Determinants of bank-switching behaviour within a South African context

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Dissertation accepted in fulfilment of the requirements for the degree *Masters of Commerce in Risk Management* at the North-West University

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DECLARATION

I declare that:

" **Determinants of bank switching behaviour in the South African context**"

is my own work, that all the sources used or quoted have been indicated and acknowledged by means of complete references, and that I have not previously submitted this dissertation for a degree at any other university.

……..

LS MUNYAI

May 2020

LETTER FROM THE LANGUAGE EDITOR

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21 May 2020

To whom it may concern

This is to confirm that I, the undersigned, have language edited the **dissertation** of

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for the degree

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entitled:

Determinants of bank-switching behaviour within a South African context

The responsibility of implementing the recommended language changes rests with the author of the document.

Yours truly,

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ABSTRACT

Keywords: bank switching, depositor behaviour, customer satisfaction, risk tolerance, behavioural finance, demographical factors, service quality, South Africa

The easing of regulations in the global banking industry has allowed entry to new financial institutions. This has led to an increase in competition since banks provide nearly identical products or services. Thus, granting bank clients with an opportunity to choose their preferred bank. As banking clients and depositors became more service- and price-conscious in their purchasing behaviour of financial services, their banking behaviour increasingly became prone to change. As a result, bank customers tend to switch banks due to underlying factors influencing their behaviour. On the other hand, banks strive to retain and attract more clients as this may increase future income and reduce the risk of liquidation. In South Africa, with more banking clients switching banks, only a few studies have explored bank switching behaviour. Therefore, against this backdrop a research gap was identified. The primary objective of this study was to examine the determinants of bank switching behaviour of depositors in a South African context.

A quantitative research methodology was adopted to address the research objectives of this study. All South African depositors form part of this study's target population. However, since the South African banking industry is highly concentrated, the sample frame comprised of only the top five banks' depositors. The top five banks were utilised as these virtually represent the entire population in terms of the largest customer database (market share). The top five banks comprise of Absa, First National Bank (FNB), Nedbank, Capitec Bank and Standard Bank. Moreover, a non-probability purposive method was utilised for this study to meet the following sample criteria: living in Gauteng, older than 18 years, has some level of education, and earning an income deposited into a bank account. In this research journey, an exploratory factor analysis (EFA) has been employed to determine the important factors for bank switching behaviour of depositors in Gauteng.

After conducting the EFA, five factors were extracted as a result. Based on their importance, these factors comprised of empathy that had items relating to cognitive and emotional feelings regarding the bank service quality. Bank switching, which had items relating to the reluctance of depositors to switch from their current bank to another. Reliability had items relating to accurate and timeous bank service performance. Responsiveness had items relating to skills and willingness to assist bank clients. The last factor, tangibility had items relating to tangibles

such as technology, appearance, and physical facilities that can influence bank switching behaviour of depositors.

All the factors indicated internal reliability, suggesting practical significance. The findings from this study have also shown that a positive relationship exists between bank perception of depositors and bank switching. Hence, bank perception of depositors influences their likelihood to switch banks. Age was the only demographical factor influencing the likelihood of bank switching. Education levels had a negative relationship with risk tolerance, implying that a higher level of education leads to lower levels of risk tolerance. On the other hand, behavioural finance biases such as representativeness, anchoring, gambler's fallacy and overconfidence had a combination of negative and positive relationships with the demographical variables of the sample. The significant factors influencing bank switching behaviour of depositors include reliability of timeous and accurate bank service performance, customer satisfaction, and representativeness and loss aversion bias. Customer satisfaction was found to be the most contributing factor influencing bank switching behaviour of depositors.

Several banks are attempting to find solutions and strategies on how to offer better quality services competitively to satisfy and retain their customers. Therefore, banks will benefit from the empirical findings of this study since they provide banks with an understanding of the factors causing the switching behaviour of depositors. Hence, banks can incorporate customer satisfaction-oriented strategies for customer retention to realise higher future profits and avoid liquidation problems. Banks will be able to reduce costs when they retain and expand their customer database.

Regarding the empirical research findings of this study, recommendations and managerial implications were provided. Limitations form part of any research study and this study is not an exception. Future researchers can therefore use this study as a foundation to take on a new direction. Although the sample size of this study meets the sample adequacy for the nature of this study, it is recommended that future studies expand the sample size and consider the cultural and demographic implications of a particular region. As this study merely focused on Gauteng depositors, future researchers can investigate the changes in the significance of the determinants for bank switching behaviour.

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LIST OF ABBREVIATIONS

Absa	Amalgamated Banks of South Africa
ANOVA	Analysis of variance
BASA	Banking Association South Africa
BCBS	Basel Committee on Banking Supervision
BSD	Basel Supervision Department
CSI	Customer satisfaction index
EFA	Exploratory factor analysis
FAIS	Financial Advisory and Intermediary Services Act
FICA	Financial Intelligence Centre Act
FSAP	Financial Sector Assessment Program
FSCA	Financial Sector Conduct Authority
FNB	First National Bank
FSB	Financial services board
FSR Act	Financial Sector Regulation Act
IMF	International Monetary Fund
IoDSA	Institute of Directors South Africa
KMO	Kaiser-Myer-Olkin
KPMG	Klynveld Peat Marwick Goerdeler
PA	Prudential Authority
PCA	Principal component analysis
PWC	Price Waterhouse Coopers
RWA	Risk-Weighted Assets
SARB	South African Reserve Bank
SCF	Survey of consumer finance

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

The prominence of customer switching originated from the 1980s deregulation of the global banking industry (Clemes *et al*., 2007:50). Hence, a rise in competition has since emerged in the banking industry as it became easier for new entrants, such as banks and non-bank financial institutions, to enter the market (Clemes *et al*., 2007:50). In the 21st century, new technological advances have led to a dynamic, transformed and highly competitive banking industry environment (Beerli *et al*., 2004:253). Banks are increasingly driven by customer-oriented principles rather than traditional product-oriented banks (Beerli *et al*., 2004:253). High-quality marketing services can be implemented through customer orientation behaviour (Gilmore, 1997:186). Buying behaviours of consumers depict more service and price consciousness due to new technological advances and deregulation (Beckett *et al*., 2000:15).

In the early 1980s, the South African banking industry was strictly regulated, however, financial liberalisation programmes were implemented, which created opportunities for customers to access more diversified larger banks domestically (Singleton & Verhoef, 2010:537). The financial banking sector of South Africa is found to be concentrated (Okeahalam, 2007). The main top five larger banks in South Africa based on market share are Standard Bank, Amalgamated Banks of South Africa, Capitec Bank, First National Bank as well as Nedbank. Otto and Henderson (2005) provides that 90 percent of private assets of banks in the country are held by these banks. New technological advances have increased competition within the banking sector. Okeahalam (2002) maintains that South African banks are slowly but surely moving towards efficiency. This provides customers with a choice of switching amongst the affordable banks that provide good quality of services and have a good reputation.

According to Bansal *et al*. (2005:96), satisfaction and quality are amongst the factors that might have an influence on customer bank switching behaviour. Thus, influencing financial decisions of customers. Financial decisions require individuals to consider their tolerance of risk. Dickason and Ferreira (2018:1) define risk tolerance as an extent of risk an individual is willing to accept regarding financial decision-making. It is a significant concept when financial analysts are assisting individuals in making future financial decisions (Fan & Xiao, 2006:55). Roszkowski (1993) maintains that in the past, risk tolerance has been studied extensively by multiple fields such as finance, psychology, management science as well as economics. Cutler

(1995:33) is of the view that age is one of the factors that influence risk tolerance. A study of both young and old individuals was conducted by Irwin (1993) to determine which age group is more risk tolerant than the other. Older individuals have been found to have an insufficient period of time to completely recover from their poor financial decisions and losses acquired. In contrary, Blume (1978), Coet and McDermott, and Yip (2000:4) are of the view that the level of risk an individual is willing to take is determined by gender. There is a display of lack of confidence in the analysis abilities and decision-making skills of non-Whites (MacCrimmon & Wehrung, 1986:155; Zhong & Xiao, 1995:108). However, interestingly, this is contrary to a study conducted by Leigh (1986:17), which indicated that Whites were less risk tolerant than non-Whites. Individuals that earn high annual incomes are generally found to be more risk tolerant compared to low annual income earning individuals (Irwin, 1993). Various scholars such as Baker and Haslem (1974:469), MacCrimmon and Wehrung (1986:200), Sung and Hanna (1996), and Ardehali *et al.* (2005:513) have investigated the relationship between education and risk tolerance. A consensus was reached by these researchers that better risk assessment is facilitated by individuals with higher levels of education than those individuals with lower education levels. This study focuses on determining the levels of risk tolerance, perception and switching behaviour of the South African depositors, therefore, the influence of demographical factors will be significant.

Recent technological advancements in the banking industry have heightened the need for customer retention. Financial institutions have increasingly provided their customers with remote access to services through online banking (Bauer & Hein, 2006:1713). Best performing banks hold a notion that they heavily rely on customers since they are the reason for doing business (Mohsan *et al*., 2011). In South Africa, a study by Singh (2004) indicates that online banking was utilised more by males compared to females, whereby security issues were under scrutiny by non-online bankers. The influence of demographical factors will form a significant part in determining the levels of risk tolerance of South African depositors. A number of financial institutions are seeking alternative approaches relating to cost reduction, customer satisfaction, differentiation of products and services as well as improving efficiency (Maduku, 2013). This can be seen as a customer retention strategy with the aim of mitigating risks and maximising revenues. The bank switching behaviour of customers from one financial institution to another is not limited to market circumstances, as comprehensive models exist in some literature (Bansal *et al*., 2005:97).

1.2 PROBLEM STATEMENT

Realisation of future profit for any company is influenced by customer switching behaviour (Ghouri *et al.*, 2010:96). Hence, customer bank switching can reduce the income of one bank and increase the income of another bank, creating risk for banks as well as liquidation problems. Customers incur costs when switching between financial institutions. Kim *et al*. (2003) define switching costs as costs that prevail to agents of the economy due to the change of a supplier. Long-term relationships and customer loyalty gain are arguably priorities for many business organisations (Barroso & Picon, 2012). Quality of service is frequently perceived as an essential prerequisite for sustainability and establishment of satisfying relationships with customers that are valued (Lassar *et al*., 2000:244). Thus, attaining value perception of customers' insight as a foundation for service development and quality improvements is through learning from their switching behaviour and complaints (Edvardsson & Roos, 2003).

It can unlikely be argued that customer satisfaction is crucial for loyalty of customers in banking (Bick *et al*., 2004). Nonetheless, customer orientation and good quality of service are imperative for customer satisfaction achievement. In the fast-growing digital age, banks need to be highly competitive to retain customers and manage risks. Delivering offerings that comprise of value or competitive benefits to a customer is vital for effective competency of an organisation in a certain market (Devlin, 2000).

Although bank switching behaviour has been widely studied, past research studies investigating the determinants of depositors' bank switching behaviour are limited, especially in South Africa. Ferreira (2018) maintains that past studies mainly focused on electronic banking and deposit insurance. Hence, the aim of this study is to examine the determinant factors of bank switching behaviour to contribute more insight into limited studies of customer bank switching behaviour in South Africa.

1.3 OBJECTIVES OF THE STUDY

The following objectives were identified and outlined for the study.

1.3.1 Primary objective

The primary objective of the study was to examine the determinant factors for bank switching behaviour in Gauteng, South Africa.

1.3.2 Theoretical objectives

- Provide a comprehensive review of the landscape, history, purpose, regulations and structure of the banking sector in South Africa;
- Discuss the risks within the banking sector,
- Describe the challenges faced by the banks in the digitalisation era, and
- Provide a discussion of bank switching.

1.3.3 Empirical objectives

Empirical objectives were formulated in accordance with the primary objectives as the following:

- Establish service quality factors influencing bank switching behaviour;
- Determine how bank reputation influences bank switching behaviour of depositors;
- Determine how the demographical characteristics influences switching behaviour of depositors;
- Determine risk tolerance level and influence of demographic information;
- Determine how demographical information influences behavioural finance; and
- Determine the most significant determinant influencing bank switching behaviour of depositors.

1.4 RESEARCH DESIGN AND METHODOLOGY

This study provides a literature review of prior and recent studies on the field of bank switching behaviour determinants as well as an empirical study. This is based on quantitative research by using primary data.

1.4.1 Literature review

The study's theoretical background and the literature review was compiled by accessing books, journal articles, theses as well as other relevant sources to explain the significance of bank switching behaviour of depositors.

1.4.2 Empirical study

This study implemented a quantitative research approach by means of a survey. Furthermore, a positivistic research paradigm was followed since the study aims to challenge the traditional notion of "the absolute truth of knowledge" (Henning *et al.*, 2004:17). The general objective

of a positivist researcher is to test theory and try to enhance the predictive understanding of the phenomena in question (McKinney, 1966:68; Myers, 2013).

1.4.2.1 Research population and sample frame

The South African bank depositors in Gauteng are the main population target for this study, since it is an imperative group for research. The sample frame includes individuals banking with the top five larger banks in South Africa, namely First National Bank, Amalgamated Banks of South Africa, Nedbank, Capitec Bank and Standard Bank.

1.4.2.2 Sample size and method

The study used a sample size of 324 South African depositors. The sample was selected using purposeful sampling. The sample size is efficient for the analysis of the study.

1.4.3 Measured instrument

The study utilised quantitative primary data whereby the participants completed a self-administered questionnaire comprising of seven sections. A cover page was used for explaining the significance of the study to the participants as well as their participation. The questionnaire comprised of the following sections: (A) demographic information, (B) customer satisfaction, (C) perception, (D) behavioural finance, (E) risk tolerance, (F) price and (G) involuntary switching.

Section A included various demographic questions such as gender, age, current bank, income of depositors and level of education. Demographics were included criteria for this study in order to capture the correct sample. Depositors with more than five years' banking experience were asked to complete the questionnaire, whereby their salary gets deposited into their bank account. Hence, age and income are important factors. Previous studies by Ferreira (2018), Dickason (2017), Redda (2015) and Grable (1999) have all found demographics to be contributing factors to stakeholder's behaviour in the financial sector. The education level was also asked because depositors need to have a certain level of financial knowledge when taking out a savings account. Researchers such as Irwin (1993) and Grable (1999) found males, youngsters, whites, individuals with higher income and education levels to have a higher risk tolerance than females, older, African and lower education and income level individuals. There are numerous factors that affect a depositor's level of risk tolerance such as religion, mood, demographics, ethnicity and employment, which are represented by Table 1.1.

