122868	0.243670
RI 6	0.254168	0.717891	0.138694	-0.015419
RI 10	0.453460	0.671796	-0.086500	0.261451
RI 5	0.379663	0.659157	0.004274	0.229737
RI 7	0.247921	0.654648	0.101687	0.366462
SL 2	0.213467	0.133951	0.772986	0.060062
SL 7	0.270163	0.140877	0.763254	0.128213
SL 4	-0.109142	0.179458	0.762730	0.176646
SL 3	0.315533	0.156822	0.640230	-0.003379
FS 7	0.241325	0.124540	0.044233	0.776179
FS 5	0.088403	0.268561	0.086024	0.739040
FS 8	0.256602	0.182553	0.229726	0.685382
FS 6	0.386991	0.237839	0.053166	0.654303
FS 9	0.178267	0.150794	0.378239	0.624911
FS 10	0.317506	0.217635	0.021124	0.517411
SL 8	0.454915	0.055038	0.334920	0.361838
Expl.Var	9.592704	6.943244	4.010244	4.437013
Prp.Totl	0.239818	0.173581	0.100256	0.110925

Loadings are significant at >.500000

8.3.2.2 Cronbach's alpha values of latent variables based on the results of factor analysis: Theoretical model

Some items were deleted from the measuring instrument and new variables were formed as a result of the discriminant validity assessment with the exploratory factor analysis. Accordingly, the original theoretical model had to be adapted. This means that the reliability of the new and adapted variables had to be reassessed.

Table 8.5 summarises the items that are regarded as measures of individual variables in the theoretical model following the EFA. The study retains DC, FL, FRT, CM, CT, SM, CS, FS and RI since their Cronbach's alpha values were above the cut-off point. Table 8.5 also indicates that all Cronbach reliability coefficients are above 0.70 which is regarded as acceptable for the purpose of this study. This indicates that the instrument has a fair reliability with measurements of 0.60 and above (Zeanah and Zeanah, 2009:243; Bonett & Wright, 2014:68; Taber, 2017:9). These results are summarised in Table 8.5 by means of an empirical factor structure used for regression analysis.

Table 8.5: Factor loadings: Cronbach's alpha coefficients of the latent variables based on the comprehensive exploratory factor analysis

Measuring instrument	Alpha value
Demographic characteristics (DC)	0.86
Financial literacy (FL)	0.71
Financial risk tolerance (FRT)	0.72
Communication (CM)	0.86
Consumer trust (CT)	0.92
Stock market participation (SM)	0.95
Client satisfaction (CS)	0.81
Financial sustainability (FS)	0.86
Repurchase intentions (RI)	0.94

Source: Researcher's own construction.

Subsequent to the reliability and validity valuation, five independent variables (demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust), an intervening variable (stock market participation) and three dependent variables (client satisfaction, financial sustainability and repurchase intentions) were used in further analyses, as part of the study. The latent variables, and the individual items measuring each, are summarised in Table 8.6.

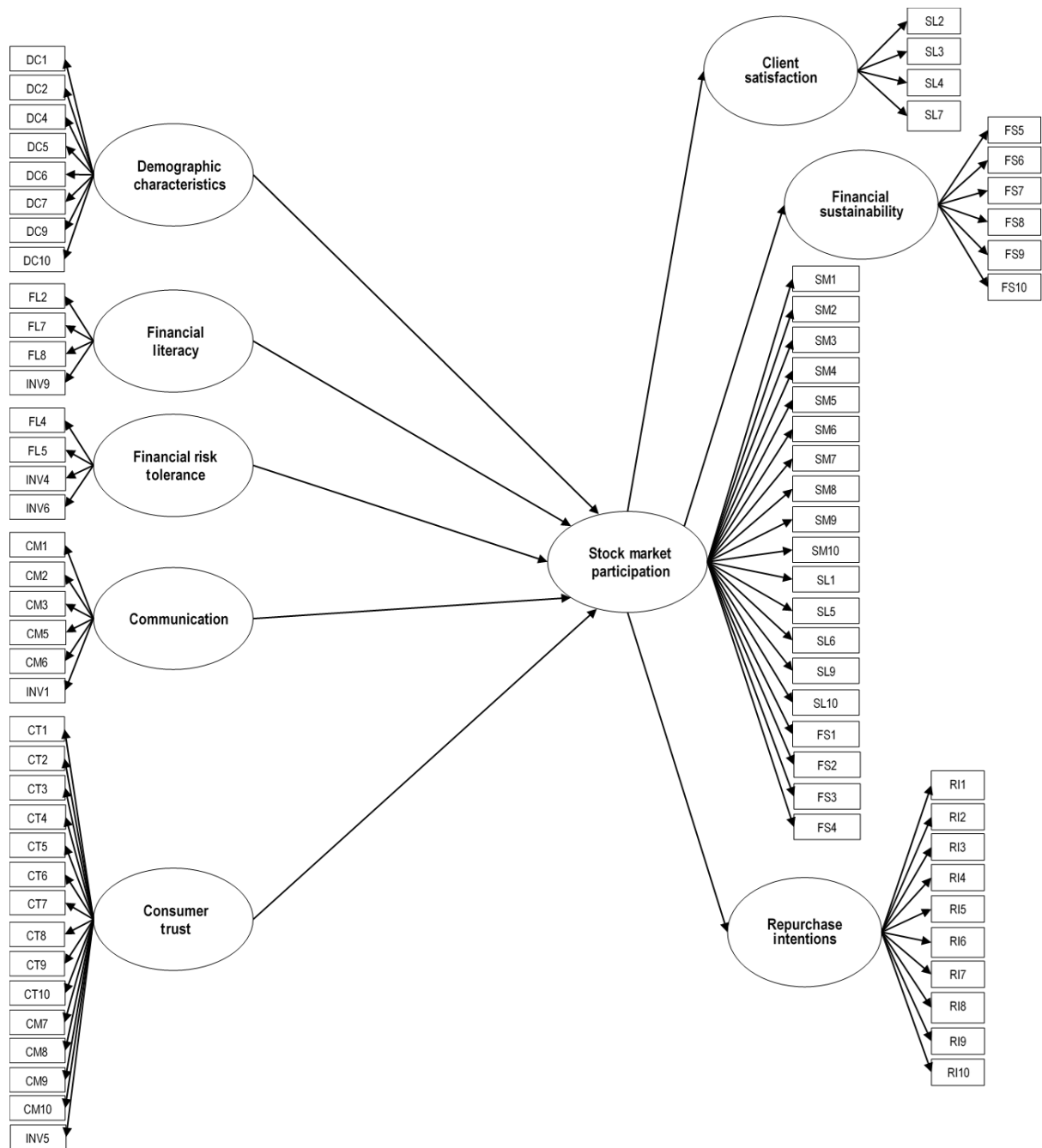
Table 8.6: Empirical factor structure for regression analysis for latent variables

Latent variables	Items
Demographic characteristics (DC)	DC1, DC2, DC4, DC5, DC6, DC7, DC9, DC10
Financial literacy (FL)	FL2, FL7, FL8, INV9
Financial risk tolerance (FRT)	FL4, FL5, INV4, INV6
Communication (CM)	CM1, CM2, CM3, CM5, CM6, INV1
Consumer trust (CT)	CT1, CT2, CT3, CT4, CT5, CT6, CT7, CT8, CT9, CT10, CM7, CM8, CM9, CM10, INV5
Stock market participation (SM)	SM1, SM2, SM3, SM4, SM5, SM6, SM7, SM8, SM9, SM10, SL1, SL5, SL6, SL9, SL10, FS1, FS2, FS3, FS4
Client satisfaction (CS)	SL2, SL3, SL4, SL7
Financial sustainability (FS)	FS5, FS6, FS7, FS8, FS9, FS10
Repurchase intentions (RI)	RI1, RI2, RI3, RI4, RI5, RI6, RI7, RI8, RI9, RI10

Source: Researcher's own construction.

As a result of the scale refinement process the original model (Figure 8.1) had to be adjusted as shown in Figure 8.2.

Figure 8.2: The adapted model of the relationships amongst variables based on views regarding stock market participation



Given that the initial investment risk factors (INV) and client satisfaction and loyalty (SL) variables did not load as factors, the two hypotheses H³ and H⁶ were not tested; thus, the modified model (Figure 8.2) did not include the INV and SL variables. As a consequence of the EFA and the formulation of the adapted model, the hypotheses had to be reformulated.

The hypotheses subjected to empirical assessment (Figure 8.3) were:

H¹: There is a significant relationship between demographic characteristics and consumer stock market participation.

H²: There is a significant relationship between financial literacy and consumer stock market participation.

H³ is modified to H^{3.1}

H^{3.1} There is a significant relationship between financial risk tolerance and consumer stock market participation.

H⁴: There is a significant relationship between communication and consumer stock market participation.

H⁵: There is a significant relationship between consumer trust and consumer stock market participation.

H⁶ is modified to H^{6.1}

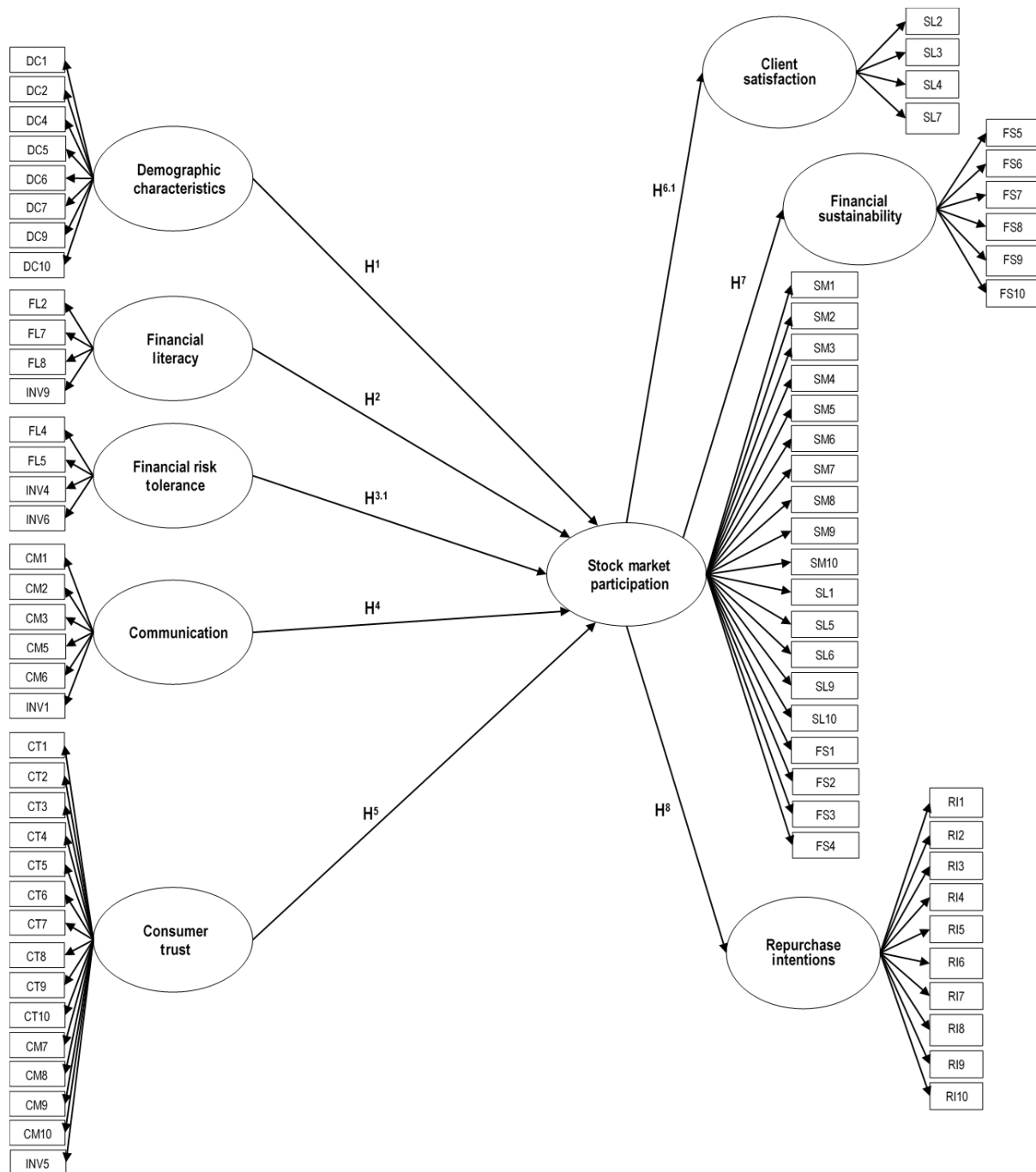
H^{6.1}: There is a significant relationship between consumer stock market participation and client satisfaction.

H⁷: There is a significant relationship between consumer stock market participation and financial sustainability.

H⁸: There is a significant relationship between consumer stock market participation and repurchase intentions.

In this chapter, the hypothesised relationships are assessed and presented in the modified theoretical model depicted in Figure 8.3.