Table 1.1: Risk tolerance influential factors

Characteristics of individuals	Tolerance assumption
Marital status	Single
Level of education	Bachelor's degree or higher
Gender	Male
Ethnicity	Non-Hispanic white
Net worth	High
Financial satisfaction	Extraordinary satisfaction level
Employment status	Employed full-time
Homeownership	Titleholder of home property
Income	High income level
Household size	Great number of members
Income changeability	Stable and predictable income
Income type	Entrepreneur
Personality type	Type A
Age group	Young individuals
Marital/gender interaction	Single male
Mood	Happy
Level of financial knowledge	Extraordinary knowledge level
Work	Professional
Locus of control	Internal locus
Sensation level	Great sensation
Level of self-esteem	Great self-esteem
Religion	Less religiosity

Source: Irwin (1993)

It is important to see whether these demographics will affect bank depositors risk tolerance levels and whether they will switch from one bank to another. Section B used a SERVPERF scale with 34 items to measure customer satisfaction. Section C included events that measure customer perception of the bank. Section D included behavioural finance questions that will determine switching behaviour of depositors. Section E used two validated risk tolerance measures including the survey of consumer finance (SCF) to capture risk attitude as well as the risk tolerance of depositors. Section F included a three-item measurement of price factors that influence customer bank switching behaviour. Finally, Section G included three items by

Clemes *et al*. (2007:59) with a Cronbach alpha of 0.634 to measure involuntary bank switching of customers. The information will indicate the influence of determinant factors for depositors' bank switching behaviour.

1.4.3.1 Behavioural finance

A nine-item behavioural finance scale, which will include statements that coherently convey the biases on which depositors base their financial decisions. A six-point Likert scale (1 = strongly disagree, 6 = strongly agree) will be used for depositors to relate their decisions to withdraw based on behavioural finance biases. Since this was a self-constructed scale by Ferreira (2018) based on literature, the internal consistency reliability needs to be confirmed. The behavioural bias scale has a Cronbach alpha value of 0.61.

1.4.3.2 Survey of Consumer Finance (SCF)

Financial risk tolerance variables are not fully incorporated in the SCF (four-item scale) but for experience and investment choice attitudes, it is a comprehensive measure (Grable & Lytton, 2001:43). The SCF scale is the only single measure of risk tolerance.

1.4.3.3 SERVPERF scale

The performance-based SERVPERF scale will be used as a measure to gain quality of service insights from the depositors' perspectives as well as to enhance customer satisfaction understanding of determinants. The SERVPERF scale is perceived to be a better method to measure the quality of service (Cronin & Taylor, 1992). Furthermore, Cronin and Taylor (1992) maintains that the reliability of the scale varies between 0.884 and 0.964 Cronbach alpha, depending on the type of industry and exhibits both discriminant and convergent validity.

1.4.4 Statistical analysis

This is a quantitative study, which will use Statistical Package for Social Sciences (SPSS), version 25, to analyse the collected primary data. The statistical methods that follow will be used for the captured data:

Descriptive analysis based on the participants' demographics, to determine the depositors' likelihood to withdraw an amount when faced with reputational risk, descriptive statistics will be used. Unclear relationships that exist from the key determinant factors (demographics, customer satisfaction, reputation, risk tolerance and price) in the questionnaire will be detected by means of a cross-tabulations test. Analysis of correlation will be conducted to measure the

relationship between the level of depositor satisfaction and the likelihood to withdraw and whether the interdependence is strong or weak. Thus, reliability tests will be conducted to determine the bank switching scales' reliability.

Regression and factor analysis will be used to identify the factors that drive the behaviour of depositors to switch banks.

1.5 CONTRIBUTION OF THE RESEARCH

As bank customers became more service- and price-conscience, their banking behaviours are increasingly prone to change, thus, there is a rise in customer bank switching behaviour. A number of banks are attempting to find solutions and strategies on how to offer better quality services competitively to satisfy and retain their customers. Research on influential determinant factors for depositors' bank switching is limited in South Africa, thus the study's purpose is to provide a significant contribution towards empirical analysis and the literature. This will assist banks to understand how to manage risks better and become more aware of the customer bank switching behaviour in order to incorporate it in their customer retention strategies for realisation of future revenue. Banks will also be able to increase their customer database (market share) as well as avoid liquidation problems.

1.6 CHAPTER CLASSIFICATION

This study comprises of the following chapters.

Chapter 1: Introduction and background. Chapter 1 introduces the topic of the study as well as the background, objectives, problem statement and methodology to provide the direction of the study.

Chapter 2: The South African banking industry. This chapter provides the nature of banks and types of risk faced by banks, explain the South African banking structure and contemporary regulations. Furthermore, the chapter discusses the challenges faced by banks in the digitalisation era.

Chapter 3: Literature review. This chapter provides the theoretical background of the determinant factors for bank switching behaviour from the most important past and recent studies. The influence of customer satisfaction on bank switching behaviour was examined and

also dimensions of service quality. Lastly, the chapter presents a hypothesised framework for bank switching behaviour.

Chapter 4: Research design and methodology. This chapter comprises of research method information as well as techniques for collection of data, including sample choice and size of the sample.

Chapter 5: Statistical analysis and discussion of results. Chapter 5 presents an empirical report of the quantitative analysis conducted in the research study to determine the determinants of bank switching behaviour of depositors. A descriptive analysis of the findings and the demographic information is provided.

Chapter 6: Conclusion and recommendations. This chapter provides a summary of the achieved empirical and theoretical objectives. Moreover, the chapter provides recommendations for future studies as well as limitations to be considered.

CHAPTER 2: THE SOUTH AFRICAN BANKING INDUSTRY

2.1 INTRODUCTION

The formation and history of the banking industry in South Africa can be traced back to the domination of the few major imperial banks (Mckenzie & Mohamed, 2016:12). This chapter aims to achieve the following theoretical objectives:

- Provide a comprehensive review of the landscape, history, purpose, regulations and structure of the banking sector in South Africa;
- Discuss the risks within the banking sector,
- Describe the challenges faced by the banks in the digitalisation era, and
- Provide a discussion of bank switching.

In recent years, the main features of the South African banking sector are depicted through the high concentration and large size. The banking sector can be regarded as the backbone of the economy because of the key role it plays within the financial system of a country (Bollard *et al*., 2011:3). This is evident based on the massive contribution financial institutions make towards financial stability and economic growth of a nation. Thus, financial institutions are fundamental for strengthening the functioning of the economy (Banking Association South Africa, 2014:2).

Efficient functioning of the financial system requires prudent policies to be set in place for regulation and supervision of banks, as banks could fail if they are not appropriately supervised since they operate within a risky business environment. As technology has become the centre of doing business globally. Globalisation has created numerous opportunities for banking. Nonetheless, these opportunities come with risks that financial institutions need to manage. The banking regulatory practices and risk management approaches are likely to be affected by these emerging challenges within the financial service sector (Tursoy, 2018:8).

The first section of Chapter 2 expands on the banks' nature by defining a bank and its intermediary purpose. Secondly, it provides a background of the South African banking industry and its current state, followed by the risks that affect the functioning of the banks. Thirdly, it contextualises the banking regulation as it forms a major part of the functioning of financial institutions. Furthermore, it gives an overview of the inevitable technological evolving environment that is taking over the way customers virtually bank nowadays,

worldwide. The last section will mainly focus on the challenges face by banks in the digitalisation era followed by an overview bank switching.

2.2 THE LANDSCAPE OF BANKING

The banking sector of South Africa has been faced with great volatility and changes, attracting major interest internationally with numerous foreign banks acquiring shares in big banks as well as establishing their presence in South Africa (BASA, 2014:1). The changes within the banking sector include product offering and regulatory framework (BASA, 2014:1). As a result, competition has increased although the banking sector is still characterised by concentration (Verhoef, 2009:163). There can be a degree of uncertainty within a business environment.

South African banks operate in the environment of risky business; thus, encounter various types of financial risks in their procedure of providing financial services (Santomero, 1997:2). The ability of a bank to measure, manage as well as comprehensively drive risks for strategic positioning seems to be a key parameter (Stavroula, 2009:13). In the past, South African banks focused more on products to acquire greater market share and growth (Strauss & Mfongeh, 2016:62). However, these banks are continuously going through remarkable changes owing to the aftermath of the global financial crisis. These changes include a focus on risk management as a fundamental aspect of banking. Thus, banking is seen as risk management with the function of ensuring provision against numerous sources by managing and diversifying risk (Hõbe, 2015:146). Banks play a significant and key role within the financial system of an economy; their intermediary function allows effective use of funds from savers to borrowers and it brings financial stability (Mishra, 2015:20).

2.2.1 Defining a bank

The term bank originates from the French word *banque* or from the Italian word *banca*, which both refer to money exchange table or "bench" (Ozsoy & Sayfullin, 2006:75). Various coins from different countries were previously exhibited in large quantities on tables by European money lenders for the purpose of exchanging or lending (Solbakk *et al*., 2009:116).

A bank is defined in terms of its function to collect public deposits and lend these deposits for the economic development of trade, industry, commerce and agriculture (Shareef *et al.*, 2017:428). The provision of loans and deposits distinguishes commercial banks from various types of financial institutions (Heffernan, 2005:1). Bollard *et al*. (2011:3) indicate that banks

contribute to the improvement of the standard of living and economic development, through the provision of various services across the economy. According to Ozsoy and Sayfullin (2006:76) and Bollard *et al*. (2011:3), bank services comprise the following functions:

- Facilitation of trade through the settlement and clearing systems;
- Safekeeping and depositing;
- Financial resources channelling between the borrowers and savers; and
- Various products for dealing with uncertainty and risk.

In principle, banks can provide these functions or they can be provided through the capital markets directly, or other financial institutions (Bollard *et al*., 2011:3). The existence of financial intermediaries and banks can be an efficient response to the cost of information (Daniels, 2010:836).

2.3 THE MAIN PURPOSE OF BANKS

Banks play a crucial role within the financial sector and towards the growth of the economy (Bollard *et al*., 2011:2). They came into existence for their commercial purpose of channelling funds (Cetorelli *et al*., 2012:1). Thus, intermediation of funds between the economic surplus unit and economic deficit unit is at the centre of the banking role (Heffernan, 2005:1). Falkena *et al*. (2004:8) provides that banks create facilities of risk sharing to assist the economic units to effectively manage uncertainty. The financial services provided by banks promote efficiency for the whole economy. Table 2.1 represents the services that form part of the functions of the bank.

Table 2.1: Functions of the bank

General	
Function	**Purpose**
Receiving deposits	Deposit collection from the public in various forms of accounts (savings, current and term deposits).
Loan accommodation and advances	Lending working capital to entrepreneurs to start-up businesses and also revive old industries.
Foreign trade	Expediting foreign trade and foreign exchange business (imports and exports).
Ease of investment	Creation of conducive environment for investment in the economy.
Capital formation	Provision of financial assistance for capital formation in the commerce, trade and industry for economic development.

Public Utility	
Safekeeping of valuables	Provide customers with locker services for safekeeping (e.g. shares, securities, documents etc.).
Money remittance	Remittance of funds to the general public.
Assist customers with travelling abroad	Issue traveller's cheques, cash and drafts in customer's favour.
Advisory services	Provides customers with valuable advice on business growth, different products and feasibility of industry.
Agency	
Trustee	Acts on behalf of customers as a trustee.
Payment and collection	Engages in payment and collection of the bill of exchange, cheque, insurance etc. on clients' behalf.
Shares and securities	Responsible for sale and purchase of securities and sale on customer's behalf.
Confidentiality	Maintains secrecy for customers

Source: Falkena *et al*. (2004); Ozsoy and Sayfullin (2006)

2.3.1 Financial intermediation

Banks are regarded as intermediaries like any other financial institutions (non-bank) that collect deposits and lend them out to the public. Financial intermediation is a pivotal activity within an economy since it allows a flow of funds from individuals who may currently not utilise the funds to those individuals who want to use the funds (Redda, 2015:18; Ferreira, 2018:15). This helps to stimulate a more dynamic and efficient economy (Mishkin, 1995:10). Financial intermediation exerts corporate control, mobilises savings, manages risk, conducts exchanges and lowers the research cost of potential investments (Levine *et al*., 2000:37).

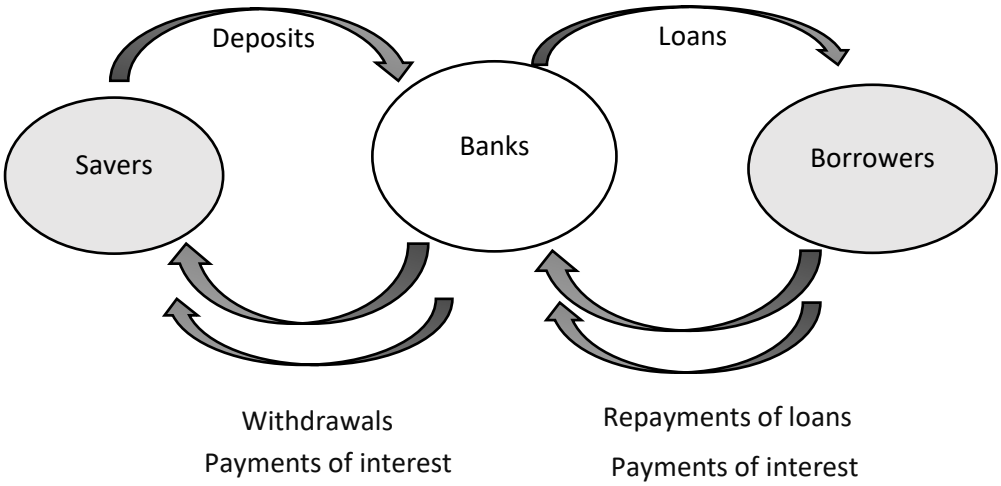
Faster economic growth and efficient resource allocation are induced by financial intermediation processes, which reduce transaction costs and ameliorates information (Levine *et al*., 2000:62) and, thus, play an integral and valuable part in the development of the economy (Ismail, 2010:11). Banks facilitate risk management and mitigate liquidity risk of investors and borrowers (Allen & Ndikumana, 2000:134). Banks eliminate risk through investing in short-term assets, which are more liquid than long-term assets (Allen & Santomero, 2001:287). Short-term assets consist of a minimal period to maturity, whereby long-term assets involve a more considerable amount of time for maturity transformation (Pozsar *et al.*, 2010:49). Financial intermediation has evolved to channel deposit savings from less productive short-term assets into more productive long-term assets (Bencivenga & Smith, 1991).

Banks have the power to create wealth in the economy through collective systemic interactions (Werner, 2014:2). Wealth is created through bank loans to borrowers (McLeay *et al*., 2014:5).

Banks receive interest income from making loans (assets), however, they are obliged to pay interest expense for deposits (liabilities). In this way, banks rely more on higher rates of interest from their loans, than the interest expense it pays on customer deposits (McLeay *et al.*, 2014:5).

According to Ferreira (2018:16), two functions, namely depository function and liquidity function prevail as the reasons why customers utilise bank facilities. The reason for the depository function is to use simple bank payment facilities, while the liquidity function is because of the customer's current and future expenditure needs, hence the need for liquid funds that cannot be temporarily invested (Ferreira, 2018:16). The bank's financial services assist customers with safekeeping their funds and provides a convenient way for credit purchases in the market. Banks and other financial intermediaries are the reason for the functioning of financial markets (Redda, 2015:19). Thus, the circulation of funds between savers and borrowers would be improbable in their absence since they play a pivotal role in facilitating and channelling funds within the economy (Redda, 2015:19). Financial intermediation process of the bank, as well as the interest income and interest payment, are depicted in Figure 2.1.

Figure 2.1: Financial intermediation process



Source: Shin (2009)

2.4 BACKGROUND OF SOUTH AFRICAN BANKING INDUSTRY

Lombaard Bank was the first South African bank to be established in 1793 in Cape Town and began its business operations on 23 April (SARB, 2011:3). In 1842, the bank was closed due to its failure to meet the banking requirements, which led to the establishment of more commercial banks (SARB, 2011:3). According to Van Niekerk (2016:131), 28 banks were established by the year 1861.

British banks dominated the financial sector in South Africa from the 1860s; this had an impact on determining the financial structure within the economy (Mckenzie, 2016:40). The British banks` domination was finally complete when the National Bank was acquired by Barclays Bank in 1926 (Verhoef, 2009:158). In 1934, Volkskas Bank was established and also an expansion of the Netherlands Bank of South Africa took place. Barclays Bank and Standard Bank dominated the banking sector until the 1970s (Verhoef, 2009:159). In addition, Verhoef (2009:159) points out that 90 percent of the capital was owned by both of these banks. The prominence of these banks was because of British interests in South Africa, their operations and growth stem from the gold and diamond mining industry (Mckenzie, 2016:40).

The stock market development, as well as other financial institutions, followed similar paths. The Johannesburg Stock Exchange (JSE) was formed in 1887 after the gold discovery, to facilitate trade, as well as the capital need to fund the mining sector investments (Hassan, 2013:2). Since the 19th century, the British, US and European financial institutions were linked to the mining industry in South Africa (Mckenzie & Mohamed., 2016:12). In the aftermath of the Great War (World War I), economic and financial turmoil demonstrated a need for the establishment of a central bank (SARB, 2011:3). By 1921, the South African Reserve Bank was established as the central bank in terms of the Banking and Currency Act (Act 31 of 1920) (SARB, 2011:3). The first proposal for the establishment of the central bank can be traced back as far as 1879. Commercial banks in South Africa used to issue their printed banknotes in terms of the gold standard and these banknotes were used for gold exchange (SARB, 2011:3). Bank legislation was introduced since none existed after the country unified in 1910 (SARB, 2011:5). This was also compelled by commercial banks that requested to be released from the gold exchange obligation.

Although there have been many changes in the banking sector of South Africa in the past, a large number of foreign banks acquired sizeable stakes in four big banks, which led to new branches being launched in the country (Ifeacho & Ngalawa, 2014:1184). The banks include Nedbank, Standard Bank, Absa and First National Bank (FNB). Ferreira (2018:21) states that during South Africa's sanctioning from global markets in the 1990s, the banking sector was dominated by these big four banks. At that time, over 84 percent of total assets in the banking system were owned by these four banks (Mckenzie, 2016:39).

2.5. SOUTH AFRICAN BANKING SECTOR STRUCTURE

The South African banks operate in an environment characterised by concentration (Verhoef, 2009:163). The banking industry structure originates from the domination of imperial banks (Mckenzie & Mohamed, 2016:12).

2.5.1 Concentration

The banking system of South Africa is effectively regulated and well developed. It comprises of a central bank (South African Reserve Bank), a few investment institutions, large banks, savings and lending organisations, as well as a handful of small banks (SARB, 2017). One of the most prominent features of the South African banking sector is its concentration and large size (Mckenzie, 2016:38). It has been concentrated since the entrance of the imperial banks in the market during the 19th century (Verhoef, 2009:163). Concentration and competition were influenced by the domination of a few big banks historical legacy and restrictions on banking operations (Verhoef, 2009:180).

In theory, the high concentration would imply that there is a low level of competition. Although the South African banking sector is characterised by concentration, the level of competition is increasing due to new entrants and other financial institutions offering financial services (BASA, 2014:1). Out of 138 nations, South Africa ranked 11th in terms of financial market development when compared globally (World Bank, 2018). The relatively concentrated nature of the South African banking sector has raised some concerns for regulatory authorities. The banking sector market was found to be oligopolistic in terms of price competition avoidance. Complex pricing structures were prevalent and when combined with the banking services network nature it ties customers within specific financial service providers (Simatele, 2015:830).

Although the banking sector is concentrated, Capitec Bank has managed to acquire a stake in the market, which sums up the five major banks. Capitec Bank has grown the most in the low-income market segment, whereby in 2013 it had 16.5 percent market share by living standard measure band (Makhaya & Nhundu, 2016:119). Nonetheless, lack of competition in the financial sector can be the reason for the under-provision within banking as well as other non-competitive behaviours such as high bank charges (Simatele, 2015:826). This is critical to the South African banking sector, as reported by SARB (2017), that the major five banks account for approximately 99 percent of market share. Competition within banking drives strong

effective markets, enhances productivity, enhances innovation and leads to efficient resource allocation (Moyo, 2018:1).

2.5.2 Efficiency and competition

In South Africa, inequality is a focal point in the pursuit of profitability targets and efficiency by the banking sector (Strauss, 2016:175). The competitive and efficient banking sector plays a pivotal role in a country's well-being, as it helps with the facilitation and channelling of funds from economic surplus to economic deficit units; hence, stimulating optimal resource allocation and savings (Moyo, 2015:2). An effective banking sector encourages growth within the economy through risk diversification and efficient resource allocation (Simbanegavi *et al*., 2015:308).

The linkage between efficiency and competition is important to the South African economy since the banking sector is dominated by a few major banks (Moyo, 2015:2). In the past, inefficiency in the banking sector was caused by a lack of competition in the local market, rather than exclusion from the international markets (Canals, 1993). Nonetheless, Okeahalam (2007:670) is of the view that South African banks are slowly moving towards efficiency. Recently, findings by Simatele (2015) have indicated that there has been an increase in the level of competition over time. However, market allocation and price-fixing allegations within the banking sector emerged in 2017, raising the question of banking practices (Moyo, 2015:2). South African banks tend to collude in excessive competitive levels of price settings and moving towards oligopolistic behaviour (Strauss & Mfongeh, 2016:63).

In a competitive market, consumers are likely to enjoy the benefits of efficiency gains, whereby efficiency gains are accrued by shareholders in a less competitive market (Falkena, 2004:36). Lack of competition can thus mean that savings-cost is not passed on to consumers (Strauss, 2016:175). Therefore, dominant banks may improve their income and profitability through unfair practices (Strauss, 2016:175).

The South African banking sector is comprised of a large percent of foreign banks (Rashid, 2011). The SARB (2017) states that there are 64 financial institutions and virtually half of the institutions are foreign banks, with only 16 percent of the banks being controlled locally. Table 2.2 represents all the banks that operate within the local economy of South Africa.

Table 2.2: List of banks in South Africa

Category	Bank
Banks in Liquidation	Islamic Bank Limited and Regal Treasury Private Bank Limited
Locally Controlled Banks	Amalgamated Banks of South Africa, African Bank Limited, Bidvest Bank Limited, Discovery Bank Limited, FirstRand Bank Limited, Capitec Bank Limited, Grindrod Bank Limited, Investec Bank Limited, Nedbank Limited, Sasfin Bank Limited, The Standard Bank of South Africa Limited, UBANK Limited, Tyme Bank and GroBank.
Mutual Banks	Bank Zero Mutual Bank, Finbond Mutual Bank, Grahamstown Building Society Mutual Bank, Venda Building Society Mutual Bank
Branches of Foreign Banks	Bank of Baroda, Bank of China Limited (Johannesburg Branch), Bank of India, Bank of Taiwan South Africa Bran, BNP Paribus SA, Canara Bank, China Construction Bank Corporation – (Johannesburg Branch), Citibank N.A, Deutsche Bank AG, HSBC Bank plc (Johannesburg Branch), Icici Bank Limited, JPMorgan Chase Bank, N.A.(Johannesburg Branch), Societe Generale, Standard Charted Bank (Johannesburg Branch), State Bank of India

Source: SARB (2019)

2.5.3 Technological innovation

Globally, technological advancement within the banking sector has become pivotal for delivering financial services. This has brought some change in customer services, there has been a shift from the traditional approach to the digital mode (O`Cass & Grace, 2004:266). According to KPMG report (2018:10), in the past decade there has been an unprecedented innovation within the banking industry, from new propositions and customer channels to emerging back-office automation and technologies. With technology as a driver of service innovation, this compels banks to adopt these services and not promote complex products to perpetuate financial divisions (Maumbe, 2006:77). South African financial institutions are active participants in providing digitalised financial services to their customers (Singh, 2004).

Technological innovation in the banking sector has led to enhanced cost advantages and also the ability to track customers (Booth, 2007). This explains the outward global expansion of banks in South Africa after market deregulation (Singleton & Verhoef, 2010:539). Moreover, foreign direct investment (FDI) played a key role in helping South Africa to establish its presence internationally. The banking sector was led by Nedbank in terms of product development and innovation for trade as well as other financial business, thus providing the economy with a driven advantage internationally (Singleton & Verhoef, 2010:554).

Over the past decade, E-commerce has expanded tremendously in South Africa. This was fuelled by supply chain management, online procurement benefits of cost-efficiency as well as enhanced customer relationships (Jobodwana, 2009:290). The use of digitisation in the highly concentrated South African banking sector has prompted competency amongst the major banks, leading to rapid product innovation. First National Bank (FNB) is one of the leading digital innovative banks (FNB, 2017:8). Nonetheless, numerous studies have found that digitalisation in banking has brought some challenges in emerging economies despite the plethora of benefits for customers (Aladwani, 2001; Hernández-Murillo *et al*., 2010; Chavan, 2013). The adoption of online banking has led customers to enjoy benefits such as service quality, time-saving and lower banking fees (Yu & Guo, 2008:9). Despite the benefits, banks in South Africa are faced with the challenge of encouraging the use of online banking by customers (Singh, 2004:193).

The pace of customers adopting online banking practices is perceived to be hindering digital innovation to achieve its full potential successfully (Masocha *et al*., 2011:1858). Online banking is still not beneficial to rural communities (Mlitwa & Tshetsha, 2012:369). It has conclusively been shown that inflexibility of customers to new technology, computer literacy, constructive usage of online services and low levels of education hinder e-banking accessibility in South African rural communities (Masocha, 2011:1858). Mlitwa and Tshetsha (2012:369) points out that banks can overcome this challenge through embarking on awareness and educational campaigns to instil the efficiency of online banking in rural communities. Banks need to find solutions to these challenges if they are planning on being actively involved in the new phase of developmental innovation (KPMG, 2018:37). The South African banking industry consists of a number of financial services providers. Table 2.3 represents the different types of banks that exist as well as their area of expertise. However, the main focus of the study relies on deposit-taking institutions such as retail banks, saving banks and commercial banks.

Table 2.3: Types of banks

Bank type	Area of expertise
Retail banks	Offer services to small businesses and customers from different branches.
Commercial banks	Offer investment basic services, offer loans and accept deposits.
Investment banks	Underwrites security issues to corporate customers.
Central banks	Supervises banks and manages economic activity.

Credit unions	Offer services to most commercial and retail banks.
Mutual banks	Accept deposits and offer share dividends to customers.
Saving and loan banks	Accept deposits from customers and offer loans to other customers.
Virtual banks	Offer online banking services to customers.
Mortgage banks	Offer mortgage loans only to customers.
Banker's bank	Offers security trading as well as clearing of a cheque to other banks.
Cooperative banks	Assist farmers with finance to acquire equipment or goods.
Merchant banks	Offer equity and debt services to corporate customers.

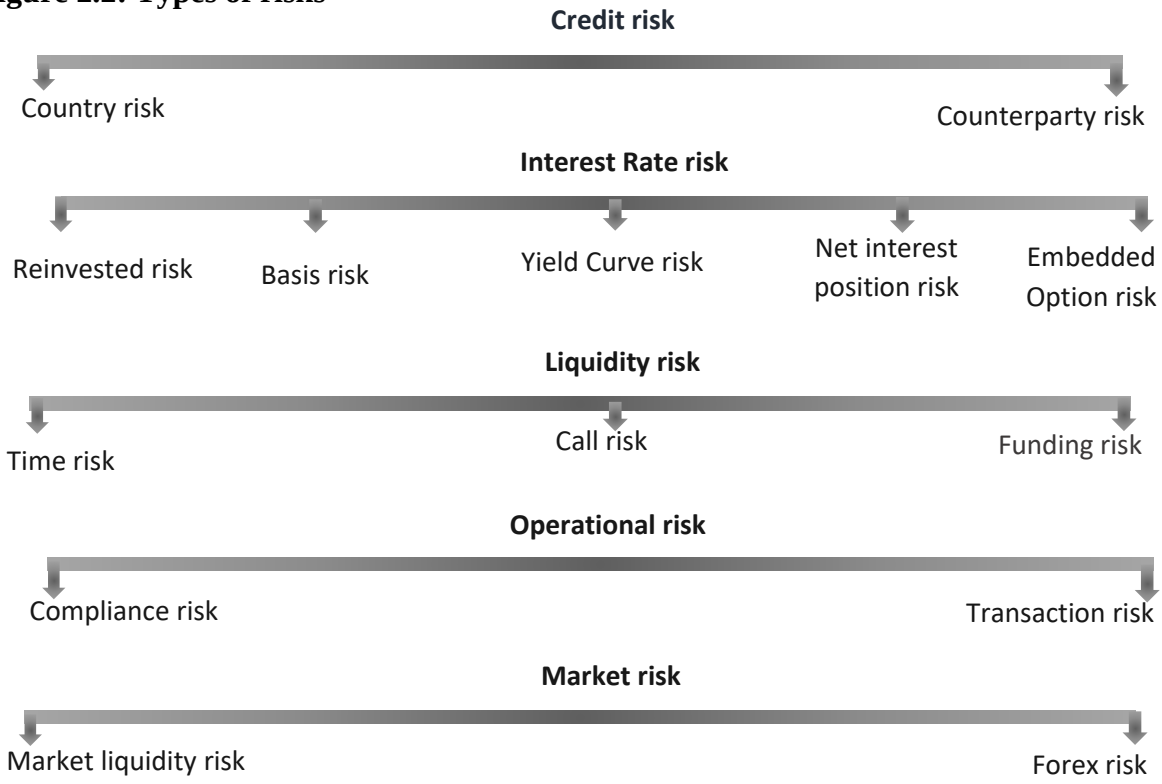
Source: Rose and Hudgins (2013); Ferreira (2018)

2.5.5 Risks within the bank

Banks operate in a risky business environment (Tursoy, 2018:7). Growing complexity in the business of banks and the operative dynamic environment within the financial sector has led to the significance of risk management (Kanchu & Kumar, 2013:146). While banks are intermediaries in terms of provision of financial services, in transactions they also act as a 'middleman'; however, this role exposes banks to various types of risks (Tursoy, 2018:7). Bank risks are interchangeably referred to as challenges banks usually encounter when making numerous decisions and they are often perceived to define distinctive uncertainty (Stavroula, 2009:17). Risk in banking can be defined as an uncertain outcome of an event, adversely affecting the functioning or profitability of the bank (Stavroula, 2009:16).