Figure 8.3: The hypothesised model of the relationships between variables based on consumers' views regarding stock market participation



8.3.3 Descriptive statistics

According to Kaushik and Mathur (2014:1118), descriptive statistics present an uncomplicated outline of the sample in relation to the observations that have been made and deal with the presentation of numerical facts. Similarly, Trochin (2006) argues that descriptive statistics is a method used to describe the basic features of

data used in a study, and it provides simple summaries about the sample and the measures. These summaries may also form the basis of the preliminary description of the data, as part of a more extensive statistical analysis, or they may be sufficient in and of themselves for a particular investigation (Kaushik & Mathur, 2014:1118). The results of the descriptive statistic are presented in Table 8.7.

Table 8.7 depicts the descriptive statistics related to each variable that was measured on a seven point Likert scale. On the scale, options 1, 2 and 3 represent the level of disagreement while options 5, 6 and 7 represent a statement of agreement, and option 4 indicates neutrality. Table 8.7 shows that respondents agreed that demographic characteristics (mean score 5.23), communication (mean score 5.20) and financial literacy (mean score 4.79) contribute to stock market participation. This implies that respondents believe that being familiar with share and stock market trading, as well as the size of their families, determine the type of investments they will choose. The results also indicate that respondents agreed that financial advisers encourage them to participate in stock market participation (mean score 4.84) as indicated in Table 8.7. This implies that continuous guidance from financial advisers/planners promotes consumer stock market participation in terms of financial products and services.

The results also indicate that although the respondents believe that their financial advisers/planners are honest about stock market matters, they are still reluctant to trust financial advisers/planners regarding stock market participation (mean score 4.13). Table 8.7 further indicates that the respondents were not tolerant of risk investment (mean score 3.07). This implies that the respondents are not convinced that they have knowledge about investments.

Table 8.7 indicates that the respondents believe that consumer stock market participation relates to repurchase intentions (mean score 5.47). The respondents also believe, to some extent, that stock market participation improves the financial sustainability (mean score 4.42) of consumers of financial products and services. Finally, Table 8.7 shows that some respondents were neutral regarding the link between stock market participation and client satisfaction (mean score of 4.04). This implies that respondents are only to some extent satisfied with the professionalism of financial advisers/planners.

Table 8.7: Descriptive statistics for each variable of the study

VARIABLE	MEAN	STANDARD DEVIATION
Demographic characteristics (DC)	5.23	0.82
Financial literacy (FL)	4.79	0.71
Financial risk tolerance (FRT)	3.07	0.77
Communication (CM)	5.20	0.84
Consumer trust (CT)	4.13	0.65
Stock market participation (SM)	4.84	0.78
Client satisfaction (CS)	4.04	0.72
Financial sustainability (FS)	4.42	0.86
Repurchase intentions (RI)	5.47	0.89

Source: Researcher's own construction.

The empirical factor structure summarised in Table 8.6 was therefore subjected to a multiple regression analysis using the STATISTICA (version 12) computer programme.

8.3.4 Regression analysis

Harring (2012:1) defined regression analysis as a technique that is used to assess the relationship of the variance between a dependent variable and one or more input variables called independent variables. Furthermore, regression analysis incorporates a large number of variables, calculates interaction effects between variables and, when used appropriately, it is confirmatory or explanatory in nature (Gilstrap, 2013:58). In this study, regression analyses were performed to establish the relationships formulated in the relevant set of hypotheses; this assists the researcher to reject or accept the hypotheses based on the results of the regression analysis. The first level of regression analysis tested the relationships between the independent variables suggested in the model of the study and the intervening variable 'stock market participation'. The second level of analysis tested the influence of the intervening variable on each of the outcomes (dependent variables) suggested in the model of the study.

8.3.4.1 Consumer views of influences on stock market participation

(a) The influence of demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust on stock market participation

Table 8.8 indicates that demographic characteristics ($b = 0.231$, $p < 0.001$), financial literacy ($b = 0.266$, $p < 0.001$), communication ($b = 0.197$, $p < 0.001$) and consumer trust ($b = 0.741$, $p < 0.001$) are positively related to 'stock market participation'. This indicates that the respondents believe that their demographic characteristics, financial literacy, communication and trust in financial service providers encourage them to consider participation in the stock market. Although financial risk tolerance is significantly related to stock market participation ($b = -0.092$, $p < 0.001$), this relationship is negative. This implies that respondents believe that financial information is difficult to understand; this has a negative effect on their stock market participation. In total, the R^2 of 0.711 shows that 71% of the variability in stock market participation in the model is explained by the independent variables.

Table 8.8: Regression analysis: The influence of demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust on stock market participation

REGRESSION SUMMARY FOR VARIABLE: STOCK MARKET PARTICIPATION						
Parameter	Beta b*	Std. Error	B	Std. Error	T value	P-value
DC	0.240	0.026	0.231	0.025	9.092	0.001***
FL	0.239	0.026	0.266	0.028	9.360	0.001***
FRT	-0.090	0.026	0.092	0.026	-3.516	0.001***
CM	0.212	0.027	0.197	0.025	7.782	0.001***
CT	0.618	0.028	0.741	0.033	22.231	0.001***
R	R²	F	Std. Error of estimate P			
84%	0.71192104	249.10	0.70906311	p< .00000		
* = p < 0.05						
** = p < 0.01						
*** = p < 0.001						

8.3.4.2 The influence of stock market participation on outcomes: Client satisfaction, financial sustainability and repurchase intentions

(b) The influence of stock market participation on client satisfaction

Table 8.9 shows a R² of 0.271, which indicates that 27% of the variability in client satisfaction in the model is explained by the variable 'stock market participation'. Table 8.9 also indicates that stock market participation has a positive relationship with client satisfaction (b = 0.475, p < 0.001). This implies that respondents believe that when they participate in the stock market, their financial advisers/planners treat their stock matters with confidentiality.

Table 8.9: Regression analysis: The influence of stock market participation on client satisfaction

REGRESSION SUMMARY FOR DEPENDENT VARIABLE: CLIENT SATISFACTION						
Parameter	Beta b*	Std. Error	B	Std. Error	T value	P-value
Stock market participation (SM)	0.520	0.038	0.475	0.034	13.72847	0.001***
R	R²	F	Std. Error of estimate P			
52%	0.27060855	188.47	0.26917274 p<0 .00000			
* = p < 0.05						
** = p < 0.01						
*** = p < 0.001						

(a) The influence of stock market participation on financial sustainability

Table 8.10 shows a R² of 0.390 which indicates that 39% of the variability in ‘financial sustainability’ in the model is explained by the variable ‘stock market participation’. This means that stock market participation has a positive relationship with financial sustainability (b = 0.685, p < 0.001). This implies that respondents believe that stock market participation ensures long term financial stability for consumers.

Table 8.10: Regression analysis: The influence of stock market participation on financial sustainability

REGRESSION SUMMARY FOR DEPENDENT VARIABLE: FINANCIAL SUSTAINABILITY						
Parameter	Beta b*	Std. Error	B	Std. Error	T value	P-value
Stock market participation (SM)	0.625	0.035	0.685	0.038	18.02974	0.001***
R	R²	F	Std. Error of estimate P			
63%	0.39020839	325.07	0.38900801 p<0 .00000			
* = p < 0.05						
** = p < 0.01						
*** = p < 0.001						

(c) The influence of stock market participation on repurchase intentions

Table 8.11 indicates a R^2 of 0.389 which reveals that 39% of the variability in 'repurchase intentions' in the model is explained by the variable 'stock market participation'. This means that stock market participation has a positive relationship with repurchase intentions ($b = 0.711$, $p < 0.001$). This implies that when respondents participate in the stock market they are encouraged to continue investing in listed shares.

Table 8.11: Regression analysis: The influence of stock market participation on repurchase intentions

REGRESSION SUMMARY FOR DEPENDENT VARIABLE: REPURCHASE INTENTIONS						
Parameter	Beta b*	Std. Error	B	Std. Error	T value	P-value
Stock market participation (SM)	0.623	0.035	0.711	0.040	17.99776	0.001***
R	R²	F	Std. Error of estimate P			
62%	0.38936382	323.92	0.38816178 p<0 .00000			
* = p < 0.05						
** = p < 0.01						
*** = p < 0.001						

The t-values reported in Table 8.8 indicate that the higher the t-values, the stronger the impact of the independent variables on 'stock market participation'. In addition, the t-values relevant to the intervening variable indicate a high to moderate impact on the dependent variables. Table 8.8 indicates a strong impact of consumer trust on stock market participation, with the highest t-value ($t = 22.231$). Furthermore, demographic characteristics with the t-value ($t = 9.092$) and financial literacy with the t-value ($t = 9.355$) have also have a strong impact, followed by communication (t-value of $t = 7.782$) which has a moderate impact on stock market participation.

Furthermore, Table 8.9 indicates a strong impact of stock market participation on client satisfaction with a high t-value ($t = 13.728$). Also significant, Table 8.10 indicates that stock market participation has a strong impact on financial sustainability, with the highest t-value of $t = 18.0297$. In addition, Table 8.11 indicates that stock market

participation has a strong impact on repurchase intentions, with a high t-value ($t = 17.997$).

8.3.5 Correlation analysis

Correlation is the statistical process used to determine the relationship amongst variables (Leedy & Ormrod, 2010:273). When two variables have a linear relationship outside of what is anticipated by chance alone, this denotes the existence of correlation (Stockwell, 2008:1). Consequently, Coldwell and Herbst (2004:107) observe that the resultant statistic, known as the correlation coefficient, is a number between -1, which indicates a perfect negative or inverse relationship, and +1, which indicates that the two sets of variables are perfectly positively correlated. According to Du Plooy-Cilliers, Davis & Bezeuidenhout (2014:214), a positive number indicates a positive correlation in a positive direction, which means that when the independent variable increases, the dependent variable also increases. Moreover, Zikmund *et al.* (2010:559) posit that a negative number indicates a negative correlation in a negative direction; this means that if the independent variable increases or improves, the dependent variable will decrease or deteriorate. The strength of a relationship is indicated by the size of the correlation coefficient where a correlation of +1 or -1 indicates a perfect correlation (Leedy & Ormrod, 2010:273). According to Ratner (2009:140), the degree of relationship is measured by a correlation coefficient, which symbolised by r . Pearson's correlation coefficient is a measure of the strength of the linear relationship between two such variables that cannot be measured quantitatively (Hauke & Kossowski, 2011:87). In this study, the Pearson correlation coefficients were calculated to determine the correlations between the study's variables. The results of this study's correlation analysis between the variables is shown in Table 8.12.

Table 8.12: Correlation matrix of variables of the study

Variable	Means	Std. Dev.	Consumer trust (CT)	Demographic characteristics (DC)	Financial risk tolerance (FRT)	Communication (CM)	Financial literacy (FL)	Stock market participation (SM)	Repurchase intentions (RI)	Client satisfaction (CS)	Financial sustainability (FS)
CT	4.131	0.656	1.000	0.128	0.344	0.369	0.210	0.746	0.463	0.666	0.599
DC	5.228	0.820	0.128	1.000	0.032	0.338	-0.236	0.332	0.573	0.128	0.182
FRT	3.071	0.775	0.344	0.032	1.000	0.182	-0.012	0.166	0.178	0.400	0.302
CM	5.201	0.844	0.369	0.338	0.182	1.000	0.038	0.514	0.564	0.276	0.457
FL	4.790	0.707	0.210	-0.236	-0.012	0.038	1.000	0.322	-0.114	0.099	0.137
SM	4.839	0.786	0.746	0.332	0.166	0.514	0.322	1.000	0.624	0.520	0.625
RI	5.475	0.896	0.463	0.573	0.178	0.564	-0.114	0.624	1.000	0.370	0.517
CS	4.045	0.718	0.666	0.128	0.400	0.276	0.099	0.520	0.370	1.000	0.385
FS	4.424	0.862	0.599	0.182	0.302	0.457	0.137	0.625	0.517	0.385	1.000
*small/weak correlation **moderate correlation ***large/strong correlation											

Source: Researcher's own construction.

Table 8.12 indicates that there is a positive correlation between consumer trust and stock market participation, with a coefficient of 0.746. This implies that when consumers believe in their financial service provider they will invest in financial products. Communication has a positive correlation with stock market participation, with a coefficient of 0.514. This indicates that mass communication influences the buying or selling of shares on the stock market. Table 8.12 also shows that demographic characteristics have a positive correlation with stock market participation, with a coefficient of 0.332. This means that gender, age, family size and level of income impact consumer financial decision-making regarding stock market participation. Table 8.12 further indicates that financial literacy has a positive correlation with stock market participation, with a coefficient of 0.322. This implies that when consumers understand the core purpose of investing in the stock market they consider participating in stock market financial investments. The results also show that financial risk tolerance has an unfavourable correlation with stock market participation, with a coefficient of 0.166. This means that there is a lack of knowledge regarding stock market participation.

Table 8.12 indicates that stock market participation has a positive correlation with client satisfaction, with a coefficient of 0.520. This implies that consumers believe that participation in the stock market offers them investment options with which they are satisfied. Table 8.12 further indicates that stock market participation has a positive correlation with financial sustainability, with a coefficient of 0.625. This implies that consumers believe in stock market participation because of its strength and resultant long term stability for consumer investors. Table 8.12 also indicates that stock market participation has a positive correlation with repurchase intentions, with a coefficient of 0.624. This means that consumers believe that financial advice, the media, the stock market environment and the performance of shares motivate them to participate in the stock market again.

8.4 FINDINGS ON THE HYPOTHESISED RELATIONSHIPS

H¹: There is a significant relationship between demographic characteristics and stock market participation

Tables 8.8 and 8.12 report a statistically significant positive relationship between demographic characteristics ($p < 0.001$) and stock market participation. This means that there is a significant positive correlation between demographic characteristics and stock market participation, with a correlation coefficient of 0.332. Therefore, H¹ is accepted.

H²: There is a significant relationship between financial literacy and stock market participation

Tables 8.8 and 8.12 report a statistically significant positive relationship between financial literacy ($p < 0.001$) and stock market participation. This means that there is a significant positive correlation between financial literacy and stock market participation, with a correlation coefficient of 0.322. Therefore, H² is accepted.

H^{3.1}: There is a significant relationship between financial risk tolerance and stock market participation

Tables 8.8 and 8.12 report a statistically significant negative relationship between financial risk tolerance ($p < 0.001$) and stock market participation. This means that there is a significant correlation between financial risk tolerance and stock market participation, with a correlation coefficient of 0.166. Therefore, H^{3.1} is accepted.

H⁴: There is a significant relationship between communication and stock market participation

Tables 8.8 and 8.12 report a statistically significant positive relationship between communication ($p < 0.001$) and stock market participation. This means that there is a significant positive correlation between communication and stock market participation, with a correlation coefficient of 0.514. Therefore, H⁴ is accepted.

H⁵: There is a significant relationship between consumer trust and stock market participation

Tables 8.8 and 8.12 report a statistically significant positive relationship between consumer trust ($p < 0.001$) and stock market participation. This means that there is a significant positive correlation between consumer trust and stock market participation, with a correlation coefficient of 0.746. Therefore, H^5 is accepted.

H^{6.1}: There is a significant relationship between stock market participation and client satisfaction

Table 8.9 reports a statistically significant positive relationship between stock market participation ($p < 0.001$) and client satisfaction. This means that there is a significant positive correlation between participation in stock market and client satisfaction, with a correlation coefficient of 0.520. Therefore, $H^{6.1}$ is accepted.

H⁷: There is a significant relationship between stock market participation and financial sustainability

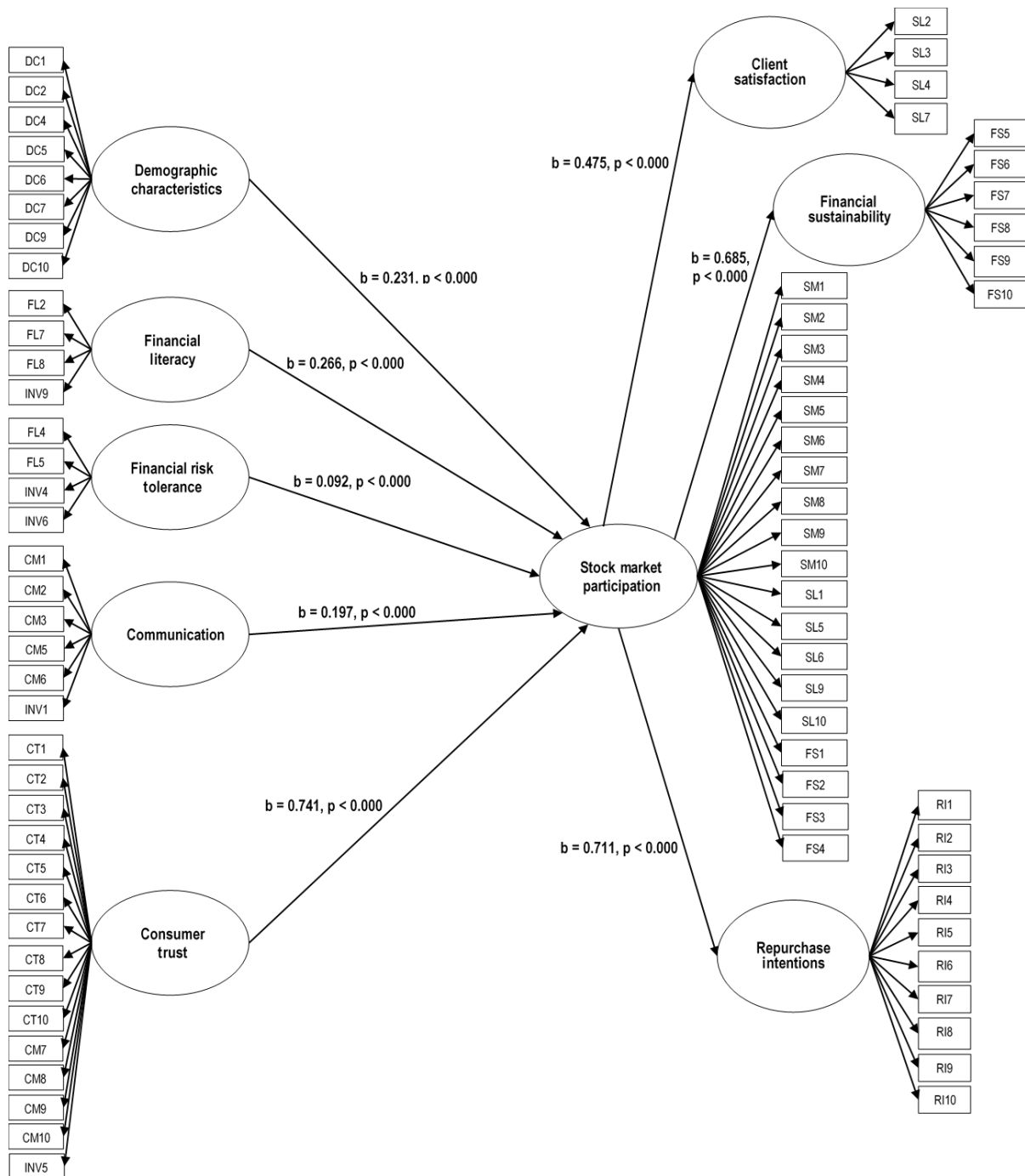
Table 8.10 reports a statistically significant positive relationship between stock market participation ($p < 0.001$) and financial sustainability. This means that there is a significant positive correlation between participation in stock market and financial sustainability, with a correlation coefficient of 0.625. Therefore, H^7 is accepted.

H⁸: There is a significant relationship between stock market participation and repurchase intentions

Table 8.11 reports a statistically positive relationship between stock market participation ($p < 0.001$) and repurchase intentions. This means that there is a significant positive correlation between participation in the stock market and repurchase intentions, with a correlation coefficient of 0.624. Therefore, H^8 is accepted.

The regression analysis results are summarised in Figure 8.4.

Figure 8.4: The hypothesised results of the relationships between variables based on consumers' views regarding stock market participation



8.5 SUMMARY

This chapter reports on and presents the results of the statistical analysis performed for this study's empirical investigation. The Cronbach's alpha reliability coefficients were calculated for the research instrument used to measure the variables in the empirical model of the study, and the descriptive statistics were presented and

discussed in this chapter. Two sets of EFAs were carried out to assess the discriminant validity of the variables; in addition, the existing association between the constructs were revealed and reported on. Cronbach's alpha reliability coefficients were calculated for all the latent and retained factors. Multiple regression analysis was used to investigate the effects of the five independent variables (DC, FL, INVT, CM and CT) on the intervening variable (SM). In addition, the effect of the intervening variable (SM) on the dependent variables (CS, FS and RI) was assessed. Linear regression analyses were performed in order to establish the relationships formulated in the relevant set of hypotheses, with the results thereof presented in this chapter. The strength of the relationships between the variables was tested by means of correlation analysis. The next chapter, Chapter Nine, discusses the conclusions, managerial implications and recommendations of the study. The limitations and ideas for future research, as well as the contribution made by this study to the existent body of knowledge, are presented in the final chapter.

CHAPTER NINE

CONCLUSIONS AND RECOMMENDATIONS OF THE STUDY

9.1 INTRODUCTION

Chapter Eight provided the empirical results of the study. The empirical results are presented in graphical format in Figure 9.1 so as to enhance the discussion in Chapter Nine. This chapter provides summaries of all the chapters of the study; the chapter also presents the conclusions pertaining to the problem statement and research questions as well as the empirical results of the study. This chapter will also deliberate on the recommendations presented in the study as well as the contribution made by the study; in addition, this chapter suggests areas for further research and it outlines the limitations of the study. The primary aim of this study was to investigate consumer behaviour regarding stock market participation in SA by considering the antecedents and outcomes of stock market participation in SA.

9.2 BRIEF SUMMATION OF THE STUDY CHAPTERS

9.2.1 Chapter One: Introduction and background to the study

Chapter One laid the foundation and set the scene for this research; towards this end, the primary objective and problem statement concerning the factors that influence stock market participation in SA are presented in this chapter. In this chapter, the hypothetical model was developed; the research hypotheses were established on the foundation of the hypothetical model for stock market participation.

9.2.2 Chapter Two: Overview of stock markets and the Johannesburg Stock Exchange

Chapter Two presented an overview of the stock market in SA and contextualises it from a historical perspective, while also providing a contemporary view thereof. The chapter presented a historical background of SA's Johannesburg Stock Exchange, commonly referred to by its acronym JSE, and it highlighted the main players and participants in the exchange. The chapter gave a brief overview of some of the world's major stock exchanges, the role of the stock exchange in the country, its contributions to economic development and the listing requirements for companies. The chapter

briefly discussed consumer participation in the investment process as well as the regulatory environment under which the JSE, its members and various stakeholders participate. Finally, the chapter concluded by introducing the newly established and registered stock exchange in SA called the ZAR-X.

9.2.3 Chapter Three: Overview of the investment environment and financial planning

Chapter Three discussed the theoretical field of investment and behavioural finance in order to highlight the influences of investment theory and behavioural finance on consumer financial decision-making. The financial decisions of households and the investment environment in which consumers make these decisions, as well as the financial system, the financial market instruments and the financial intermediaries were also discussed in this chapter. The chapter also introduced aspects of the financial planning process and the role of financial advisers as key role players in consumer participation in the stock market. The chapter concluded with a discussion of the domain within which behavioural finance is applicable to consumer behaviour studies in a state of financial risk and uncertainty.

9.2.4 Chapter Four: Consumer buying behaviour and behavioural finance

Chapter Four of this study presented a theoretical literature review as relevant to the investment decision making context. The chapter examined the factors that have been suggested to affect investment decisions in the field of behavioural finance. The chapter also examined a set of relevant participation factors from a consumer behaviour perspective and it offered a discussion of consumer behaviour models which are substantial to the foundation of this study. Lastly, the chapter briefly discussed stock market activity on African stock markets and some of the initiatives that are considered to foster the growth and development of the continent's stock exchanges.

9.2.5 Chapter Five: Analysis of the key areas influencing stock market participation

Chapter Five of this study provided an overview of key areas of stock market participation drivers not presented in the hypotheses but relevant to this study, and can be linked to the primary objective of this study.

9.2.6 Chapter Six: Hypothetical model of the study: Consumer behaviour towards stock market participation

Chapter Six interpreted and discussed the hypothesised model in order to demonstrate the relationship between the mediating variables of the study. The chapter sought to provide evidence for the proposed relationships between the variables used in the study and the validation of variables found in the hypothesised model.

9.2.7 Chapter Seven: Research design and methodology

Chapter Seven discussed the applicable research paradigm for the study. Furthermore, the chapter described the steps and techniques used in the collection and analysis of data. This was followed by a discussion of the design and administration of the measuring instrument. Furthermore, the population sample, data collection and analysis, reliability and validity of the research instrument are also discussed in this chapter. Thereafter, the chapter provided a discussion of the descriptive statistics employed to summarise the sample data.

9.2.8 Chapter Eight: Empirical results of the study

Chapter Eight provided the empirical results of the study. Cronbach's alpha reliability coefficients were calculated for all the measurements for variables of the measuring instrument, and the descriptive statistics were presented in this chapter. Two sets of EFAs were carried out to assess the construct validity of the variables; the existing association between the constructs were revealed and reported on. The first set of two factor analyses involved general perceptions of consumer behaviour regarding participation in the stock market. Cronbach's alpha reliability coefficients were calculated for all the retained and latent variables. A multiple regression analysis was used to investigate the effects of two or more independent variables on a single or

interval-scaled dependent variable. Linear regression analyses were performed to establish the relationships formulated in the relevant set of hypotheses in the proposed model of the study; the results thereof were reported in Chapter Eight. Also, the correlation analysis was performed to assess the existence and strength of relationships between variables. The empirical results show that stock market participation is influenced by demographic characteristics, financial literacy, financial risk tolerance, communication, and consumer trust. Furthermore, the empirical results show that participation in the stock market positively results in client satisfaction, financial sustainability and repurchase intentions by consumers.