Although financial institutions take risks, they have to cautiously do so (Carey, 2001). The financial situation, nature of the bank and the time horizon can influence the risk appetite of a bank, thus shaping the risk management approach (Stavroula, 2009:24). As risk is proportionately direct to return, banks expect to make more profit as they take on more risk by increasing their interest rates, which may lead to a decline in customer loans (Boyd & De Nicolo, 2005:1332). In addition, Boyd and De Nicolo (2005:1332) state that an increase in interest rates on loans is likely to cause bank customers to adjust policies of their investments. The greater the risk, the greater the dangers of losses, which may be detrimental to the bank (Carey, 2001). High levels of risk can be perceived as the financial health of the bank being impaired because of several contingent factors (Kanchu & Kumar, 2013:146). The soundness and safeness of these financial institutions are essential for the financial system's health (Tursoy, 2018:8). Figure 2.2 represents the numerous major risks that have an impact on banks.

Figure 2.2: Types of risks



Source: Tursoy (2018)

The different types of risks within the banking sector are defined in Table 2.4, along with other risks that affect financial institutions within the financial system.

Table 2.4: Risks within the bank defined

1. Liquidity risk: Inability of banks to meet commitments and obligations to borrowers and depositors. **1.1** ***Funding risk***: Arises from reimbursement need of net outflows of unanticipated withdrawal. **1.2** ***Call risk***: Arises from the inability of banks to undertake business opportunities. **1.3** ***Time risk***: Arises from compensation need for expected inflows.
2. Interest rate risk: Possibility of a loss due to price changes in the market that will affect net interest margin (NIM) earnings of the bank. **2.1** ***Yield curve risk***: Arises when the curve yields frequent non-parallel movements that affect the net interest income (NII) due to different instruments of assets and liabilities different maturities for pricing. **2.3** ***Basis risk***: Possibility of a loss due to a different magnitude change of interest rate in assets and liabilities. **2.3** ***Mismatch risk***: Arises when there is a mismatch between assets and liabilities in terms of pricing or maturity dates, which creates exposure market rates unexpected changes. **2.4** ***Embedded option risk***: Arises when the interest rate changes in the market create premature withdrawals or credit loans prepayment that affects the profitability of the bank.

2.5 ***Net interest position risk***: Possibility of a loss due to a decline in interest rates where there are more earning assets compared to paying liabilities. **2.6** ***Reinvested risk***: Arises when there is uncertainty the level of interest rate to reinvest for cash flows in the future.
3. Market risk: A possibility of a loss due to changes in conditions of the financial market, which may negatively affect the bank's profitability and net worth. **3.1** ***Market liquidity risk***: Arises from the inability of a bank to conclude a particular instrument major transaction close to the current market price. **3.2** ***Forex risk***: possibility of a loss due to adverse changes in exchange rates in a period whereby a bank has a forward or spot open position or combination of both in single foreign currency.
4. Credit risk: Customers inability or failure to meet their agreed terms of financial commitment to a bank. **4.1** ***Country risk***: A possibility of bank loss due to borrowers' non-performance because of a country's imposed restrictions. **4.2** ***Counterparty risk***: Arises when a trading partner fails or refuses to perform its obligation.
5. Operational risk: A possibility of loss due to inadequate or internal process failure, systems and people or as a result of external factors. **5.1** ***Compliance risk***: A possibility of a reputation or financial loss resulting from a bank's failure to comply with the law or regulations. **5.2** ***Transaction risk***: Arises from internal or external fraud, business process failure or inability to manage information or maintain business.
6. **Other Risks:** **6.1** ***Reputation risk*****:** A possibility of loss in customer base or financial loss due to poor public image or negative public views. **6.2** ***Strategic Risk*****:** Arises from inappropriate implementation or poor business decisions in response to changes in the industry that result in losses.

Source: Stavroula (2009); Kanchu and Kumar (2013)

The key to mitigate or face risk within banking is to identify distinct sources of uncertainty as well as the extent of the potential impact on profitability (Stavroula, 2009:17). Various types of risks require different approaches; hence, a clear explanation assists for quantitative risk measures and risk management (Stavroula, 2009:17). In addition, the adopted risk management techniques by the banking industry are established through risk quantification that has been chosen by the banking sector to manage and demonstrate in each area how to apply the procedure (Stavroula, 2009:17).

In the banking sector, risk management became a necessity in 1997, when core principles were published for effective supervision of banking by the Basel Committee on Banking Supervision (BCBS) (Tursoy, 2018:4). In banking, risk management can be defined as the developed logic

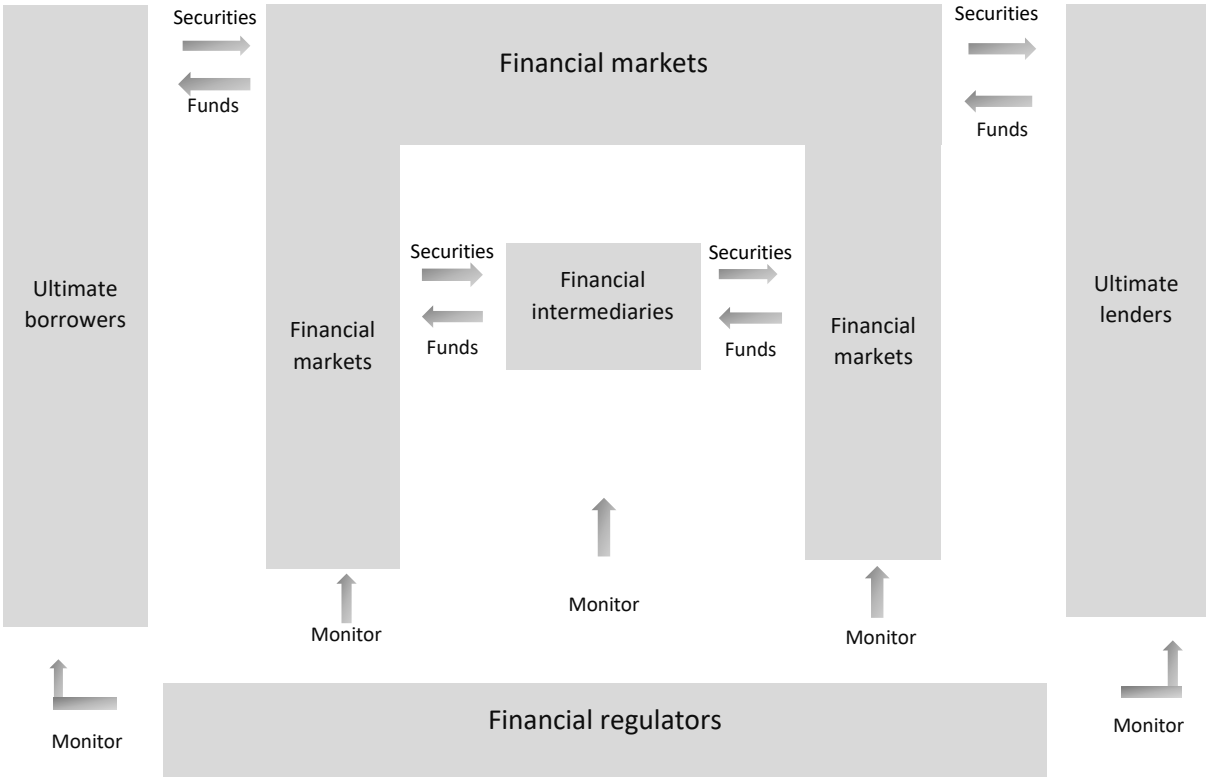
to execute a plan to manage potential losses (Tursoy, 2018:1). Furthermore, practices in risk management usually focus on managing the exposure of an institution to risk or losses in the banking industry for the protection of asset value (Tursoy, 2018:1). Risk management has become a significant issue within the banking sector since it can be linked to the stability of the financial system. Hence, unsound practices in risk management that govern the bank's lending usually have a key role in financial crises, the 1997/98 Asian financial crisis being the most notable (Stavroula, 2009:18). The risk management framework provides a significant linkage between risks and capital.

2.6 BANK REGULATION IN SOUTH AFRICA

In the past two decades, the South African regulatory system within the financial sector has experienced major transformation. This includes bank supervision responsibility of the National Treasury being transferred to the South African Reserve Bank (SARB) in 1987 as well as the Financial Services Board (FSB) establishment in 1989 (Falkena *et al*., 2000). The banking sector in South Africa is well regulated for ensuring effective oversight over its functions (BASA, 2014:8). Furthermore, since 1994, the constitutional supremacy has been evident through the effective legal framework. Thus, the Constitution in South Africa is perceived to be amongst the most progressive globally and can influence and regulate the financial sector (Mfongeh *et al*., 2016:80).

It has been found that financial systems are prone to contagion risk and instability in the absence of effective regulation (Botha & Makina, 2011:3). Furthermore, few major financial institutions dominate the financial system in South Africa and this leads to high interconnectedness levels as well as high contagion risk (Botha & Makina, 2011:3). Sufficient regulation and supervision are required to manage the outcomes and risks of these institutions (SARB, 2018:9). Figure 2.3 represents the role that regulators play within the financial system.

Figure 2.3: Role of the regulators within the financial sector



Source: Gupta *et al.* (2012)

Financial regulations form a pivotal part of every country to organise and control the financial sector. Regulators implement and supervise these regulations for effective operations (Zorgani, 2014:10). All the financial sector players are monitored by these regulators for purposes of introducing an effective, stable and efficient financial system (Zorgani, 2014:10. Hence ensuring that there is compliance through monitoring (SARB, 2018).

South Africa has a fragmented regulatory framework, meaning that different institutions regulate different markets and financial services (Gupta *et al*., 2012). It comprises of numerous regulators that are coordinated through advisory bodies, statutory bodies and also standing committees (Botha & Makina, 2011:32). In addition, the regulatory and supervisory framework in South Africa is described as being horizontally split and functional (Botha & Makina, 2011:32). The SARB regulates commercial bank activities, whereas non-financial institutions operate under the FSB regulation (Mfongeh *et al*., 2016:80).

2.6.1 Bank legislations and proposed Twin-Peak framework

As pointed out by Mfongeh *et al*. (2016:80), the South African regulatory constitution is classified amongst those of the developed countries. The legislation of the financial banking

services comprises, amongst others, the following regulatory acts. Table 2.5 represents the South African banking sector legislations.

Table 2.5: Legislations within the South African banking sector

Legislation	Act	Purpose
The Banks Act	94 of 1990	Supervises and regulates financial institutions that accept deposits from savers.
The National Credit Act	34 of 2005	Promotes consumer credit access through a non-discriminatory and fair market environment.
The National Payment Act	78 of 1998	Provides for the administration, management, operation, settlement and clearing systems. Regulates and supervises payment and also matters connected.
The Financial Intelligence Centre Act (FICA)	38 of 2001	Aims to combat activities of money laundering and related activities, it also provides verification and client identification risk-based approach.
The Competition Act	89 of 1998	Maintains and promotes competition through adaptability, efficiency and also economic development. Thus, providing product choices and competitive prices to consumers.
The Financial Intermediary and Advisory Services Act (FAIS)	32 of 2002	Regulates the rendering of services of financial intermediaries and advisories to clients, to amend or repeal certain laws.
The Home Loan and Mortgage Act	63 of 2000	Aims to promote fair practices of lending, whereby financial institutions are required to disclose home loans provision information and also establishing an Office of Disclosure.

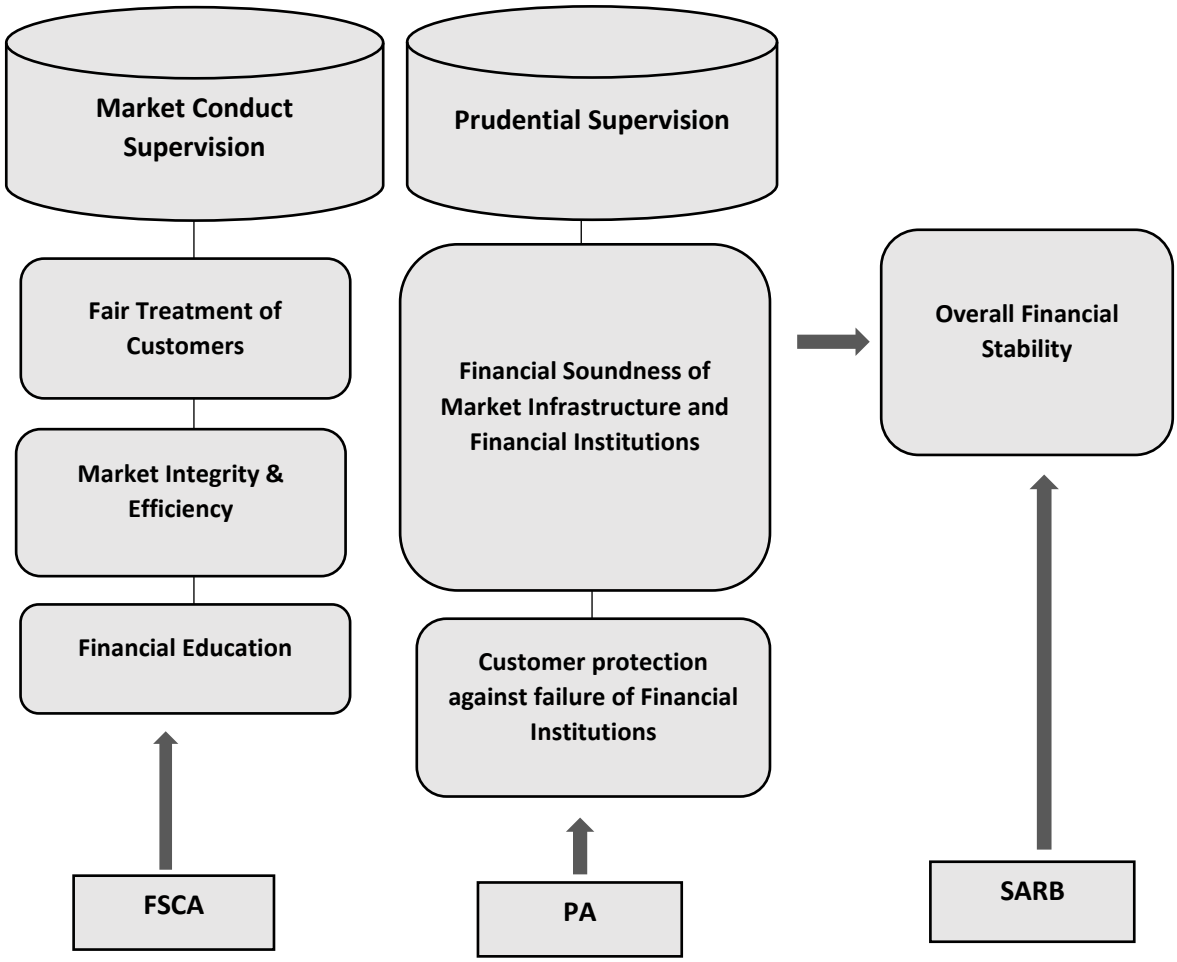
Source: SARB (2019) and Zorgani (2014)

Banks are required to comply with the legislations in Table 2.4, as set out by the regulatory and supervisory law in South Africa for a fair, non-discriminatory and sound financial sector (SARB, 2019). Furthermore, all banks need to comply with Basel III as well as the King Code III on Corporate Governance (BASA, 2014:8). The 2008 global financial crisis revealed some weaknesses in the regulatory framework. Since then, the international standard-setting committees announced various strategies to address these weaknesses (BASA, 2014:8).