9.3 CONCLUSIONS ON PROBLEM STATEMENT AND RESEARCH QUESTIONS OF THE STUDY

9.3.1 Conclusions on problem statement

9.3.1.1 *Ensuring that the investment environment is conducive to consumer participation in the stock market*

The investment environment is made up of policies as well as regulatory and institutional elements that provide incentives to attract individual consumers and the private sector to invest in financial assets. Similarly, Lisauskaite (2010) defines the investment environment as the existing investment vehicles in the market available for consumers and the place for transactions with these investment vehicles. It is evident from the above definitions that the investment environment is made up of a financial system, financial instruments, financial intermediaries and investment barriers, all of which are intended to make the investment environment conducive for consumer participation. According to the European Investment Bank (2017), in the investment environment there are hurdles and investment barriers that influence and can affect a consumer's investment plan. Investment barriers slow down or reduce investment in the economy by consumers, which results in diminished productive capacity as well as suppressed long-term economic growth. Investment barriers include access to cash liquidity, an investment time horizon, tax factors, legal and regulatory challenges and each consumer's unique circumstances (Reilly & Brown, 2011:43).

(a) Financial system

According to Faure (2013:8), the financial system is a set of arrangements that embrace the lending and borrowing of funds and the intermediation by financial intermediaries to facilitate the transfer of funds. Howells and Bain (2007) refer to the financial system as a set of markets for financial instruments, consumers and firms which transact in those markets with regulators of the system. Van Wyk *et al.* (2016) concur that the financial system is a set of arrangements which involves the lending and borrowing of funds by non-financial economic units, and the intermediation of this function by financial advisers and financial planners. In addition, Bodie *et al.* (2009) describe the financial system as encompassing the markets, intermediaries, service firms and other institutions used to carry out the financial decisions of consumers, firms and the government.

(i) Financial market instruments

Consumer participation in the stock market is dependent on the availability of tradable financial instruments. Financial instruments are classified as financial assets (Taw, 2015:4) and financial instruments can be classified by the type of claims that the investor has on the issuer (Darskuviene, 2010:11). According to Parameswaran (2011), a financial instrument is a financial asset that is tradable, with the key differentiator between assets being the maturity of the claims being traded. Examples of financial instruments include government bonds, shares, corporate bonds and Treasury bills.

(ii) Financial intermediaries

Consumers participate in the stock market indirectly through financial intermediaries (Allen & Gale, 2003:7). According to Parameswaran (2011:22), a financial intermediary is a financial services provider that helps to ensure that the transaction of funds is made available to borrowers. Pettinger (2017) defines a financial intermediary as a financial institution, such as a bank, that helps to facilitate the needs of lenders and borrowers. Similarly, Allen and Gale (2003:7) define an intermediary as an institution that invests on behalf of consumers. Bodie *et al.* (2009:58) suggest that financial intermediaries are individuals and companies whose primary business is to provide consumers with financial products and services that cannot be obtained more efficiently by transacting directly in the stock market. The main types of intermediaries

are banks, investment companies and insurance companies (Bodie *et al.*, 2009:58; Pettinger, 2017:132). Consumers participate in the stock market through intermediaries such as banks and insurance companies. It is believed that banks are the largest and oldest financial intermediaries in terms of assets under their management (Rothbard, 2002:58).

Therefore, based on the empirical results of this study and the discussion above, it can be concluded that the investment environment is conducive for consumers to participate in the South African stock market. However, financial advisers/planners could develop more strategies to improve clients' financial risk tolerance levels in order to increase stock market participation.

9.3.1.2 What are the stock market participation drivers that influence consumer behaviour?

The following factors have been identified as stock market participation drivers: *social interaction, geographic effect, financial advice, financial innovation, gender, consumer debt, time factor, political orientation and health and disability.*

Social interaction and its effect on stock market participation has been the subject of many studies in behavioural finance and, according to Manjula (2013), stock market participation can be influenced by social interaction in several different ways and through different networks. Notably, the social environment in which consumers live has a critical role to play in influencing their participation in the stock market. In the same way, a study by Brown, Ivkovic, Smith and Weisbenner (2008) reveals that growth in a community's share ownership rate will increase the likelihood of stock market participation amongst consumers in that society. Brown *et al.* (2008) investigated the importance of geography in explaining stock market participation and providing evidence that individual consumers are influenced by the investment behaviour of members of their community.

Financial advice refers to any recommendations of a financial nature furnished to consumers in order to meet their financial needs, which are usually sales and services oriented through selling financial products and providing financial advice to meet financial needs (Hassan, Sanchez & Yu, 2011:7; Botha, Rossini, Geach, Goodall, du Preez & Rabenowitz, 2012:44). Advice is ubiquitous in the retail finance industry and,

according to a broad survey of retail investors in Germany, more than 80% of investors consult a financial adviser/planner (Collard, 2009:24).

According to Calvet, Celerier, Sadinni and Vallee (2016:2), the introduction and development of financial innovation can impact consumer portfolio choices. Allowing a better customisation of financial products might minimise conflicting interests that hinder consumer participation in the stock market; for instance, products offering a guarantee in capital at maturity might encourage loss averse investors to participate (Calvet *et al.*, 2016:2).

Barber and Odean (2011) examined the link between gender and behavioural finance biases. Their study revealed that men are more susceptible than women to the overconfidence bias reflected in shares trading behaviour. In general, it has been observed that women are more risk averse than men, while younger consumers are more risk seeking than their older counterparts, and wealthier consumers exhibit a greater willingness to invest in shares while the poor are more risk averse (Clark & Strauss, 2008:23).

A country's "saving by the household sector" is defined as that part of current income, after the payment of direct taxes, that is not consumed as part of consumer current expenditure (OECD, 2018:1). In accounting practice, the saving of a household will be equivalent to the increase in the net asset value of the household while an increase in consumer debt will lead to a fall in savings unless this is reversed by stronger increases in the assets of a household (OECD, 2018:1). Similarly, Harari (2018) concurs that rising debt repayments due to higher interest rates may also lead to reductions in consumer spending. However, consumer debt has the potential to enable wealth-building although it carries the risk of severe negative consequences for a household's net worth (Aspen Institute, 2018:4). According to van der Walt and Prinsloo (2004), an increase in the credit and debt commitments of households gives rise to a decline in consumer savings. Therefore, consumer debt negatively impacts consumer behaviour regarding participation in the stock market.

Time is critical to consumer investment decisions as consumers can defer consumption since the consumption that they expect to fund with their current savings often lies far in the future (Collard, 2009:32).

Political values have a bearing on consumer investment decisions in different ways (Afsharha, 2014:19). Hong and Kostovetsky (2012) demonstrate that fund managers who support the Democratic Party in the United States of America have different approaches to portfolio allocation in comparison to those who support the Republican Party. Research also shows that the physical and mental health of consumers has a profound effect on their market entry decisions (Afsharha, 2014:21). Using data from health and retirement studies in the USA, Rosen and Wu (2004), as cited in Afsharha (2014:21), demonstrate that health has a major role to play in the probability of stockholding. In addition, the health status of each consumer influences asset allocation strategies; in this respect, households that are in poor health are less likely to participate in the stock market (Afsharha, 2014:21). It is evident from the above discussion that there are different drivers of stock market participation, which is linked to the main aim of this study.

9.3.2 Conclusions on research questions of the study

9.3.2.1 *Do demographic characteristics play a role in attracting consumer participation in the stock market?*

Demographic characteristics are strongly related to consumer buyer behaviour and are predictors of how the target market will respond to a specific marketing mix (Lamb, Hair, McDaniel, Boshoff & Terblanche, 2015:46). According to Schiffman and Kanuk (2015), demographic characteristics such as age, gender, marital status, income, occupation and educational level are most often used as the basis for market segmentation. Various studies, such as the one conducted by Schiffman and Kanuk (2015:372), have shown that consumers in different social classes vary in terms of their product choice, lifestyles, buying habits and values. Furthermore, social class is usually measured by an index comprised of several demographic variables such as education, income, occupation and residence. Schiffman and Kanuk (2015:373) argue that individuals tend to behave in a manner consistent with the class to which they belong or to the one just above them. Agrawal and Jain (2013) conducted a study on investor buying behaviour of urban and rural consumers for financial assets, with a specific focus on mutual funds. Their findings revealed that age, gender, occupation, education and income have a significant impact on the buying behavioural patterns of rural and urban investors (Agrawal & Jain, 2013:115). In this study, it has also been

concluded that demographic characteristics are positively correlated to consumer participation in the stock market in SA.

9.3.2.2 Does financial literacy impact financial decisions and participation in the stock market?

Financial literacy is likely to be positively correlated with planning skills; it is and thus expected to increase the probability of participating in financial investments (Zeka, 2017:176). As a result of financial literacy, there is also evidence that the financial literacy of individuals can have a positive influence on their retirement funding adequacy (Folk, *et al.* 2012:70; Lusardi & Mitchell, 2011:7). In a study to assess the extent of awareness of financial market activities in Ghana, Acquah-Sam and Salami (2013) reveal that consumers have little knowledge about stock market activities and that the level of comprehension regarding stock market activities is significantly linked to stock market participation. Lusardi and Mitchell (2014) conclude that well-educated consumers are more likely to buy and hold shares, even after they have been limited to manage only finance issues such as their wealth, current income, and unemployment risk. In this study, it has been revealed that financial literacy has a significant influence on consumer participation in the stock market in SA.

9.3.2.3 Does consumer attitude to investment risk impact participation in the stock market?

A consumer's attitude to risk describes the level of risk a consumer is willing to take on a particular investment, taking into account the consumer's circumstances. The NFU Mutual UK Handbook (2017), Zurich Awareness Booklet (2018) and Vanguard (2017) use a simple scale of 1 to 5 to gauge a consumer's attitude to risk, where 1 represents a more cautious approach to investments and 5 represents a more tolerant attitude to risk. It is generally believed that an investor's decision is always based on risk and uncertainty since a consumer would invest in the stock market at high risk because they tend to envision a higher possible return from the investment (Botha *et al.*, 2015:221). In this study, investment risk factors could not be measured as such, since the respondents did not regard the developed investment risk factor items as part of a single construct. Instead, the items that loaded together related to consumers' tolerance levels regarding risk, when making investments. It was established that

financial risk tolerance has a significant negative relationship with stock market participation. This shows that respondents believe that financial information is difficult to understand, which has a negative effect on their stock market participation.

9.3.2.4 *Does communication as an awareness tool impact participation in the stock market?*

It is assumed that information structure and factors in the market systematically influence consumer investment decisions as well as market outcomes. In a study on consumer behaviour towards unit trusts, Padmaja (2013) establishes that lack of awareness contributes to non-participation in the buying of unit trusts. Investor awareness was found to profoundly predict 50.2% of the variances in stock market consumer behaviour on the Uganda Stock Exchange; moreover, perceived risk attitudes were found to significantly predict 9.1% of the variance in stock market investor behaviour (Wanyana, 2011:8). The results indicated that the investor awareness and perceived risk attitudes are negatively related to consumer stock market behaviour (Wanyana, 2011:8). This means that awareness can influence consumer participation in the stock market. In this study, it has been established that communication has a significant positive relationship with consumer stock market participation in SA.

9.3.2.5 *Does consumer trust of service providers influence stock market participation?*

The correlation between trust and financial decision-making is corroborated by El-Attar and Poschke (2011) who argue that trusting behaviour has been proven to affect households' portfolio choice between risky and risk-free financial assets. Corbitta *et al.* (2003) also concur that negative attitudes towards perceived risk can have a negative effect on customers' trust intention; alternatively, trust intention may positively influence participation behaviour. Households with less trust were found to invest more in housing and less in risky financial assets (El-Attar & Poschke, 2011:727). Guiso *et al.* (2008) found evidence consistent with a lack of trust being an important factor in explaining limited stock market participation. Therefore, less trusting individuals are less likely to buy shares and, conditional on buying shares, they will buy fewer shares (Guiso *et al.*, 2008:2559). Less trusting individuals are less likely to buy shares and

trust is a key factor in explaining limited stock market participation (Guiso *et al.*, 2008:2559). In this study, according to the respondents' views, if consumer trust in financial advisers/planners increases, stock market participation will also increase. It can be concluded that trust has a significant positive relationship with stock market participation in SA.

9.3.2.6 Does consumer stock market participation promote client satisfaction and repurchase intentions?

According to Marinao (2017:45), client satisfaction has been widely recognised as a determining factor of customer loyalty and a firm's sustained profitability. Furthermore, a satisfied customer shows greater resistance to price elasticity, thereby improving a firm's reputation and the consumer's willingness to return and to recommend the firm to friends and family. Lovelock and Wirtz (2011:331) suggest that having the right portfolio of customer segments, attracting the right customers and delivering high levels of satisfaction are a solid foundation for creating customer loyalty. According to Younus, Raseed and Zia (2015:9) as well as Gogoi (2013:73), consumers are affected by many factors while selecting a product, with the ultimate decision on the consumer's intention depending on external factors. Purchase intention refers to the consumer's preference regarding the buying of a product or service after an evaluation (Younus *et al.*, 2015:9). Morinez *et al.* (2007), as cited in Mirabi, Akbariyeh and Tahmasebifard (2015:268), suggest that purchase intention is a situation in which the consumer tends to buy a particular product under a certain condition related to the behaviour, perceptions and attitudes of consumers. Shah, Aziz, Jaffari, Waris, Ejaz, Fatima and Sherazi (2012:105) suggest that purchase intention is a kind of decision-making that studies the reason why a consumer chooses to buy a particular brand. Furthermore, purchase intention is an effective tool for consumers to predict the buying process and it may be influenced by price or perceived quality and value. According to Crosno, Freling and Skinner (2009:91), the fulfilment of the product's purchase intention depends on variables such as consumer willingness to purchase and interest in the product, imposed social pressure as well as perceived value. Furthermore, Yang (2009) argues that purchase intention can measure the possibility of a consumer buying a product; the higher the purchase intention, the higher the consumer's willingness to buy the product. Trang and Tho (2017) reveal that investors with a high

risk perception regarding investing, have a higher perceived risk intention to invest in shares. In this study, it is revealed that stock market participation can result in higher levels of client satisfaction and repurchase intentions.

9.3.2.7 Does consumer stock market participation lead to financial sustainability?

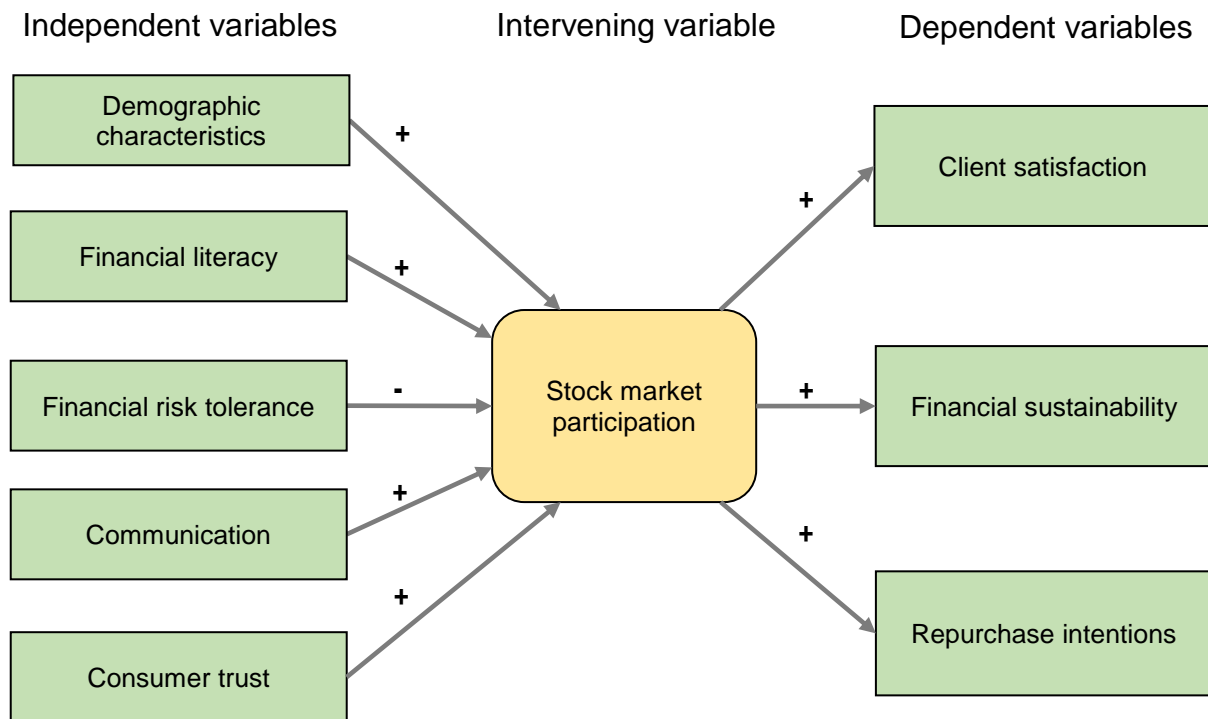
There are many benefits to investing in shares, such as diversification, tax benefits and capital growth (JSE, 2016). There are two types of returns that an investor can expect to earn from an investment. The first is income return, which represents periodic cash flows generated by the investment; these include dividends paid for ordinary shares and periodic interest paid for bonds (JSE, 2016; ASIC, 2018; Amadeo, 2019:2). The second type of return is price change, which is the increase or decrease in the price of the asset in relation to the purchase price or the market price in the previous time period. Another benefit of investing in shares is that it is a liquid asset (JSE, 2016). The stocks traded in the market also have greater liquidity than other securities, which means that it can be easily converted into cash by selling the equities with other traders in the market (ASIC, 2019). In this study, it has been concluded that stock market participation in SA leads to financial sustainability.

9.4 SUMMARY OF EMPIRICAL RESULTS

Figure 9.1 provides a summary of the empirical results reported in Chapter Eight of this study. The variables that exerted a significant influence on consumer stock market participation were shown in the model presented in Figure 8.4, in the previous chapter. Figure 8.4 also showed the variables that stock market participation influence (that being, the outcomes of stock market participation). The study revealed that consumer behaviour regarding stock market participation is influenced by various factors such as demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust. Figure 9.1 shows that there are relationships between demographic characteristics, financial literacy, financial risk tolerance, communication, consumer trust and stock market participation. Although financial risk tolerance is significantly related to stock market participation, this relationship is negative. This implies that respondents believe that financial information is difficult to understand and that this, in turn, has a negative effect on

their stock market participation. Furthermore, Figure 9.1 shows that there is a significant relationship between stock market participation and client satisfaction, financial sustainability and repurchase intentions.

Figure 9.1: Empirical results of the proposed influence and outcome of stock market participation



9.5 EMPIRICAL RESULTS AND CONCLUSIONS OF THE STUDY

9.5.1 Empirical results and conclusions based on views of consumers of financial products towards factors influencing stock market participation

9.5.1.1 *Demographic characteristics*

In this study, demographic characteristics refers to the characteristics of a population; these include the age, gender, income level, education level, family or household structure, cultural background and family or household size of the consumer. Schiffman and Kanuk (2015) suggest that demographic characteristics such as age, gender, marital status, income, occupation and educational level are most often used as the basis for market segmentation. Furthermore, Agrawal and Jain (2013:115)

reveal that age, gender, occupation, education and income have a significant impact on the buying behavioural patterns of rural and urban investors. Knowledge of customers' occupation and their level of income can help marketers devise strategies capable of more effectively delivering services to the specific needs of customers belonging to different occupation groups (Lal, Vij & Jain, 2014).

The results of the study have shown that demographic characteristics such as gender, income level, family structure and cultural background have a statistically significant positive relationship with consumer stock market participation. This implies that consumers believe that their gender influences the way in which they relate to investing in shares, and that men are risk takers when considering investing in shares. Almenberg and Dreber (2015) support these findings by reporting that men and women have different attitudes towards participating in stock markets as women are more risk averse compared to men. Halko, *et al.* (2012:67) further concur with the findings of this study by maintaining that gender is a strong predictor of risk and that the returns of households headed by men are influenced by their higher level of risk tolerance, with men more likely to have riskier assets.

Furthermore, the research findings reveal that consumers believe that the stock market and trading in shares is only for those consumers who are educated, wealthy and who earn high salaries. Lusardi and Mitchell (2014) concur that well-educated consumers are more likely to buy and hold shares, even after they have been limited to manage only financial issues such as their wealth, current income, and unemployment risk. Schaninger and Sciglimpaglia (1981), as cited in Christia and Ard (2016:59), further support that consumers with a higher income have achieved a higher level of education; as a result, they often engage in information processing prior to the decision process for participation in the stock market. The empirical results also reveal that consumers believe that they have to be high income earners in order to trade in shares. Yao *et al.* (2011:879) affirm this finding by reporting that income level and source of income have been found to have a meaningful influence on stock market participation and financial risk tolerance.

The empirical results further reveal that the residential areas in which consumers live reflect the type of investors they are. Brown *et al.* (2008) concur with this finding by affirming that proximity to stock exchange listed companies also increases share

market involvement. Brown *et al.* (2008:4) found that the impact of stock market participation of community members is strongest for less financially sophisticated households and it is strongest within peer groups as defined by age and income variables. Furthermore, the availability of stock exchange listed companies within close proximity and, similarly, if a firm's head office is within the community, significantly correlates with share ownership by individuals (Brown *et al.*, 2008:4).

9.5.1.2 Financial literacy

In this study, financial literacy is defined as the knowledge and ability to explain basic economic and financial concepts, and to use that knowledge in order to manage one's financial resources effectively. According to Van Rooij, *et al.* (2011), those who have low financial literacy are significantly less likely to invest in shares. In addition, Kadoya, *et al.* (2017) reveal that a lack of financial literacy is the reason for consumer reluctance to participate in the stock market in Japan. Garcia and Tessada (2013:14) suggest that education has a larger impact on the probability of holding simple financial assets; this suggests that formal education can drive consumers to participate in the stock market. Furthermore, financial education has a positive impact on individuals' willingness to tolerate financial risk (Garcia & Tessada, 2013:14).

The results of the study have shown that there is a statistically significant positive relationship between financial literacy and participation in the stock market. This implies that consumers believe that they participate effectively when they are informed of the difference between saving and investing in the stock market. BankSeta (2017:11) supports this finding by maintaining that financial literacy is a key driver in developing a robust savings culture into the future; moreover, this has important implications for FSPs that are endeavouring to stimulate individuals to invest.

The research findings of this study also reveal that consumers with investment knowledge will possibly purchase shares. BankSeta (2017:11) supports this finding by maintaining that understanding key financial concepts, such as budgeting, is key to ensuring a sustainable savings culture as the lack of financial literacy contributes to the low savings culture and, therefore, also to stock market participation.

The empirical results of the study also suggest that consumers believe that it is important to own shares now, so that they can reap the benefits thereof when they

retire. Standard Bank Online (2016) supports this finding by suggesting that before embarking on investing in the stock market, a prospective investor needs to consider the timing in terms of age and time remaining before retirement, as well as how much time they have left to achieve their financial goals. The empirical results of the study further reveal that consumers prefer to invest in shares with stable performances. Botha *et al.* (2012:26) support this finding by maintaining that consumers with higher levels of financial literacy are in a better position to make informed financial decisions, to determine the value of financial products, and to demand quality services and financial advice.

9.5.1.3 Financial risk tolerance

Semenov and Kuznetcov (2015) refer to financial risk tolerance as a consumer's willingness to make financial decisions which have unknown and potentially costly outcomes. Similarly, Davies (2017) believes that financial risk tolerance is an investor's willingness to take perceived risk. In this study, financial risk tolerance is defined as a consumer's willingness to take financial decisions in which the outcomes of the decisions are unknown and potentially costly. According to Manjula (2013), the strongest single driver of stock market participation, or the decision to forego investing in shares, is risk aversion.

The results of the study reveal that there is a negative relationship between financial risk tolerance and participation in the stock market. This implies that consumers are convinced that they themselves and their family members have limited knowledge of investments. The respondents indicate that if they and their family members have higher levels of financial risk tolerance, their stock market participation will be lower or, in contrast, if they have low levels of financial risk tolerance (more riskier investors), their stock market participation will be higher. Lin and Lu (2015:118) further concur that passive investors have a stronger need for securities' investments and exhibit a lower risk tolerance than active investors. Li (2013:46) supports this finding by reporting that, in the investment environment, consumers with knowledge about investment principles are likely to make better informed investment decisions.

The empirical results also reveal that financial information regarding stock market matters is not easy to understand. Moreover, consumers often cannot cope with the

financial loss that results from a stock market decline, which may result in share prices decreasing. This is in line with the work of Collard (2009:2), who found that most consumers did not have a clear idea of what the risks were and many felt that long-term investments were riskier, mainly because they would not be able to access their money in the case of unexpected events; furthermore, Collard (2009:2) found that most consumers believe that there was no capital at stake in low risk investments. Contrary to this research finding, this means that consumers with low levels of financial risk tolerance are less likely to participate in the stock market. Daniela (2010) supports this finding by reporting that consumer participation in the stock market is low because of low financial risk tolerance.

9.5.1.4 Communication

In this study, communication is defined as the unique tool that marketers and businesses use to attract consumers in order that they respond in a desired way. McQuail (2009:7) argues that mass communication is the process of communication operating at the society-wide level, and it is identified by its institutional characteristics such as a firm's brand or information pamphlets. Communication is part of the relationship between consumers and service providers (Rootman, 2011:210). Communication from consumers to firms will ensure that a firm generates information on the business environment conditions, opportunities and consumer needs (Rootman, 2011:208). Padmaja (2013:31) concludes that a lack of awareness in the financial services environment contributes to the non-participation in the buying of mutual funds.

The results of the study have shown that there is a statistically significant positive relationship between communication and participation in the stock market. The research findings of this study reveal that consumers would prefer to use information gained from media sources, such as newspapers, television and magazines, when making investment decisions. Standard Bank (2016) supports this notion by concurring that there is a substantial amount of information produced about the JSE's daily transactions and dealings through print, digital and electronic media such as newspapers, online magazines and television. Furthermore, the JSE has a website and it produces the Stock Exchange News Service (SENS) which is designed to

ensure that all information from listed companies is released at the same time for everybody.

The results of the study further show that consumers are confident about the credibility of the stock market information they receive from financial intermediaries. FSB (2015) concurs that South African consumers participate in the stock market through registered stock brokers, banks and other licensed financial service providers. Furthermore, Guiso and Jappelli (2008) report that financial awareness is partly determined by the way in which FSPs socialise with consumers and how information is disseminated. This research finding is in line with Li's (2009) notion that social interaction is one of the most important channels through which consumers communicate knowledge and information about financial investments.