A joint Financial Sector Assessment Program (FSAP) was conducted by the World Bank and International Monetary Fund (IMF) concerning the financial system of South Africa in 2008. According to the IMF (2009), the financial regulatory framework reform was needed, although South Africa had an advanced and effective regulatory framework that oversees the financial system. The National Treasury Policy Document was issued by the Government in 2011 to address the identified shortcomings by the IMF through propositions that will strengthen the financial system's regulatory framework.

A Twin-Peaks financial regulatory system had been proposed by the National Treasury to ensure a sound and safer financial industry (BASA, 2014:8). As noted by Botha and Makina (2011:34), initially, South Africa had plans to adopt a single-regulatory framework recommended by the Melamet Commission of 1993, nevertheless, opted to follow the international trends. A smaller amount of disruption was considered to be caused by the Twin-Peaks approach to both current regulators and market participants (Botha & Makina, 2011:34). Moreover, it was perceived as the optimal approach to provide necessary priority for market integrity, consumer protection and transparency (Botha & Makina, 2011:34). The transition towards the Twin-Peak approach is executed in various phases. The establishment of the regulatory authorities is the initial phase (SARB, 2018:1). Figure 2.4 diagrammatically illustrates the proposed Twin-Peak approach's main elements.

Figure 2.4: The proposed Twin-Peak Framework

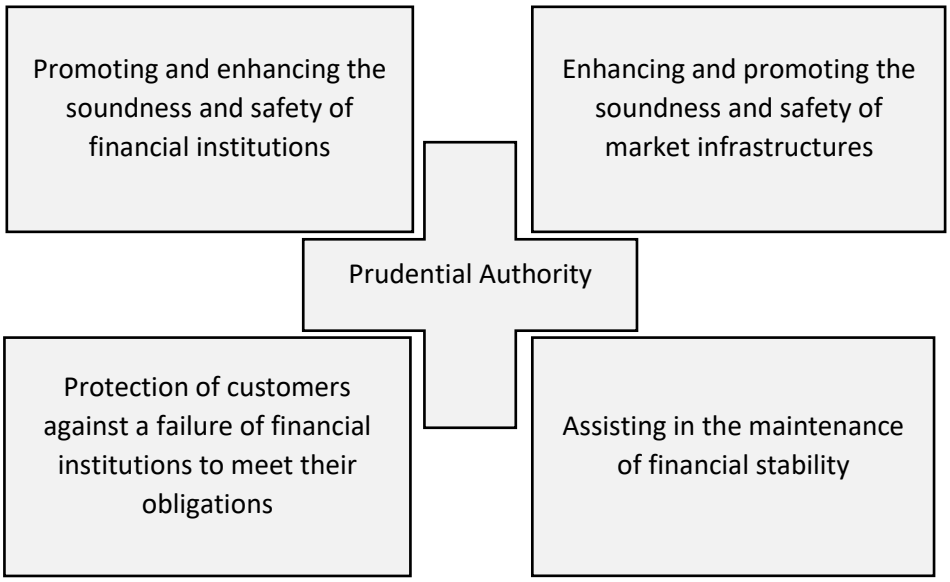


Source: FSCA (2018)

The main aim of the Twin-Peak framework is an efficient and stable financial sector that treats its customers fairly (FSCA, 2018:5). It is designed to comprise of a comprehensive regulatory framework with two core authorities that will specialise in better customer protection as well as strengthening the soundness and safety of financial institutions (SARB, 2018:6). A Twin-Peak framework splits the regulatory functions between two regulatory supervisions (FSCA, 2018:20).

The Financial Sector Regulation Act (FSR Act) is the initial step in a shift towards a Twin-Peak framework for the South African regulation of the financial sector. This has created two new regulatory authorities – the South African Reserve Bank's Prudential Authority (PA) and the FSCA, which revises and replaces the former FSB mandate (FSCA, 2018:20). The PA focuses its objective on soundness and safety of financial institutions, whereas the FSCA aims to protect customers as well as promote integrity and efficiency within the financial markets (FSCA, 2018:20). Figure 2.5 comprehensively depicts the objectives of the PA.

Figure 2.5: Prudential authority main objectives

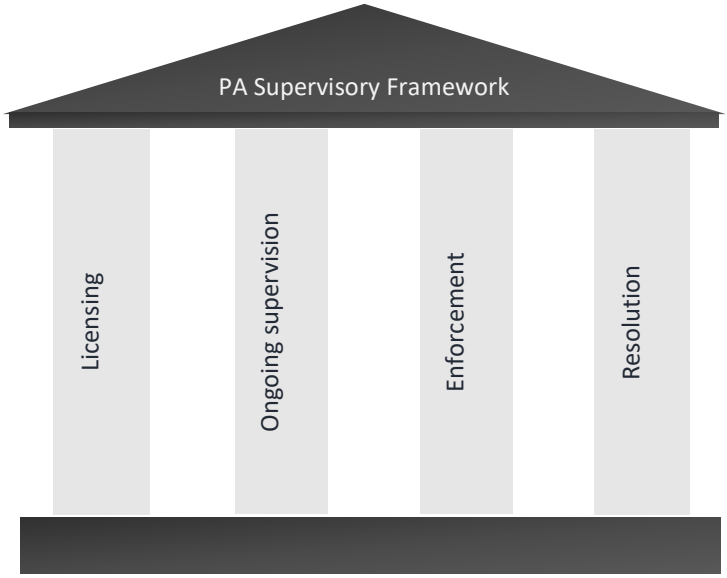


Source: SARB (2018)

The PA is a micro-prudential regulator responsible for policy setting and overseeing regulatory requirements for compliance of financial institutions that offer securities services, financial products as well as market infrastructures (MIs) (SARB, 2018:3). The SARB, from which the PA stems, is responsible for maintaining financial stability. The PA also assists the South African Reserve Bank in stabilising the financial sector (SARB, 2018:3). The FSR Act established the PA as an independent jury operating within the SARB. The financial management, resources, reporting obligations and governance structure of the PA are approved by the FSR Act (SARB, 2018:3).

Although each sector may allow particular treatment to a certain level, each sector faces a similar set of risks that compels a case to harmonise and integrate supervisory practices and approaches (SARB, 2018:17). This includes mitigating the potential duplication risk, lessening the regulatory arbitrage scope and attaining economies of scale in the PA (Ernst and Young, 2017:9). The PA supervisory framework comprises of four pillars derived from the financial institution life cycle in the event it fails to sustain itself (SARB, 2018:17). The four pillars of the prudential supervisory framework are outlined in Figure 2.6.

Figure 2.6: Supervisory framework of the Prudential Authority



Source: SARB (2018)

The PAs purpose is ensuring that financial institutions comply with the prudential minimum requirements that are related to leverage, liquidity, capital and other relevant measures of financial health (SARB, 2018:1), while the FSCA focuses on the financial market and consumer protection (SARB, 2018:1). An effective Twin-Peak framework, nevertheless, requires cautious coordination between these two regulators as well as other relevant authorities, to avoid potential conflicts and duplication of work (FSCA, 2018:20).

2.6.2 King Committee on Corporate Governance

A proud corporate governance tradition has been maintained by South Africa since the first King report publication. Four King reports have been published by the King Committee on Corporate Governance in South Africa. King I was published in 1994, led by a former judge Mervyn King SC and its main aim was to promote the highest corporate governance standards through a Code of Corporate Practices in South Africa (King Committee on Corporate Governance, 2002). The King Committee on Corporate Governance (2002) introduced King II in 2002 since King I lacked transparency and because of the changes brought by technology in doing business. The purpose of the revised King II was to implement an inclusive approach for successful governance of companies (King Committee on Corporate Governance, 2002). The international changing landscape with the new Company Act led to the introduction of 2009s King III code (Meyer, 2009). Furthermore, King III served as a comprehensive regime of global corporate governance (King Committee on Corporate Governance, 2009). The modern global

economy is characterised by major changes in business as well as in society and these changes have provided the King Committee with the context to set out King IV (IoDSA, 2016:3). King IV is the recent iteration in the series of King reports, setting out the principles, philosophy, outcomes and practices that serve as the corporate governance benchmark in South Africa (IoDSA, 2016:24).

2.6.3 Basel Committee on Banking Supervision

Globally, banking is an extremely regulated industry. The purpose of banks to create money from the public through intermediation and capital reserve requirement explains such high level of oversight (Sanderson *et al*., 2017:1). In the 1980s, the bank`s asset quality deterioration caused massive turmoil globally, thus the renewed bank regulation interest (Soni & Priyan, 2013:4). The first Basel Capital Accord or Basel I was formed in 1988 by the Basel Committee on Banking Supervision (BCBS), which set the minimum capital reserve requirement for active banks internationally (Jacobsohn, 2004:2). Basel I was criticised due to high-risk exposure for banks, Gennotte and Pyle (1990) supported the critique that under Basel I, banks were even more risky. In 2004, Basel II was implemented to improve the shortcomings of Basel I and comprised of three pillars, namely market discipline effective use, supervisory review practice and minimum capital requirements (SARB, 2010). The 2007/8 global financial crisis exposed the liquidity weaknesses of Basel II. Poor management of risk and governance accompanied these weaknesses (BCBS, 2015). The implementation of the enhanced Basel III in 2010 was a reform of the Basel II. The Basel III was aimed at extending on numerous aspects as well as strengthening the Basel II's three pillars (BCBS, 2015). In January 2016, the BCBS published its final instalments of the Capital Accords. This was to address the emerged deficiencies from the 2007/8 financial crisis (PWC, 2018:5).

In South Africa, banking supervision has been effective and helped reduce the 2007/8 global financial crisis' catastrophic effect within the financial sector (IMF, 2010:4). The SARB Supervision Department (BSD) is responsible for the implementation of the domestic Basel Accord requirements through the Banks Act (94 of 1990) amended in 2013 and other regulatory Directives (BCBS, 2015). The BSD is South Africa's representative on the BCBS as well as on its subcommittees. The aim of the representation is to influence the global regulatory standard's formulation to accommodate financial institutions based on the economic environment of South Africa (SARB, 2016:10). The BCBS focuses on strengthening the practices, supervision and regulation of banks internationally, to enhance financial stability

globally (BCBS, 2015). PWC (2018:5) is of the view that banks should commence to comprehensively understand Basel IV rules for evaluation of risk-weighted assets (RWA) density levels and economic capital in order to adapt to future changes.

2.7 BANK CHALLENGES IN THE DIGITALISATION ERA

2.7.1 Globalisation

The rapid growth of information in different forms of marketing and productive activities are seen as the major forces that drive economic globalisation (Shangquan, 2000:1). The sophisticated management, capital base strength and confidence of both the domestic and international clients enabled South African banks to extend their operations on a global scale (Verhoef, 2009:192). The function level, the experience, bank expertise and the central bank's soundness of regulation were the main reasons for globalised bank operations (Mckenzie, 2016:52). The evolution of globalisation has led to more diverse and highly efficient banks in South Africa, thus, providing new opportunities for banks (Ferreira, 2018:67). Nonetheless, globalisation brings along risks of unfavourable external factors (Shangquan, 2000:5). These external risk factors involve country risk, credit risk, currency exchange risk and market risk (McCauley *et al*., 2002:50). Banks need to manage these factors effectively as they may hinder the bank's performance, thus evoking customer's switching to different banks. For instance, African Bank's failure shocked the South African markets and triggered a systemic risk in the financial system (Sanderson *et al*., 2017:1). The bank announced the substantial deterioration of its business in November 2013. African Bank adopted a risky business framework, which utilised both local and foreign debt instruments to fund its activities without the backing of assets (Sanderson *et al*., 2017:2). The headline earnings of the bank fell by 88 percent with credit impairments increasing to R8.27 billion and the bank was placed under curatorship (Havermann, 2019:93). Poor management contributed to the downfall of the African Bank and had a negative impact on the perception of customers, hence, evoking the bank switching behaviour of customers.

2.7.2 Leveraging social media

In recent years, social media development has abruptly transformed marketing communication practices due to increasing usage of technology (Oni *et al*., 2014:307). It is seen as an impactful communication channel in the modern economy (Dwivedi *et al*., 2015:300). Chikandiwa *et al.* (2013:365) define social media marketing as a system that creates a platform for marketers to interact, engage, collaborate and utilise innovative crowdsourcing for bank`s marketing

strategy. Moreover, social media marketing provides banks with a channel for managing customer relationships, given the multifaceted nature of bank services (Chikandiwa *et al.*, 2013:366). Rootman *et al*. (2011:191) adds that the management of customer relationships can increase customer satisfaction and profitability. Hence, it can be unlikely that satisfied customers might not switch their current banks. Despite the potential of social media as a platform for buiding customer relationships, banks are found to be fairly sceptical because of certain challenges (Angelini *et al*., 2017:349). These challenges are concerned with compliance, regulatory and risks (Angelini *et al*., 2017:349).

Banks in South Africa are faced with uncertainty and legal issues coupled with challenges of technological development (Rootman & Cupp, 2016:281) A study by Chikandiwa *et al*. (2013) has conclusively shown that social media is still at an early adoption stage in South Africa. In addition, Chikandiwa *et al*. (2013) study found that for advertising and reactive customer service, banks utilise Twitter and Facebook. Social networks such as Twitter and Facebook have a powerful ability to instantly share the user's information with other users (Mucun & Ezulturkay, 2014:138). However, with the risk of privacy in social media, banks need a secure channel of communication to protect the information of their customers (Rootman & Cupp, 2016:293). In the social media environment, banks also run the risk of reputation and the complex approaches of reducing risk of interacting with customers within an uncontrolled medium (Angelini *et al*., 2017:350). It is easier and quicker for customers on social media to tarnish a bank's image by sharing their complaints. The optimal usage of social media platforms as a tool within a marketing strategy can strengthen the reputation of the bank (Gotsi & Wilson, 2001:24). Social media brings a competitive advantage; thus, banks should be willing to learn how to utilise it to convert customer criticism into opportunities (Klimis, 2010:17). This strategy can retain and attract more customers. Thus, mitigating customer bank switching.

2.7.3 Automation and online banking

The emergence and evolution of new business models and technology will give rise and change to customer expectations in terms of banking services. It is believed that customer retention and bank services can be enhanced through the adoption of technology (Yang *et al*., 2007:338). In the past, automated teller machines (ATMs) brought massive technological development within the banking industry. An increased number of ATMs made banking services more accessible to customers. In recent years, with new technological development, online banking

is becoming a pivotal influence on the banking structure and is transforming the nature of banking (Abdullahi, 2012:50). Furthermore, Abdullahi (2012:48) points out that online banking became prominent through the merger of information technology and banking activities, which made it easy for customers to transact with their banks. The term online banking can be defined as a system that enables customers, businesses, and financial institutions to obtain information about products and services to transact and also access accounts at home or from offices (Jamaluddin, 2013:2). A number of banks across the globe are beginning to provide deposit products and credit online (Banstola, 2007:96).

As more banks are shifting towards online banking, Banstola (2007:96) indicates that banks may find new opportunities along with emerging strategic and operational risks. The benefits include efficiency, competitive advantage, improved business turnover, enhanced automation models and improved image (Kuzic *et al*., 2002:1608). Growing competition in online banking encourages banks to incorporate innovative automation to remain competitive (Abdullahi, 2012:48). Online banking benefits are accompanied by challenges. The lack of e-commerce knowledge and technology costs are amongst those major challenges (Ojeka & Ikpefan, 2011:35). Security concern is the most crucial challenge (Yang *et al*., 2007:337). In addition, Johnson and Powell (1994) stresses the challenge of older people being unfamiliar with the usage of the Internet, thus becoming reluctant to use online banking. Given the rapid growth in technological advances in South Africa, banks will require greater utilisation of resources to mitigate these challenges to ensure that they satisfy customer privacy needs. Functions of risk will have to adapt to the new evolving types of risks that might need new tools and skills (Harle *et al*., 2015:3).

2.7.4 Bank switching

Increased switching behaviour of customers was driven by global banking deregulation early in the 1980s (Clemes, 2007:50). An immense pressure in the global landscape during the 1970s to deregulate the financial markets led to the liberalisation of international banking (Singleton & Verhoef, 2010:540). Slow economic growth, interest rate differentials and expansion to attract customers from foreign countries could be the reasons why banks are drawn to the global market (Singleton & Verhoef, 2010:540). The financial sector was dominated by banks for many years due to the high entrance cost, distribution network facilities and strict government regulation (Reber, 1999:32). The removal of regulatory restrictions within the banking industry

allowed new entrants to enter the market, thus enhancing competition, which may force banks to improve competency (Singleton & Verhoef, 2010:540).

The entrance of new competitors provides customers with a wide range of choices. Customers become more service- and price-conscious in their purchasing behaviour of financial services (Vyas & Raitani, 2014:321). Furthermore, as products and services in banking are virtually identical in nature, this might prompt the likelihood of customers switching between banks (Vyas & Raitani, 2014:321). In general, customers indicate a low bank switching propensity (Gerritsen & Bikker, 2018:1). A study by Chakravarty *et al*. (2004) found a lower bank switching propensity of bank customers. A research finding by Callari *et al*. (2016) in the United Kingdom also points towards lower bank switching propensity as they indicated that, in a given year, only 3 percent of customers switched between banks.

After many years of strict regulation in the South African banking sector, deregulation became a fundamental factor. The implementation of financial liberalisation programmes within the banking industry was beneficial to banking customers (Singleton & Verhoef, 2010:536). The performance standard increased due to the competition brought by new banks and non-bank financial institution (Bick *et al*., 2004:302). This granted customers choices and access to more financial services of competitive banks (Singleton & Verhoef, 2010:537). Table 2.6 represents the customer satisfaction index (CSI) scores of South African banks. The satisfaction of customers has a major effect on bank switching (Athanassopoulos *et al*., 2001), which suggests that highly satisfied customers might be less likely to switch banks compared to less satisfied customers.

Table 2.6: Five major banks CSI index for 2016 to 2017 period

#	Bank	2016 score	2017 score	Change (point)
1	**Capitec**	**83.1**	**85.3**	**+2.2**
2	**FNB**	**81.3**	**81.0**	**-0.3**
	Industry Average	**76.5**	**77.0**	**+0.5**
3	**Nedbank**	**77.0**	**76.3**	**-0.7**
4	**Standard Bank**	**71.9**	**75.2**	**+3.3**
5	**Absa**	**74.2**	**73.3**	**-0.9**

Source: Consulta (2018)

2.9 SYNOPSIS

Banks play a pivotal part in the economy. Their main purpose of channelling the movement of funds is key to their significant role of intermediation. This allows borrowers (deficit economic units) to have access to funds they may need to commence with their productive projects. The channelling of funds by banks largely contributes towards the functioning and stabilisation of the economy.

The South African banking sector is considered to be effectively and highly regulated, which is crucial for stabilising the economy. The banking sector is found to be competitive, although it is highly concentrated with a few major banks holding virtually 90 percent of the market share. Five major banks dominate the changing landscape of banking, namely Capitec Bank, FNB, Nedbank, Standard Bank, and Absa. These major banks are capitalising on innovations to improve the quality of service delivery for customer convenience. However, with this high concentration, these banks are exposed to contagion risk because of their connectedness, which may harm the entire banking industry of South Africa.

Banks face many risky challenges, which might affect their functioning and, therefore, lead to failure if ineffectively managed. Hence, the need for a regulatory and supervisory framework for effective risk management of these financial institutions. This helps with the monitoring of the banking industry to achieve a healthy and sound financial sector as well as protecting banking customers. The increasing use of technology across the globe in doing business has led to globalisation. Banks encounter new evolving challenges in adopting technological advances in their business strategic frameworks. As a result, banks need to find solutions to effectively manage these challenges to stay competitive and retain their customers. South African banks need to adapt to these changes to stay in line with the international trends and improve competency, which may lead to a developed financial sector. In this way, banks can mitigate the risk of losing customers. Factors that influence bank switching of depositors will be contextualised in Chapter 3.

CHAPTER 3: DETERMINANT FACTORS OF BANK SWITCHING BEHAVIOUR

3.1 INTRODUCTION

Chapter 3 provides the theoretical literature on the determinant factors of bank switching behaviour. Bank switching behaviour of customers can negatively impact a bank (Lees *et al*., 2007:147). It is crucial for banks to understand the reasons why customers tend to switch from one bank to another as it possibly could have an impact on a bank. Bank switching trend needs to be accepted by banks to provide greater control, choice and flexibility to their customers (Brunetti *et al*., 2016:175). The two main factors that might affect bank switching behaviour are customer satisfaction and quality of service (McDougall & Levesque, 2000:392). However, other factors might also contribute significantly. As proposed in Chapter 1, this chapter aims to achieve the following theoretical objectives:

- Theoretically analyse the determinant factors of bank switching behaviour;
- Analyse the dimensions of customer service quality and satisfaction; and

In this chapter, attention will be given to the factors that have an impact on bank switching behaviour of customers. First, bank switching will be comprehensively defined based on the relevant literature as well as demonstrated through the switching process decision model. Secondly, the chosen factors influencing the switching behaviour of customers will be provided and discussed. This is to provide literature relating to the factors that are considered to affect bank switching. Thirdly, customer satisfaction is explained and analysed in the context of banking. Intentions of customers to switch banks based on their level of satisfaction and risk tolerance forms the importance of customer satisfaction towards bank switching behaviour (Mohsan *et al*., 2011:263). Munien (2008:1) points out that the bank satisfaction of customers is greatly determined by their general expectations of service provided. Finally, the last section of this chapter will focus on the dimensions of service quality. The use of service quality dimensions is for outlining various aspects of service quality that are related to customers' decision to switch banks. Service quality has an important impact on bank switching (Zeithaml *et al*., 1996:31). This assist in understanding of customers' behaviour within banking (Clemes, 2007:54).

3.2 BANK SWITCHING BEHAVIOUR

Bank switching behaviour of customers has been explored in a large and growing body of literature. The term bank switching behaviour is coined as a customer's exit from one bank to another (Stewart, 1994). According to Boote (1998), bank switching occurs when a customer stops purchasing certain services. However, Bansal and Taylor (1999) contends that customer switching behaviour involves replacing the services of the current bank with the services of another bank. Similarly, Garland (2002) defines bank switching behaviour as a shift of customers from one bank to another or choosing services of another bank. Moreover, Keaveney and Parthasarathy (2001) defines customer bank switching behaviour as an act of loyalty to one bank, however, they switch to another bank due to poor services or bank problems. According to Stewart (1998), the reasons that explain the decision of customers to switch banks are complex and numerous.

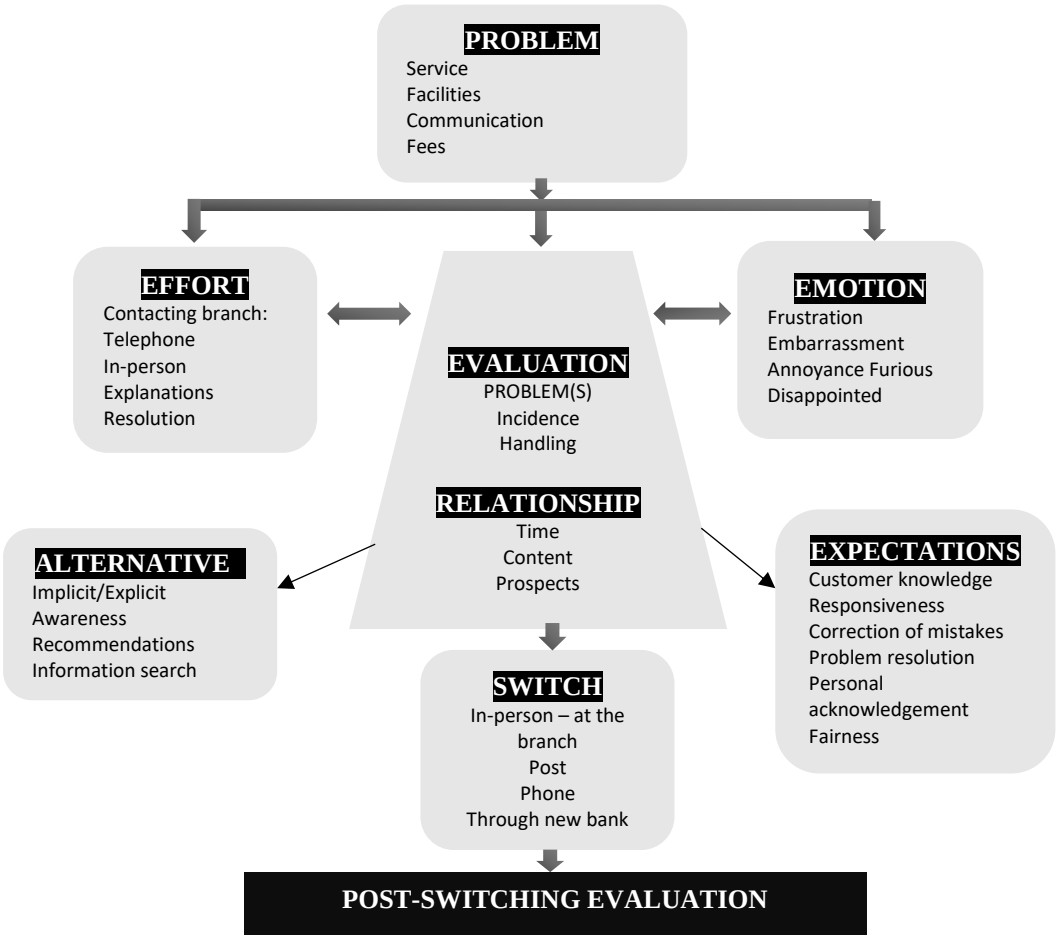
Many researchers such as Gerrard and Cunningham (2004), Ghouri *et al.* (2010), and Vyas and Raitani (2014), have shown that customer bank switching behaviour is influenced by various factors. These factors include prices, advertising (Ghouri *et al*., 2010), service failures, inconvenience, competition, customer satisfaction and reputation (Gerrard & Cunningham, 2004; Vyas & Raitani, 2014). A study by Colgate and Hedge (2001) categorised pricing, service failure, and denied services as major factors for bank switching behaviour of customers. A research finding by Yavas *et al.* (2004) points towards customer services in terms of quality. Moreover, Yavas *et al.* (2004) points out that positive word-of-mouth is closely related to tangible aspects of the quality of service, while satisfaction and switching behaviour are related to the quality of service elements of time. Satisfied customers might share their customer service experience about an organisation with more than five people, whereas dissatisfied customers can share with more than ten people (Mohsan *et al*., 2011). This suggests that customer satisfaction can be one of the crucial factors to determine customer switching behaviour.

Manrai and Manrai (2007) suggest that the competitive nature of various elements of service provided by banks plays a vital role in switching decisions by customers. A study by Brunetti *et al.* (2016) found differences suggesting that a customer's decision to switch between banks is associated with a number of bank services customers had with their banks. In addition, Brunetti *et al*. (2016) also found a strong correlation between bank switching and mortgage borrowing and repayment. Furthermore, Levesque and McDougall (1996:15) indicate that

competitive interest rates of banks influence the satisfaction of customers and are likely to trigger bank switching behaviour.

In recent years, a considerable amount of the literature has been published on customer satisfaction and retention. There is a consensus among researchers that the retention of existing customers is more essential than the ability to attract new customers (Parvatiyar & Sheth, 2000; Lin & Su, 2003; Mishra, 2010). In contrast, instead of retaining existing customers, managers continuously focus on attracting new customers (Madzivhandila, 2013:25). Customer satisfaction has been considered an important business strategy and a scale of which many banks establish their standards (Mburu, 2012:1). However, for superior service, customer satisfaction is insufficient as a single factor, as customers switch between banks due to bank failures and service quality (Gerrard & Cunnigham, 2007). The customer's decision to switch to another bank is illustrated in Figure 3.1.

Figure 3.1: The switching process model



Source: Stewart (1998)

3.3 DETERMINANT FACTORS OF BANK SWITCHING BEHAVIOUR

Bank switching is common in the financial services sector as customers tend to be more inclined to switch to another bank due to dissatisfaction and poor service quality (Mohsan *et al*., 2011:264). Various factors such as switching costs, risk tolerance, behavioural finance and demographics influence bank switching behaviour of customers (Clemes *et al*., 2010:520).

3.3.1 Switching costs

A considerable amount of literature has been published on switching costs of customers. In a theoretical view, switching costs enhances a customer's tolerance of price differential before switching service providers and also helps with an understanding of customer retention (Anderson & Sullivan, 1993; Anderson, 1994). Jones *et al*. (2002:441) points out that when customers switch between banks, they incur costs relating to collecting information about another bank to switch from their current banks. Similarly, Kiser (2002:350) explains switching costs as once-off costs incurred by a customer when switching from a current bank to a new bank. According to Clemes *et al*. (2010:526), switching costs in banking can be described based on time, money and effort of opening a new bank account, transfer of funds as well as online banking registration.