The empirical results of the study also reveal that consumers believe that mass communication influences the buying or selling of shares on the stock market. According to Standard Bank Online (2016), although most consumers do not fully understand shares, much about shares is learned from social conversations.

9.5.1.5 Consumer trust

In this study, consumer trust is referred to as the expectation or positive impressions that are effected in order to secure collective benefits from mutual interactions (Krot & Lewicka, 2012:225). This implies that there is an expectation that the other parties will respond in accordance with commitments, negotiate honestly, and not take advantage, even when the opportunity arises. Therefore, business relationships should be based on good faith and, as such, trust relationships should be part of the financial services as these products are often complex and require some level of personalisation because consumers place a certain amount of trust in the firm or supplier of their choice (Cheng, 2009:2). According to the South African Savings Institute (SASI, 2010), the country's lack of faith in financial advisers and brokers has impacted individual consumers and households' perceptions of savings. The correlation between trust and financial decision making is corroborated by El-Attar and Poschke (2011) who argue that trusting behaviour has been proven to affect households' portfolio choice between risky and risk-free financial assets.

The empirical results reported in Chapter Eight found that there is a significant relationship between consumer trust and participation in the stock market. The empirical results of this study reveal that consumers believe that they participate effectively when financial advisers provide them with accurate information on stock market matters. The research findings by Georgarakos and Inderst (2011:1) support the empirical results of this study by reporting that trust in financial advice has a significant impact on the decision of less educated households to buy shares and other information-sensitive products.

The research findings of this study further reveal that consumers effectively participate in the stock market when they closely follow the suggestions of financial advisers regarding investing in shares. The European Central Bank (2011) affirms this finding by reporting that financial advice is pervasive and it is a significant influencer of households' willingness to invest in risky assets. The findings of the study further indicate that consumers believe that they effectively participate in the stock market when they trust financial advisers regarding the handling of their stock market matters. This notion is supported by Georgarakos and Inderst (2011:7) who found that, for consumers who need to rely on advice, trust in advice becomes a key determinant of their willingness to buy shares since advice matters most when they trust it. Guiso *et al.* (2008:1) concur that in order to encourage shareholding amongst consumers with low financial capabilities, trust in advice is a key prerequisite. Therefore, consumers who trust their financial advisers are more likely to participate in the stock market.

9.5.2 Consumer views regarding stock market participation and its outcomes

9.5.2.1 *Empirical results and conclusions based on the views of consumers of financial products towards participation in the stock market*

In this study, stock market participation refers to the degree to which consumers should or prefer to invest at least a portion of their wealth in shares in order to take advantage of the return on their investment. This implies that stock market participation measures whether the consumer participates in the stock market; in addition, the number of shares in an investor's portfolio is also an important outcome (Sivaramakrishnan *et al.*, 2017:820). According to Chan, Yim and Lam (2010),

consumer participation is the degree to which consumers contribute, effort, preference, knowledge to service production delivery. The empirical results reported in Chapter Eight support this notion.

The results of this study reveal that consumers believe that stock market participation will ensure the advancement of their financial well-being. Sivaramakrishnan *et al.* (2017:820) support this finding by maintaining that stock market participation has an important economic outcome. The empirical results further reveal that consumers believe that stock market participation offers investment options that ensure financial stability. Chuah and Devin (2010:7) suggest that, when consumers feel certain of their judgements, they refer to this type of overconfidence as certainty overconfidence. The research findings of this study reveal that stock market participation offers value-creating investment options. Bulsara *et al.* (2015:124) support this finding and affirm that investment products, such as shares, have their own value irrespective and independent of financial advisers/planners and consumers. The research findings of the study further reveal that consumers believe that stock market participation offers investment options that are financially viable in the long run. Bulsara *et al.* (2015:124) concur that the ownership of shares belongs to the investors and, unlike other consumer products, they are intangible; thus, their value is intrinsic and relative as they can be sold or bought at different periods of time and in different places. According to Bulsara *et al.* (2015:124), the behaviour of consumers of financial products can be influenced by many internal and external variables. This notion concurs with the research findings of this study, which has established that demographic characteristics, financial literacy, communication and consumer trust influence stock market participation.

9.5.2.2 *Empirical results and conclusions based on the views of consumers of financial products towards outcomes of participation in the stock market*

(a) *Client satisfaction*

In this study, client satisfaction is defined as the feeling that a product has fulfilled or exceeded the customer's expectations as well as the customer's willingness and devotion to continue patronising a firm over the long-term. According to Schiffman and

Kanuk (2010), as cited in Mbuthia (2014), client satisfaction is the client's perception of the performance of the product or service in relation to their needs. Sharmin (2012:31) describes customer satisfaction as an emotional response to the experience provided by products or services purchased, retail outlets and the overall market place.

According to Jagongo and Mutswenje (2014), there is a substantive relationship between participation in the stock market and client satisfaction and loyalty. The empirical results reported in Chapter Eight found that there is a significant relationship between consumer stock market participation and client satisfaction. If stock market participation is encouraged it will possibly result in customer satisfaction. This means that consumers believe that financial advisers conduct business in a professional manner and that the consumer is satisfied with the responsiveness of the financial adviser in dealing with their stock market matters. Various researchers, such as Fornell, Mithas, Morgeson III and Krishnan (2006:3) as well as Gruca and Rego (2005:115), as cited in Mbuthia (2014:75), concur that high levels of customer satisfaction have also been linked to higher returns and lower risk in the stock market. The results of the study further indicate that consumers believe that financial advisers will take corrective action without delay when they have complaints. Angelova and Zekiri (2011:234) support this finding by reporting that the fulfilment of promises is a significant part of achieving client satisfaction and retention since the reputation of a service provider is determined by its ability to fulfil its obligations and its promises.

9.5.2.3 *Financial sustainability*

In this study, financial sustainability refers to having the ability to manage financial resources in order to meet family financial needs throughout one's life cycle and through the ups and downs of the economy at large. The empirical results reported in Chapter Eight indicate that there is a significant relationship between consumer stock market participation and financial sustainability. The empirical results of this study reveal that consumers believe that stock market participation provides long-term financial sustainability. Magliolo (2012) supports this finding by maintaining that consumers invest in shares in order to obtain capital growth, while others invest to obtain a regular income such as a dividend; moreover, some investors may invest in shares for financial sustainability and financial independence. Wong (2011) argues that an investor invests for the long-term and earns periodical cash flow; he reiterates

that an investor does not aim at short-term gains. The results of the study further indicate that consumers believe that stock market participation creates advanced financial investment projects. Du Plessis (2008:43) suggests that savings provide stability at both the household and the country level against economic shocks and erratic foreign direct investment flows.

The research findings in this study also reveal that consumers believe that they accumulate substantial wealth through investments. Ozuomba *et al.* (2016:1) support this finding by reporting that shares offer opportunities for both strong capital growth and regular dividend income, which is tax free; they further report that consumers hedge investments against inflation.

9.5.2.4 Repurchase intentions

In this study, repurchase intentions is defined as the likelihood that an user will repurchase the good or service in the future. According to Chiu, *et al.* (2009:6), repurchase refers to the probability or willingness of consumers who already completed an initial purchase to continue to use and do business with the same firm at a later time under consideration of present and possible situations. The empirical results reported in Chapter Eight indicate that there is a significant relationship between consumer stock market participation and repurchase intentions. This shows that consumers who participate on the stock market are more likely to repurchase shares in the near future.

The empirical results of this study reveal that consumers intend to continue investing in shares listed on the stock market. Many companies pay out part of their profits to shareholders; furthermore, the more the company pays dividends, the more the shareholders reinvest and participate in the stock market (Magliolo, 2005:22; Haque, *et al.* 2017:60). The research findings specifically reveal that consumers believe that they will repurchase listed shares due to the influence of financial advisers. Magliolo (2012) supports this finding by maintaining that the more consumers invest on the stock market, the more financial service providers grow their investment capacity. The research results of the study further indicate that consumers believe that the performance of the shares they currently own influences them to buy more shares. Magliolo (2012) as well as Guma and Bonga-Bonga (2016) concur that there is a

relationship between consumer participation in the stock exchange, investment inflows and the growth in assets under management. Therefore, the research findings of this study have provided sufficient evidence to suggest that consumers' repurchase intentions are linked to current stock market participation.

9.6 RECOMMENDATIONS RELATING TO FACTORS INFLUENCING CONSUMER BEHAVIOUR REGARDING STOCK MARKET PARTICIPATION

On the basis of the results reported in Chapter Eight, as summarised alongside the findings of previous studies, this section outlines some of the recommendations of the study.

9.6.1 Demographic characteristics

In this study, it can be concluded that there is a significant relationship between demographic characteristics and participation in the stock market. FSPs are required to adopt strategies that target consumers in different demographic characteristics, as these are significant variables that have been found to lead to consumer stock market participation. This study therefore recommends that FSPs consider demographic characteristics such as gender, level of income, level of education, and residential area when designing financial products. It is thus recommended that, when designing financial products to promote stock market participation, FSPs:

- create an investment environment that is supportive of gender equality in order to negate gender stereotypes that consider financial risk-taking as a male domain;
- create policies specifically targeted at alleviating gender disparities in various domains of life, together with policy makers;
- ensure that the language used in financial products is easy to understand and, where possible, it should be in the consumer's mother tongue;
- ensure that sophisticated media platforms, such as the internet and social media, are used to target financially literate consumers while radio programmes that broadcast in vernacular languages are used to target the less literate consumers;

- ensure that financial products cater to the different levels of income and affordability of consumers;
- increase their geographic footprint and presence so that their products are accessible to a wider community;
- encourage household participation through family oriented products such as joint investment accounts; and
- take into consideration consumers' cultural background when designing financial products, for example, Islamic banking.

9.6.2 Financial literacy

In this study, it can be concluded that there is a positive relationship between financial literacy and stock market participation. Effective financial literacy and investment initiatives should be structured so as to help consumers know when and how to locate information in order for them to make sound financial decisions. Therefore, it is recommended that, when attempting to promote consumer participation in the stock market, FSPs do the following:

- provide information and create awareness that it is important for consumers to own shares so that they can benefit when on retirement;
- educate consumers to invest in shares with stable performance;
- educate consumers on the differences between saving and investing in the stock market;
- ensure that consumers understand that the core purpose of investing is to create wealth in the long run;
- provide consumers with easy access to trusted, reliable, independent and easy to understand information;
- use a large variety of channels and means to ensure that a wide audience, including vulnerable consumer groups in rural areas, are appropriately and effectively reached, through means such as targeted public awareness campaigns, road shows, leaflets, posters and booklets;
- ensure that financial literacy campaigns are planned and delivered on a regular basis using local languages;

- ensure that community role models, such as sports people, musicians and other celebrities, are used to raise the visibility of such campaigns to increase stock market participation amongst specific target groups;
- create programmes that teach individuals about financial terminology and basic budgeting techniques in their preferred language;
- incorporate financial literacy programmes in both primary school and secondary school curricula in order to teach children the basics of investing at a young age;
- provide free online financial literacy courses to assist consumers who are not able to attend contact-learning sessions;
- use social media platforms such as Facebook as out-reach financial literacy initiatives to disseminate messages tailored for different population segments, and to help instil positive attitudes and behavioural changes towards financial decision-making; and
- provide incentives, games, gamification and edutainment (media designed to educate through entertainment, such as radio dramas and soap opera) to consumers in order to encourage participation in financial literacy initiatives as this may also be instrumental in engaging more reluctant consumers.

9.6.3 Financial risk tolerance

On the basis of the findings presented in Chapter Eight, this section outlines the recommendations of the study relevant to financial risk tolerance. The empirical results reveal that there is a negative relationship between financial risk tolerance and participation in the stock market. It is thus recommended that policy makers and FSPs attempt to promote financial risk tolerance amongst consumers by doing the following:

- ensure that the financial products cater for different consumer age categories;
- ensure that consumers always rely on companies' historical financial performance and use both present and historical information correctly when making investment decisions;
- ensure that the six steps of financial planning are a regulatory requirement and standard professional practice for financial planners;

- ensure they mitigate the impact of financial risk tolerance by incorporating insights from behavioural finance such as behavioural portfolio theory and outcome-based investment philosophy;
- ensure that consumers are convinced that their family members have knowledge about investments;
- ensure that information regarding stock market matters is easily understood by the consumer;
- ensure that consumers can cope with financial loss resulting from a stock market decline; and
- consider investment products that are tailor made for pensioners and the middle aged.

9.6.4 Communication

In this study, it can be concluded that there is a significant relationship between communication and participation in the stock market. In order to communicate effectively with consumers, it is recommended that policy makers and FSPs:

- communicate their financial product offerings through different media channels (newspapers, television, magazines, etc.) guided by different consumer segments;
- have the ability to profile consumers and utilise the most effective media and messages, which can be a critical tool for increasing stock market participation. Therefore, the most effective means of communication is most likely to increase consumer participation in the stock market, from different demographic groups;
- use media relations campaigns, press conferences, briefings, press releases, radio call-in shows, topical supplements to newspapers and specialist magazines, and topical television shows to encourage consumers to participate in the stock market;
- ensure that consumers are confident about the credibility of the stock market information they receive from financial advisers;
- ensure that they (FSPs) make an effort to familiarise consumers with financial investment tools, such as unit trusts, bonds and retirement annuities; and

- ensure that they (FSPs) frequently interact with consumers on stock market matters; and
- ensure that consumers regularly seek information about the stock market in order to gain a basic understanding of how the stock market performs.

9.6.5 Consumer trust

On the basis of the findings presented in Chapter Eight, this section outlines the recommendations of the study regarding consumer trust and participation in the stock market. The empirical results reveal that there is a positive relationship between consumer trust and participation in the stock market. It is thus recommended that, when attempting to promote consumer stock market participation, policy makers and FSPs do the following:

- implement customer engagement forums in order to effectively build and foster trust relationships with customers;
- be purpose led and be involved with community shared causes, such as employment creation initiatives, entrepreneurship incubation and student bursaries, through a shared growth strategy if they want to build a lasting trust relationship with consumers;
- ensure that there are consumer protection rules and regulations to effectively drive consumer trust;
- ensure that they (FSPs) provide consumers with accurate information on stock market matters;
- ensure that (FSPs) proactively protect customer data and defend consumers against cybersecurity threats by establishing infrastructure, processes and procedures to prevent attacks or data breaches to foster consumer trust;
- ensure that they (FSPs) have the consumer's best interests at heart and that they are honest about stock market matters;
- ensure that there is transparency when discussing product features and commissions charged by financial advisers;
- ensure that they (FSPs) genuinely listen to the consumer's ideas and suggestions on stock market matters before making investment decisions;

- ensure that consumers are provided with written documents regarding stock market matters, when necessary;
- ensure that consumers are confident that the stock market will recover after a decline;
- ensure that consumers are comfortable to have an open discussion with financial advisers regarding the status of their investments;
- ensure that they (FSPs) pass on stock market information that is useful to the consumer;
- endeavour to offer online fintech products if they are to remain attractive to the youth. With such consideration by FSPs, it will be possible for the youth to undertake investments as a result of increased financial inclusion.

9.7 RECOMMENDATIONS REGARDING VIEWS AND OUTCOMES OF STOCK MARKET PARTICIPATION IN SOUTH AFRICA

9.7.1 Views of stock market participation

Based on the findings of this study, it can be concluded that the following factors have a significant influence on stock market participation: demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust. It is therefore recommended that FSPs:

- encourage and guide consumers to buy and sell shares as and when it suits their circumstances;
- ensure that consumers use the information that they receive from FSPs regarding the share price changes and benefits of stock market participation;
- ensure that consumers use the information that they receive from FSPs regarding long-term investments on the stock market; ensure that consumers use the information that they receive from FSPs regarding investments;
- ensure that consumers use the feedback that they receive from FSPs regarding meeting with stock market traders;
- ensure that consumers use the information that they receive from FSPs regarding stock market matters relating to resignation and retirement;
- assist consumers to understand the tax implications resulting from stock market participation;

- assist consumers to review and ensure that they are satisfied with the performance of their financial investment portfolio at due periods;
- offer consumers value-creating investment options in order to encourage stock market participation;
- offer consumers investment options that are financially viable and stable on the long run, as well as providing the advancement of consumer wellbeing; and
- make an effort in ensuring that consumers understand stock market matters.

9.7.2 Client satisfaction

From the findings of this study, it can be concluded that consumer participation in the stock market can lead to client satisfaction. Client satisfaction strategies should be implemented to attract consumer participation in the stock market.

Thus, it is recommended that FSPs do the following:

- ensure that they conduct business in a professional manner;
- ensure that consumers are satisfied with the responsiveness of their financial advisers in dealing with their stock market matters;
- ensure that they take corrective action without delay when consumers have a complaint;
- ensure that they have a thorough understanding of customer beliefs, behaviours and product or service attributes in order to provide services that will lead to client satisfaction;
- ensure that overall service quality is more closely tailored to customer needs and involve customers in the product or service development process in order to drive brand loyalty, affinity and client satisfaction; and
- ensure that financial advisers treat consumers' stock market matters with confidentiality.

9.7.3 Financial sustainability

In this study, it can be concluded that there is a significant relationship between consumer stock market participation and financial sustainability. In light of these results, the following recommendations are offered to attract consumer participation in the stock market in order to secure individual financial sustainability. It is thus

recommended that, when attempting to promote consumer stock market participation, FSPs do the following:

- ensure that the stock market provides user friendly technology as well as innovative financial investment approaches;
- provide technology driven products, such as mobile telephone banking and internet banking and robo advisers, to their young consumers;
- ensure that the stock market has a long-term orientation regarding financial stability;
- ensure that the stock market creates advanced financial investment projects;
- ensure that consumers accumulate substantial wealth through investments;
- ensure that consumers have money set aside for unseen emergencies; and
- ensure that consumers have a positive attitude towards the strength and stability of the stock market.

9.7.4 Repurchase intentions

On the basis of the findings presented in Chapter Eight, this section outlines some recommendations on what drives repurchase intentions. The empirical results reveal that there is a positive significant relationship between consumer participation in the stock market and repurchase intentions. This implies that satisfied consumers participating in the stock market are likely to do repeat business with the FSP and that they intend to continue investing in shares listed on the stock market. The more consumers invest in the stock market, the more financial service providers grow their investment capacity. The findings of the study further indicate that consumers believe that they will repurchase listed shares due to the influence of media sources and service quality. In order for FSPs to encourage repurchase intentions by consumers they should do the following:

- ensure that consumers continue to invest in shares listed on the stock market;
- ensure that they use different media sources and their influence to encourage consumers to repurchase listed shares in the stock market;
- ensure that they provide a wide variety of investment options to encourage consumers to buy more shares;

- ensure that the performance of shares owned by consumers influences them to buy more shares;
- ensure that the performance of other shares influence consumers to buy more shares;
- ensure that the stock market environment influences consumers to make unplanned share purchases;
- ensure that consumers continue to buy shares on the stock market even if share prices increase;
- ensure that consumers always make time to buy shares on the stock market; and
- ensure that share purchases by other consumers encourage them to revisit the stock market in order to buy more shares.

9.8 CONTRIBUTION OF THE STUDY

- The study made a contribution to the existent body of knowledge by reviewing consumer behaviour under risk and uncertainty, and the theories that have contributed to the development of the field of behavioural finance.
- The valuable information and insights drawn from the study contribute to the body of knowledge on consumer behaviour regarding participation in the stock market; this information will benefit financial services providers, market regulators, policy makers and the investing public. Furthermore, identifying stock market participation drivers will help FSPs and policy makers to improve product and service quality; in addition, it will improve the financial services regulation framework, which will lead to client satisfaction, build greater business value and avoid creating business risks.
- With the finalisation of the Retail Distribution Review (RDR) in SA in 2019, FSPs are encouraged to implement a robust and systematic investment advice process that will bring consistency to the investment advice process. With consistency, the consumer in turn gets consistent service and outcomes regardless of the financial adviser with whom they engage; this leads to long-term and profitable client/adviser relationships.
- The study identified factors that influence consumer participation in the stock market in SA and, subsequently, developed a hypothesised model that other

researchers can use and test. The hypothesised model and the measuring instrument can be improved, and other variables could be included.

- The research findings contribute towards solving the “*stock holding puzzle*”, that is, the fact that many households do not hold shares (Campbell, 2006). This will help FSPs to incorporate behavioural finance insights and tools into their practice as non-participation is considered a “puzzle” because it is not easy to explain the reasons why many consumers do not participate in the stock market. The results will enhance studies in behavioural finance, financial planning, consumer buying behaviour and marketing, and they will inform business strategy formulation and execution.
- The research will also bring to light the challenges facing effective participation in the stock market which, once addressed, will be of great importance to FSPs, financial advisers and policy makers; this will, ultimately, contribute positively to the economic wellbeing of South Africans.

9.9 LIMITATIONS OF THE STUDY

The following limitations of the study are acknowledged:

- Due to time and cost constraints, the population sample was selected from consumers in four provinces.
- The close-ended questionnaire administered limited the views and expressions of the respondents.
- Generally, the respondents were willing to assist but they complained about the length of the questionnaire and the language barrier; thus, it was time consuming to collect data from some provinces. However, the use of trained fieldworkers assisted the researcher in overcoming this problem, as the data was collected successfully.

9.10 AREAS FOR FUTURE RESEARCH

- Since this study’s literature review stressed how debt impacted upon consumers’ savings, future studies can be conducted on the impact of consumer debt on stock market participation.

- Future research in this topic can be extended to include the influence of behavioural finance on stock market participation in SA, since this study's literature review revealed how aspects of behavioural finance such as greed, fear and emotions impact consumer participation in the stock market. Behavioural finance provides FSPs and financial advisers with insights on how to understand and manage the buying behaviour of consumers of financial products through behavioural coaching, and the application of behavioural portfolio theory into practice management.
- Research needs to be carried out on specific consumer segments based on gender, such as rural women and housewives, in order to ascertain their investment preferences. Studies can be conducted on the impact of gender related perceptions and biases on stock market participation in SA.
- This study focused on five independent variables in order to determine their influence on stock market participation. However, the literature review highlighted other variables that could be used to make this assessment. It would be worth investigating other factors, such as the influence of religion and political affiliation, on stock market participation.
- Future studies could endeavour to investigate the impact of Retail Distribution Review (RDR) on practice management in the financial services industry in SA. The aim of RDR is to ensure more transparency and fairness for consumers; this would enable them to understand and compare the nature, value and cost of services that financial advisers provide. This would also enhance standards of professionalism so as to build consumer trust which has been found to have a positive impact on stock market participation.

9.11 CONCLUSION

According to the results of this study, the five major influences on consumer participation in the stock market are: demographic characteristics, financial literacy, financial risk tolerance, communication and consumer trust. Although financial risk tolerance is significantly related to stock market participation, this relationship is negative. This implies that respondents believe that financial information is difficult to understand, which has a negative effect on their stock market participation. In addition, the study found that stock market participation influences client satisfaction, financial

sustainability and repurchase intentions. It is thus evident that stock market participation should increase so that it may result in positive financial benefits from and to South African consumers and improve the performance of role players in the financial services industry.

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ANNEXURE A

COVER LETTER AND QUESTIONNAIRE

25 April 2019

Dear Respondent

CONSUMER BEHAVIOUR REGARDING STOCK MARKET PARTICIPATION IN SOUTH AFRICA

I am a PhD student in the Department of Business Management at the Nelson Mandela University in Port Elizabeth. My study investigates the factors that influence consumer stock market participation in South Africa. The purpose of this study is to promote consumer behaviour with regards to participation in the stock market to possibly increase financial sustainability that will result in the improved financial welfare of consumers and also boost the South African economy. Furthermore, this study will shed light on the limited stock market participation which has been found to have implications on the financial sustainability of consumers.

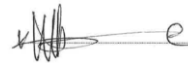
All data sources will be treated as confidential and will be used solely for research purposes. The collected data will be reported on using statistics, and no individual respondents will be identified in the research report. Attached to this letter is a questionnaire that I intend to use for data collection, which should take no longer than 40 minutes of your time to complete. Participation in this questionnaire will be regarded as implied consent. You may withdraw your participation in this study at any stage, without penalty. When completing this questionnaire, please note that there are no correct or incorrect answers. Please feel free to contact me with regard to any queries you may have concerning this questionnaire. Upon completion of the study, I undertake to provide all interested parties with a summary of the results.

Your input in this research project is highly valued and I thank you for your time and effort in completing this questionnaire.

Kind regards,



Prof NE Mazibuko and Prof C Rootman
Research coordinators



Mr Wise Mbewe
Researcher

Declaration/statement of consent: Please 'tick' (✓) the box if you hereby understand the purpose of the study, you participate voluntarily, you understand that the study is anonymous as well as that all information is kept confidential, and you hereby consent to completing the questionnaire.

Should you wish to receive a summary of this study's result, kindly supply your email address:

Your email address will be kept in a password-protected file and not in the same file as the captured data. It will not be possible to link any response to any individual respondent or email address. Your email address and responses will be kept confidential.