Barroso and Picon (2012) provide the dimensions of the switching costs that reflect the perception of customers in terms of effort, money and time involved in the process of switching. The perceived switching costs comprise of three categories. First, the monetary costs, which include losing benefits related to current relationship and initial financial costs of starting a new relationship with another bank (Patterson & Smith, 2003; Kim *et al.*, 2004). Secondly, psychological costs involve attitudes or feelings related to switching a current bank such as uncertainty, risk, dissatisfaction and frustration (Barroso & Picon, 2012:532). Lastly, relational costs, these costs are linked with the psychological costs, hence might involve breaking bonds with the current bank (including the brand and employees) (Burnham *et al*., 2003:113).

Aydin *et al*. (2006:143) consider switching costs as a mediator of the relationship between satisfaction and loyalty. In an increasingly competitive environment, customer's switching costs are regarded as a vital strategic planning aspect (Barroso & Picon, 2012:531). According to an investigation by Yanamandram and White (2006), the switching barrier that most hindered unsatisfied customers from switching banks was the cost of switching. This can be due to higher price difference that might be required to prompt a switch (Kiser, 2002:352). The

banking customers tend to be discouraged to exit the current bank because of the switching costs being greater than the benefits of switching banks (Lees *et al*., 2007:147). Thus, switching costs can be seen as barriers that retain customers in relationships with their current banks (Jones *et al*., 2002:443). Kiser (2002:350) is of the view that banks generally face a trade-off of whether to increase the switching costs to extract money from current customers or to lower the switching costs to attract potential customers. However, according to Gerrard and Cunningham (2004:217), customers might switch their current banks due to dissatisfaction, even if the costs of switching are high. This suggests that satisfaction plays an important role in customers' decision to switch between banks.

3.3.2 Customer risk perceptions

Customers' perception of adverse consequences of purchasing bank service or product and uncertainty can be defined as perceived risks of customers (Dowling & Staelin, 1994:119). Furthermore, when circumstances as a result of a decision, create discomfort or uncertain feelings, thus, perceived risk enters the decision information systems (Dowling & Staelin, 1994:120). According to Parasuraman *et al*. (1988), customer's perception of the quality of services refers to an overall superiority or excellence of the service assessment. This is a judgement based on customer expectations and the actual service performed by banks (Parasuraman *et al*., 1988:28). Customers do not merely purchase bank services or products but make purchases based on value (Ghazizadeh *et al*., 2010:279). Furthermore, Harwood (2002:24) is of the view that customers are becoming objectively conscience about the value in terms of performance attribute, preferred attributes and the consequences of utilising a product under certain circumstances. Therefore, value is the perceived benefit of customers' perception (Ghazizadeh *et al*., 2010:280). Banks can learn from the complaints and switching behaviour of customers to acquire value perception insight of customers to improve the provision of service quality (Edvardsson, 1998:428).

Edvardsson and Roos (2003:46) points out that customers may hold various risk perception reasons to complain about a service or product. This includes negative complaints as well as issues that stem from dealing with conflict situations or service failures (Zikiene & Bakanauskas, 2009:154). For instance, one customer might complain about the high level of charged fees, while another customer may find it unnecessary (Edvardsson & Roos, 2003:46). All these reasons, expectations and opinions develop the bank's reputation over time (Bennett & Kottasz, 2000:225). According to Trotta *et al.* (2011), reputation has a massive influence on

customers' purchases and can possibly attract new customers. Thus, reputation can change customers' expectations and risk perceptions of services or products (Munien, 2008:24). Table 3.1 represents the types of risk perceptions of customers.

Table 3.1: Customers risk perceptions

Risk type	Perception
Time risk	Service failure leads to an opportunity cost of discovering a better alternative.
Financial risk	Product/Service provides less value than its cost.
Performance risk	The performance of the service or product might fall short of the expectations.
Psychological risk	The mental well-being of the customer can be affected by the service/product.
Privacy risk	Possibility of losing personal information or use without your consent over online banking.
Social risk	The product or service leads to an embarrassment compared to others, resulting in a potential social status loss.
Overall risk	A measure of a general perceived risk after evaluation of all risks.

Source: Keller (2003); Featherman & Pavlou (2003)

Perceptions of customers are inevitable if a bank wants to succeed. The reason can be that banks might need to examine customers regarding their perceptions in order to drive retention and satisfaction (Mburu, 2012:28). In addition, Mburu (2012:44) maintains that it becomes difficult to meet the expectations of customers without the knowledge of their perceptions they consider fundamental when assessing their experiences. As highlighted by Ferreira (2018:41), risk perception of depositors about their banks is crucial to the bank's profitability and prosperity. Hence, depositors' perceptions need to be taken into account by banks. Perceptions management directly affects the delivery of services, development and design, whereby perceptions of customers directly influence the valuation of the provided services (Cole & Dale, 2005:93). This gap is due to service providers assuming that they are informative about the perceptions of customers (Cole & Dale, 2005:93).

In South Africa, Bick *et al.* (2004) found that customers were dissatisfied by the products, customer intimacy level and services provided by their banks. Therefore, these customers had a belief that they were not receiving the expected value. When an expected service by customers differs from the service rendered, it causes customer dissatisfaction (Mburu,

2012:44). According to Strauss and Mang (2000:170), a satisfying service is very likely to evoke customers' willingness to pay a higher price for the service. This suggests that if customers are dissatisfied with a service, they are likely to switch to another competing bank that provides better services.

3.3.3 Risk tolerance

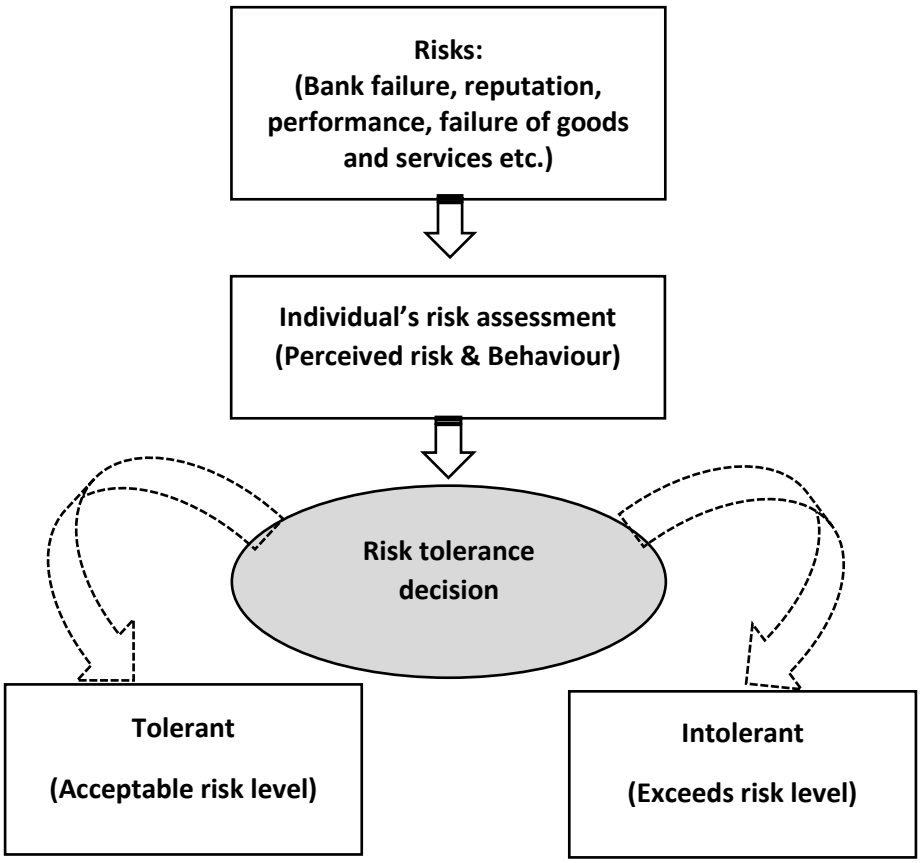
In the literature, risk tolerance has been identified as a vital aspect underlying numerous financial decisions (Sung & Hanna, 1996:12). Risk tolerance has been studied by several fields such as finance, economics and psychology (Roszkowski, 1993). Risk tolerance is defined as the behaviour and attitudes of individuals concerning financial risk from a psychological standpoint (Roszkowski, 1993). Within the financial context, it refers to a great level of uncertainty that an individual is ready to take when making a financial decision (Grable, 2000:625). According to Gibson *et al*. (2013:21), risk tolerance refers to the amount of discomfort an individual is ready to accept. Elston and MacCarthaigh (2016:1) added that risk is quantified and it can be excessive sometimes; it needs to be lessened to an acceptable level. Each banks' customers have their attitude and tolerance towards risk; hence, these customers consider the level of risk differently (Anbar & Melek, 2010:504). Moreover, Faff *et al*. (2006:5) maintains that the belief of risk tolerance inversely relates to the risk aversion concept. For instance, one customer may not tolerate one or two incidents of financial service failure and might opt to switch banks, while another customer may be tolerant (Anbar & Melek, 2010:504).

Measuring the risk tolerance level of customers is a complex process since risk tolerance is an ambiguous and elusive concept (Roszkowski, 1998:166). Although it can be difficult to measure risk tolerance of customers, Hanna and Chen (1997:18) points out that objective and subjective measures of risk tolerance exist. Subjective measures evaluate the level of risk tolerance an individual perceives (Chang *et al*., 2004:54), whereas objective measures assess risk preferences through observed behaviour (Hanna *et al*., 2001:53). Due to the complexity of measuring risk tolerance of individuals, some scholars have recommended objective measures to be crucial (Sung & Hanna, 1996:12). This is because objective measures provide a greater ability in evaluating risk tolerance (Schooley & Worden, 1996:88).

Since Grable and Lytton (1999) developed a widely used financial risk tolerance scale (SCF), a myriad of studies has investigated the risk tolerance of individuals. The scale is based on subjective measures. Most studies have attempted to explain demographics such as age, gender, education, marital status and income as factors that influence risk tolerance (Anbar & Melek,

2010:506). Although many factors have been investigated, there is a distinct consensus amongst researchers. In general, age is one of the factors that impacts risk tolerance as it was found that risk tolerance decreases with age (Finke & Huston, 2003; Jianakoplos & Bernasek, 2006). Nonetheless, other studies Hariharan *et al*. (2000) and Gollier and Zeckhauser (2002) failed to find a major effect of age towards risk tolerance. Thus, age and risk tolerance results are inconclusive. Gender has also been found to have a major effect on risk tolerance. Risk tolerance studies (Powell & Ansic, 1997; Grable, 2000) have concluded that males have a high risk preference compared to females. In contrast, gender is insignificant in influencing risk tolerance (Hanna *et al.*, 1998; Grable & Joo, 1999). Education enhances an individual's capacity to assess risk, thus has been adopted as another factor or predictor of risk tolerance (Haliassos & Bertaut, 1995; Sung & Hanna, 1996). This implies that bank customers that have a high level of education can assess risk better. Figure 3.2 depicts how customers tolerate risk based on their acceptable risk levels.

Figure 3.2: Customers risk tolerance decision



Source: Author compilation

3.3.4 Behavioural finance

The finance field has been fundamentally built on economic ideas, which stem from individual rationality (Subrahmanyam, 2008:12). However, economic research has been limited in terms of providing the reasons why irrational financial decisions are made by people (Babajide & Adetiloye, 2012:219). In conventional theory of finance, there exists an assumption of rationality amongst individuals under the utility theory that is described as a normative model (Jagongo & Mutswenje, 2014:92). According to Jaiswal and Kamil (2012:8), humans are described as rational decision-makers who evaluate evidence and all facts prudently before undertaking maximum utility outcomes. Nonetheless, in practice, the risk level individuals are prepared to accept varies and relies merely on personal attitudes towards risk (Jagongo & Mutswenje, 2014:92). A descriptive model such as a prospective theory, which explains the decision-making process of agents under uncertainty, challenged the rational utility theory.

The focus of the utility theory is on the wealth level, whereas prospect theory is centred on wealth changes (Ritter, 2003:436). Prospective losses stress individuals more than being satisfied with equal gains (Jagongo & Mutswenje, 2014:95). Hence, loss aversion and framing are assumed by the prospective theory (Ritter, 2003:436). According to De Bondt and Thaler (1995:7), loss aversion denotes that the process of decision-making is very sensitive to practising the selected choices, which is towards the manner other options are framed. This might imply that bank customers' decision to switch between banks is simply affected by other available competitive banks.

In the past three decades, behavioural finance became popular as the validation of the theoretical framework underlying assumptions developed for financial markets analysis (Babajide & Adetiloye, 2012:221). Therefore, behavioural finance studies have managed to explain why individuals can act irrationally when making financial decisions. It has been recognised that financial decisions of individuals are affected by psychology. Hence, interaction between financial decisions and psychology are referred to as behavioural finance (Shefrin, 2000). According to Huckle (2007), behavioural finance is described as the finance concept that utilises scientific method to explain financial decisions made by individuals in reality, instead of theory. Behavioural finance aims to demonstrate and enhance the understanding of depositors or investors' reasoning patterns (Ricciardi & Simon, 2000:27).

There are two reasons primarily identified for irrational behaviour of individuals in behavioural finance. First, there is emotional process whereby individuals experience a range of emotions,

thus, rely on feelings rather than reality in decision-making (Babajide & Adetiloye, 2012:220). Secondly, cognitive factors whereby individuals have the ability to handle information summarily to speed up decision-making. While cognitive process is useful in various areas of life, it can lead to poor financial decisions (Baker *et al*., 2017:25). Human behaviour frequently deviates from reason and logic and individuals tend to exhibit various behavioural biases that influence their decisions (Baker & Ricciardi, 2014:7). A bias can be defined as an irrational behaviour of market participants (Kishore, 2004:107).

Individuals are inclined to behavioural biases such as being conservative and regret-averse (Byrne & Brooks, 2008:1). Other identified common biases are representativeness, worry, trend-chasing, self-attribution and anchoring (Baker & Nofsinger, 2002; Ricciardi, 2008). Framing, status quo bias and confirmation bias were also identified (Mercer Consulting, 2010). People can be overconfident, display loss aversion, prone to effect of disposition, driven by sentiment, mood, and exhibit familiarity bias (Baker *et al*., 2017:25).

These decisions might consist of whether to withdraw or deposit funds as well as behavioural choices such as buying goods and services to consume in a certain amount. This may cause a possible regret originating in many decisions made, although consumers might not often seek decisions that are optimal, however, satisfactory (Zeelenberg & Pieters, 2007:4). Decision-making does not merely comprise of a certain difficulty encountered by an individual but it also includes the environment (Kannadhasan, 2006:1). Customers are thought to be risk-averse since they often attempt to control their regrets. This is because they tend to avoid regret occurrence by engaging in ameliorative behaviour such as decision reversal (Zeelenberg & Pieters, 2007:3). In the view of Kahneman and Miller (1986) and Zeelenberg *et al*. (1998) regret refers to a counterfactual emotion, which depends heavily on the process of comparison (Van Dijk & Zeelenberg, 2005).