SECTION A: CONSUMER BEHAVIOUR REGARDING STOCK MARKET PARTICIPATION IN SOUTH AFRICA

Please answer the following questions based on your own perceptions by placing a cross (X) in the appropriate box. There are no right or wrong answers. Indicate to what extent you agree with the following statements.								
The level of agreement range from 1 (Strongly disagree) to 7 (Strongly agree).								
Strongly disagree ————— Strongly agree								
As a consumer of financial products I believe...								
1	My gender influences the way I relate to investing in shares.	1	2	3	4	5	6	7
2	Men are risk takers when considering investing in shares.	1	2	3	4	5	6	7
3	My age will influence the type of investments I am willing to choose.	1	2	3	4	5	6	7
4	The stock market and trading in shares are only for those who are educated.	1	2	3	4	5	6	7
5	The stock market and trading in shares are only for the rich.	1	2	3	4	5	6	7
6	I need to be a high income earner to trade in shares.	1	2	3	4	5	6	7
7	The residential area where I live reflects the type of investor I am.	1	2	3	4	5	6	7
8	The size of my family will determine the type of investments I choose.	1	2	3	4	5	6	7
9	The number of employed household members will determine the extent of my participation in the stock market.	1	2	3	4	5	6	7
10	My cultural background and beliefs influence my participation in the stock market.	1	2	3	4	5	6	7
As a consumer of financial products I...								
11	Am familiar with shares and stock market trading.	1	2	3	4	5	6	7
12	Am aware that it is important to own shares now so that I can benefit when on retirement.	1	2	3	4	5	6	7
13	Am convinced that the JSE and trading in shares are easy to understand.	1	2	3	4	5	6	7
14	Am convinced that my family and I have knowledge about investments.	1	2	3	4	5	6	7
15	Believe that financial information regarding stock market matters is easy to understand.	1	2	3	4	5	6	7
16	Am aware that if inflation increases, prices (e.g. food, petrol, electricity) will also increase.	1	2	3	4	5	6	7
17	Believe there is a difference between saving and investing in the stock market.	1	2	3	4	5	6	7
18	Believe that the core purpose of investing is to create wealth in the long run.	1	2	3	4	5	6	7
19	Receive adequate training from my financial adviser to equip me with the skills I need regarding stock market matters.	1	2	3	4	5	6	7

Strongly disagree ----- Strongly agree								
As a consumer of financial products I...								
20	Am aware that I can invest in the stock market through a licenced stock broker or my bank.	1	2	3	4	5	6	7
21	Regularly seek information about the stock market to gain a basic understanding of its performance.	1	2	3	4	5	6	7
22	Regularly keep an eye on investment trends to monitor my shares' performance.	1	2	3	4	5	6	7
23	Always make investment decisions by consulting my financial adviser.	1	2	3	4	5	6	7
24	Always rely on companies' historical financial performance when making investment decisions.	1	2	3	4	5	6	7
25	Am confident that after a stock market decline the market will recover.	1	2	3	4	5	6	7
26	Can cope with financial loss resulting from stock market declines (e.g. share values/prices decreasing).	1	2	3	4	5	6	7
27	Believe that the stock market will offer higher returns in the long run.	1	2	3	4	5	6	7
28	Believe it is important to pay off debt before considering investing in the stock market.	1	2	3	4	5	6	7
29	Prefer to invest in shares with stable performances.	1	2	3	4	5	6	7
30	Believe investing in the stock market can influence my future financial stability.	1	2	3	4	5	6	7
As a consumer of financial products...								
31	I often use information gained from media sources (e.g. news papers, television and magazines) when making investment decisions.	1	2	3	4	5	6	7
32	I believe mass communication influences the buying or selling of shares on the stock market.	1	2	3	4	5	6	7
33	I am confident about the credibility of the stock market information I receive from my stock broker, financial advier/planner, my bank, etc.	1	2	3	4	5	6	7
34	I value companies' recent information when considering buying shares.	1	2	3	4	5	6	7
35	My financial adviser makes an effort to familiarise me with financial investment tools such as unit trusts, bonds and retirement annuities.	1	2	3	4	5	6	7
36	My financial adviser frequently interacts with me on stock market matters.	1	2	3	4	5	6	7

		Strongly disagree ----- Strongly agree						
As a consumer of financial products...								
37	My financial adviser passes on stock market information that might be useful to me.	1	2	3	4	5	6	7
38	My financial adviser is always willing to share changes or concerns with me regarding stock market matters.	1	2	3	4	5	6	7
39	My financial adviser accepts that clients have a right to express their views with regard to stock market matters.	1	2	3	4	5	6	7
40	My financial adviser accepts my ideas about stock market participation before making investment decisions.	1	2	3	4	5	6	7
41	I am confident that my financial adviser will provide me with accurate information on stock market matters.	1	2	3	4	5	6	7
42	I closely follow the suggestions of my financial adviser regarding share investments.	1	2	3	4	5	6	7
43	I trust my financial adviser in handling my stock market participation matters.	1	2	3	4	5	6	7
44	My financial adviser has my best interest at heart.	1	2	3	4	5	6	7
45	My financial adviser is honest about stock market matters.	1	2	3	4	5	6	7
46	I am comfortable to have an open discussion with my financial adviser regarding the status of my investments.	1	2	3	4	5	6	7
47	My financial adviser genuinely listens to my ideas and suggestions on stock market matters.	1	2	3	4	5	6	7
48	My financial adviser is sincere in his/her attempts to incorporate my views about stock market matters.	1	2	3	4	5	6	7
49	I can talk freely to my financial adviser about difficulties I am having with stock market matters.	1	2	3	4	5	6	7
50	I am confident that my financial adviser can provide me with written documents, when necessary, regarding stock market matters.	1	2	3	4	5	6	7
51	My financial adviser encourages me to participate in the stock market.	1	2	3	4	5	6	7
52	My financial adviser guides me to buy and sell shares as and when it suits my circumstances.	1	2	3	4	5	6	7
53	I use the information I receive from my financial adviser regarding the benefits of stock market participation.	1	2	3	4	5	6	7
54	I use the information I receive from my financial adviser regarding share price changes.	1	2	3	4	5	6	7
55	I use the feedback I receive from my financial adviser after his/her meetings with stock market traders.	1	2	3	4	5	6	7

Strongly disagree ----- Strongly agree								
As a consumer of financial products...								
56	I use the information I receive from my financial adviser regarding stock market matters relating to retirement.	1	2	3	4	5	6	7
57	I use the information I receive from my financial adviser regarding stock market matters when I resign.	1	2	3	4	5	6	7
58	I use the information I receive from my financial adviser regarding long-term investments on the stock market.	1	2	3	4	5	6	7
59	My financial adviser assists me to understand the tax implications resulting from my stock market participation.	1	2	3	4	5	6	7
60	My financial adviser assists me to review my financial investment portfolio at least once a year.	1	2	3	4	5	6	7
61	The stock market offers excellent investment options for me.	1	2	3	4	5	6	7
62	My financial adviser conducts business in a professional manner.	1	2	3	4	5	6	7
63	I am satisfied with the responsiveness of my financial adviser in dealing with my stock market matters.	1	2	3	4	5	6	7
64	My financial adviser takes corrective action without delay when I have a complaint.	1	2	3	4	5	6	7
65	My financial adviser's degree of knowledge regarding stock market matters.	1	2	3	4	5	6	7
66	I am satisfied with my financial adviser's effort in ensuring that I understand stock market matters.	1	2	3	4	5	6	7
67	My financial adviser treats my stock market matters with confidentiality.	1	2	3	4	5	6	7
68	I am satisfied with the functionality of the JSE.	1	2	3	4	5	6	7
69	I would recommend stock market participation to family, friends and acquaintances.	1	2	3	4	5	6	7
70	Overall, I am satisfied with the performance of my investment portfolio.	1	2	3	4	5	6	7
I participate in the stock market because....								
71	It offers value-creating investment options.	1	2	3	4	5	6	7
72	It offers investment options that ensure my financial stability.	1	2	3	4	5	6	7
73	It offers investment options that are financially viable in the long run.	1	2	3	4	5	6	7
74	It will ensure the advancement of my well-being.	1	2	3	4	5	6	7

Strongly disagree ----- Strongly agree								
I participate in the stock market because....								
75	Of its innovative financial investment approaches, e.g. user-friendly technology.	1	2	3	4	5	6	7
76	Of its long term orientation regarding financial stability.	1	2	3	4	5	6	7
77	It creates advanced financial investment projects.	1	2	3	4	5	6	7
78	I have accumulated substantial wealth through investments.	1	2	3	4	5	6	7
79	I have money set aside for unseen emergencies.	1	2	3	4	5	6	7
80	I have a positive attitude about its strength and stability.	1	2	3	4	5	6	7
As a consumer of financial products...								
81	I intend to continue investing in shares listed on the stock market.	1	2	3	4	5	6	7
82	I will repurchase listed shares due to the influence of my financial adviser.	1	2	3	4	5	6	7
83	I will repurchase listed shares due to the influence of media sources.	1	2	3	4	5	6	7
84	The wide variety of investment options that are offered by the stock market encourages me to buy more shares.	1	2	3	4	5	6	7
85	The performance of the shares I currently own influences me to buy more shares.	1	2	3	4	5	6	7
86	The performance of other shares influences me to buy more shares.	1	2	3	4	5	6	7
87	The stock market environment influences me to make unplanned share purchases.	1	2	3	4	5	6	7
88	I will continue buying shares on the stock market even if share prices increase.	1	2	3	4	5	6	7
89	I will always make time to buy shares on the stock market.	1	2	3	4	5	6	7
90	Share purchases by other investors encourage me to revisit the stock market to buy more shares.	1	2	3	4	5	6	7

ANNEXURE B

ETHICS CLEARANCE

Chairperson: Research Ethics Committee (Human)
Tel: +27 (0)41 504 2235
charmain.cilliers@mandela.ac.za

Ref: [H19-BES-BMA-013] / Approval]
8 April 2019

Prof NE Mazibuko
Faculty: BES

Dear Prof Mazibuko

CONSUMER BEHAVIOUR REGARDING STOCK MARKET PARTICIPATION IN SOUTH AFRICA

PRP: Prof NE Mazibuko

PI: Mr W Mbewe

Your above-entitled application served at the Research Ethics Committee (Human) (meeting of *27 March 2019*) for approval. The study is classified as a medium risk study. The ethics clearance reference number is **H19-BES-BMA-013** and approval is subject to the following conditions:

1. The immediate completion and return of the attached acknowledgement to Imtiaz.Khan@mandela.ac.za, the date of receipt of such returned acknowledgement determining the final date of approval for the study where after data collection may commence.
2. Approval for data collection is for 1 calendar year from date of receipt of above mentioned acknowledgement.
3. The submission of an annual progress report by the PRP on the data collection activities of the study (form RECH-004 to be made available shortly on Research Ethics Committee (Human) portal) by 15 December this year for studies approved/extended in the period October of the previous year up to and including September of this year, or 15 December next year for studies approved/extended after September this year.
4. In the event of a requirement to extend the period of data collection (i.e. for a period in excess of 1 calendar year from date of approval), completion of an extension request is required (form RECH-005 to be made available shortly on Research Ethics Committee (Human) portal)
5. In the event of any changes made to the study (excluding extension of the study), completion of an amendments form is required (form RECH-006 to be made available shortly on Research Ethics Committee (Human) portal).
6. Immediate submission (and possible discontinuation of the study in the case of serious events) of the relevant report to RECH (form RECH-007 to be made available shortly on Research Ethics Committee (Human) portal) in the event of any unanticipated problems, serious incidents or adverse events observed during the course of the study.

7. Immediate submission of a Study Termination Report to RECH (form RECH-008 to be made available shortly on Research Ethics Committee (Human) portal) upon unexpected closure/termination of study.
8. Immediate submission of a Study Exception Report of RECH (form RECH-009 to be made available shortly on Research Ethics Committee (Human) portal) in the event of any study deviations, violations and/or exceptions.
9. Acknowledgement that the study could be subjected to passive and/or active monitoring without prior notice at the discretion of Research Ethics Committee (Human). 2

Please quote the ethics clearance reference number in all correspondence and enquiries related to the study. For speedy processing of email queries (to be directed to Imtiaz.Khan@mandela.ac.za), it is recommended that the ethics clearance reference number together with an indication of the query appear in the subject line of the email. We wish you well with the study.

Yours sincerely



Prof C Cilliers
Chairperson: Research Ethics Committee (Human)

Cc: Department of Research Capacity Development

Faculty Officer: BES

Appendix 1: Acknowledgement of conditions for ethical approval

ANNEXURE C

LANGUAGE EDITING LETTER

07 January 2019

To Whom it May Concern

I herewith confirm that I have proofread the following thesis:

Title of study: *Consumer Behaviour regarding Stock Market
Participation in South Africa*

Student Name: Wise Mbewe

Student Number: 215117190

Institution: Nelson Mandela University

Qualification: Doctor Philosophiae (Business Management)

I suggested relevant changes, where I saw fit, using the "Track Changes" function in MSWord; the student could thus either accept or reject the suggested changes at his own discretion.

I trust that this is in order.

Kind regards,



Nancy Morkel
MA English (NMMU), PGDHET (UFH), BA Hons English (UPE), BA MCC (UPE)
Editing Methodology (SU), Editing Practice (SU)
nancy.morkel@mandela.ac.za

ANNEXURE D

TURNITIN REPORT

WISE MBEWE TURNITIN

ORIGINALITY REPORT

%26
SIMILARITY INDEX

%24
INTERNET SOURCES

%8
PUBLICATIONS

%2
STUDENT PAPERS

PRIMARY SOURCES

1	hdl.handle.net Internet Source	%12
2	core.ac.uk Internet Source	%1
3	www.saibw.co.za Internet Source	%1
4	uir.unisa.ac.za Internet Source	<%1
5	ibc-conference.com Internet Source	<%1
6	scholar.sun.ac.za Internet Source	<%1
7	www.fccisl.lk Internet Source	<%1
8	repository.up.ac.za Internet Source	<%1
9	"Proceedings of the Second International Conference on the Future of ASEAN (ICoFA)	<%1