In general, the behavioural approach of bank customers has focused on product or service repurchase, bank charges, brand allegiance and complaining behaviour until customers decide to switch banks (Rundle-Thiele & Mackay, 2001:538). These measures stem from customers behavioural intentions (Olorunniwo *et al*., 2006:63). In addition, Zeithaml *et al*. (1996:32) points out that behavioural intentions of customers coould be perceived through their decision to switch or remain with the bank. According to Burton *et al*. (2003:293), behavioural intentions are related to customer experience. Thus, if the customer's experience evokes positive emotions, it is highly likely that the customer will repurchase the service. Positive

outcomes are associated with positive emotions (Babin & Babin, 2001; Machleit & Mantel, 2001). Emotions, experiences and financial events can be understood by utilising models whereby there is incomplete rationality of agents (Barberis & Thaler, 2003:1053). Table 3.2 represents behavioural finance concepts that stem from individuals' biases towards risk.

Table 3.2: Behavioural financial biases towards risk

Bias	Description
Overconfidence	Individuals tend to overestimate their abilities, predictions and skills for success (Ricciardi, 2008:98).
Cognitive dissonance	When individuals encounter conflicting beliefs, they are inclined to alter past feelings, values and opinions to justify their choices (Ricciardi & Simon, 2000:29).
Mental accounting	Individuals tend to allocate certain financial events into separate mental compartments and the variance amongst these compartments affects their behaviour (Jagongo & Mutswenje, 2014:94).
Frame dependence	The decision-making process of individuals can be affected by the form a piece of information is presented (Byrne & Brooks, 2008:1).
Anchoring	Individuals tend to estimate probable future outcomes based on specific values (Mercer Consulting, 2010).
Conservatism	In the introduction of new information, individuals tend to adhere to prior beliefs (Byrne & Brooks, 2008:1).
Availability	Due to a fresh memory, individuals tend to exaggerate the recent event probabilities (Byrne & Brooks, 2008:1).
Status quo	A preference is given to the current position instead of a new one (Mercer Consulting, 2010).
Regret aversion	Adverse outcomes influence individuals to undertake decisions that will allow them to circumvent emotional pain (Byrne & Brooks, 2008).
Representativeness	Decision-makers have a natural tendency to judge a situation based on similarities and draw a general conclusion (Ricciardi, 2008:100).
Familiarity	Individuals often based their decisions on what they are familiar with (Ricciardi, 2008:101).
Confirmation	Positive outcomes are seen as a basis for confirming that a prior decision was biased (Mercer Consulting, 2010).

Source: Author compilation

3.3.5 Demographic factors

According to Kotler (1982) demographical factors to differentiate between customer segments has extensively been used in research. As indicated by Inakura and Shimizutani. (2010), the financial institution's regional density, attitudes towards risk, education and income are highly likely to influence bank switching behaviour of customers. A study by Colgate and Hedge (2001) found that young, highly educated and high-income customers frequently switched their banks in New Zealand and Australia. Previous research has shown that other demographic factors such as race, gender and occupation influence the switching behaviour of customers within the banking industry. In the view of Rashid and Hassan (2009:133), demographic factors assist companies with understanding the behaviour of customers to make branding easier. Most behavioural research studies explain bank switching of customers by using demographics.

3.3.5.1 Age

In a study by Cohen *et al*. (2006), it was indicated that a customer's decision to switch or stay with service providers is related to age. The research study by Stanley *et al*. (1985) reveals that a bank subsequently loses customers, as they grow older while it only appeals to younger customers. In addition, Stanley *et al*. (1985) concludes that to maintain a strong customer base, a bank should be able to recognise and provide solutions when there is a financial change in the bank performance stemming from ageing customers. Colgate and Lang (2001) found differences suggesting that customers who have considered switching banks are younger in comparison with those customers who had not considered switching banks. Since younger customers have short-term relationships with their banks compared to older customers, bank switching is more frequent amongst them (Clemes *et al*., 2007:61). However, interestingly, this is contrary to a study conducted by Kiser (2002), which revealed that middle-age customers are more likely to have switched banks than young and old age customers, which might suggest a cohort effect.

3.3.5.2 Gender

In the literature, gender is suggested as an important factor in decision-making, risk attitudes, complaints and perceptions behaviour (Stafford, 1996:12). However, this analysis has provided limited or insignificant gender distinctions (Ross *et al*., 1999:273). A study by Johnson and Powell (1994) analysed the decision-making of both genders and found insignificant differences. This view is supported by Ndubisi and Yin Ling (2006) who found in their research that irrespective of gender type, both men and women are unlikely to complain before they

switch banks. Although when transacting with the bank, it has been suggested that the quality of service is more important to females compared to males (Stafford, 1996:15). According to Gutek (1995), the difference might be because of the varying treatment of males and females in business exchanges or might originate from differing personality and behavioural patterns related with gender (Palmer & Bejou, 1995; Lin *et al*., 2001).

The scope to which general behaviour from gender differences can be established rather than situational reactions to environmental and social factors still needs further research (Powell & Ansic, 1997:607). Nonetheless, a common gender difference consistently identified in the research is a lower risk preference amongst females (Powell & Ansic, 1997:607).

3.3.5.3 Education

A previous study by Chakravarty *et al*. (2004) found education to be a significant factor for bank switching. This is consistent with recent studies by Brunetti *et al*. (2016), Van der Cruijsen and Diepstraten (2017), which showed that education, is positively related to customer bank switching. As highlighted by Mittal and Kamakura (2001:134), education plays a role in a range of customer decision-making and tolerance levels, which influence customer behaviour and repurchase intention. In contrast, evidence by Siles *et al.* (1994) indicates that bank switching is common amongst all different levels of education. However, it was shown that a highly educated group of individuals are more inclined to switch banks due to earning a high income (Colgate & Hedge, 2001; Duthie, 2005). A recent study by Clemes *et al*. (2010) shows similar results. In contrary, Mavri and Ioannou (2008) found differences suggesting that education had a weak impact on bank switching. According to Gerrard and Cunningham (2001) and Kaynak and Harcar (2005), the current highly educated generation is likely to patronise banks more as technology is taking over banking services.

3.3.5.4 Income

The study by Kiser (2002:364) examined the switching costs and switching behaviour of bank customers and found that both lower-income and higher-income customers are less likely to switch banks than others, except when countering major quality and price changes. This might suggest that such markets characterised by these types of customers might pose higher entry costs compared to other banking markets (Kiser, 2002:365). These results were contradicted by the experiments of Clemes *et al*. (2010:537) who considered customers earning higher income as more inclined to switch banks. This may be due to high bank service expectations held by these customers. Clemes *et al*. (2010:537) points out that in general, since high-income

customers have superior purchasing power, these customers tend to expect quality bank services. Ndubisi and Yin Ling (2006:72) added that low-income customers are less likely to draw better service quality since they have low purchasing power and might switch banks without complaints. This suggests that income might be an important factor in service quality received by bank customers and affect their bank switching behaviour.

3.3.6 Involuntary switching

Research studies by Friedman and Smith (1993) and Khan *et al*. (2010) indicated that bank switching behaviour of customers is caused by involuntary switching. Furthermore, Ganesh *et al*. (2000), in their study, showed that involuntary switching was strongly significant in comparison with the other factors of switching behaviour. Involuntary switching is described as a factor that cannot be controlled by both the bank and its customers (Keaveney, 1995:72). According to East *et al*. (2001:46), involuntary switching refers to customers' unwilling behaviour to voluntary switch banks. Gerrard and Cunningham (2004:218) define involuntary switching as incidents whereby customers change jobs and become obliged to switching to a new bank that has a relationship with the customers' new company to maintain that relationship. Similarly, Subramaniam and Ramachandran (2012:158) describes involuntary switching as a behaviour of customers changing jobs and subsequently switch to the bank of the current employer. Ghouri *et al.* (2010:100) identify closure of bank branches in customers' current location as well as changing residence and jobs as examples of involuntary switching factors for bank switching.

Changing jobs and changing location seems to be the common factors of involuntary switching. It has conclusively been shown that customers switch banks involuntary because of locating to a new area, changing jobs or a change in third party alliance (Keaveney, 1995; Gerrard & Cunningham, 2004). Moreover, uncontrollable factors that are beyond customers and banks largely describe involuntary switching (Keaveney, 1995:73). A study by Ghouri *et al.* (2010) found that the distance between the residency of a customer and the bank's location is one of the most contributing factors of involuntary switching. Customers are extremely concerned about convenience since it enables them to save a great amount of time (Clemes *et al.*, 2010:356). For example, Kiser (2002) found that limited geographical accessibility to other alternative banks lead to customers being inclined to choose a nearby bank. In addition, Kiser (2002:354) suggests that involuntary switching of customers is caused by other reasons.

Roos (1999:379) contends that the switching behaviour of customers is not merely caused by distinct decisions since switching behaviour can stem from unrelated involuntary factors. In the view of East *et al.* (2001:48), the closure of bank facilities at a certain location or opening of a new branch is attributed to customers' behaviour of involuntary switching. However, interestingly, this is contrary to a study conducted by Clemes *et al.* (2007), which indicates that involuntary switching is insignificant and has a weak influence on customers' bank switching behaviour. Later, a research study by Anjum *et al*. (2011) also found that involuntary switching was the least factor to impact bank switching behaviour of customers.

3.4 CUSTOMER SATISFACTION

Customers' expectation has a strong impact on their overall satisfaction (Munien, 2008:1). McDougall (2001:41) maintains that customers' expectation of the service will depend on how they understand their bank's service performance. Madzivhandila (2013:36) emphasises the importance of satisfaction of customers as it represents optimistic outcomes of spending on a certain service to meet their needs. According to Szymanski and Henard (2001:18), satisfaction of customers is perceived to be the ultimate factor that influences customers' bank switching behaviour. Numerous definitions of customer satisfaction in the literature are similar and vary from one another. As highlighted by Oliver (1997:13), customer satisfaction can be defined as the fulfilment response of a customer and it is an evaluation of a service or product feature, whether it delivered a satisfying amount of consumption. Hoyer and MacInnis (2001) and Hansemark and Albinsson (2004) contends that satisfaction is generally the emotional response towards the distinction between what is received and what is expected in terms of fulfilling a goal or attitudes towards bank services. Kotler (2002:173) describes satisfaction as a post-evaluative judgement concerning a customer's purposeful decision and choice. Gronholdt *et al*. (2000:509) explain satisfaction as customers' overall attitudes towards a variety of product choices, the price of the products and the conveniences offered by these products.

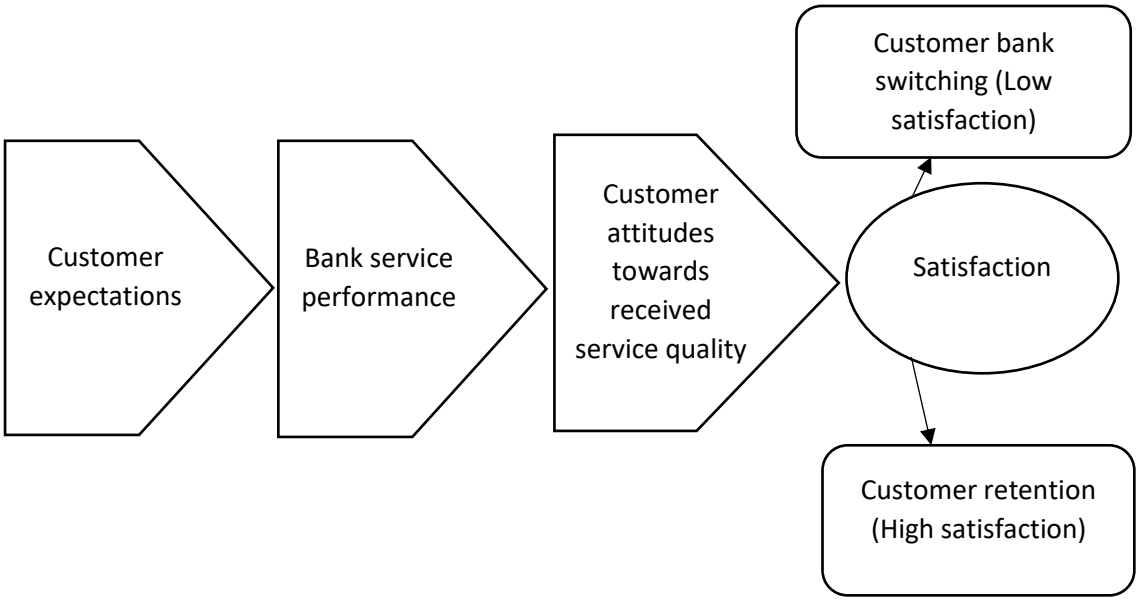
Yang and Peterson (2004:803) identify cumulative satisfaction and transaction-specific as two widely used measures of customer satisfaction. The cumulative approach describes satisfaction as the overall satisfaction a customer receives in terms of the service quality and the satisfaction associated with the organisation in general. According to Oliver (1997), the transaction-specific perspective explains satisfaction as the customer's emotional reaction towards the transactional service recently experienced with the bank. Furthermore, after completion of choice process and consumption, the response related to the service experience occurs at a certain time and

the emotional reaction differs in terms of intensity depending on the presented situation (Oliver, 1997).

The theory of customer satisfaction proposes that the quality of service can be distinguished as the variance between the actual service provided and the expected service by the customer (Oliver, 2009). This gap between expected service quality and actual service quality is called disconfirmation of expectancy and is perceived to be the greatest measure of customer satisfaction (Keiningham *et al*., 2007). Furthermore, the quality of service and satisfaction are associated with bank switching behaviour of customers (Clemes, 2007:51). The satisfaction of customers is seen as the fundamental cause of repeat purchase and positive word-of-mouth (Kotler, 2002). This is because satisfied customers tend to repeat a certain service (Clemes, 2007:53). The satisfaction of customers provides the basis for an exit barrier to assist with retention of customers and to lower the degree of customer bank switching (Fornell, 1992:11). A link exists between customer retention and satisfaction in the literature (Keiningham *et al.*, 2007).

Although retention and satisfaction of customers are linked together, Clemes (2007:53) is of the view that a failure in providing a quality service might lead to dissatisfaction of customers. Unsatisfied customers are more inclined to switch banks and highly contribute to bank switching behaviour rate (Ahmad & Kamal, 2002). The above finding contradicts an earlier study by Reicheld (2001), which found that unsatisfied customers chose to stay with the current bank because they expect no difference in the service offerings of the current bank's competitors. In other studies, Athanassopoulos *et al*. (2001) found that bank switching behaviour is negatively impacted by perceptions of high satisfaction of customers, alternatively, dissatisfied customers tend to switch their banks. Numerous factors such as the bank's lack of response, self-righteousness and indifference contribute to the likelihood of customer bank switching (Keaveney, 1995). A poor service experience evokes customers' prior incidents when customers encounter a similar service quality experience and this may lead to the inclination of switching banks because of dissatisfaction (Stewart, 1998:10). Figure 3.3 illustrates the satisfaction model of customers and their likelihood to stay or switch banks.

Figure 3.3: Customer satisfaction model



Source: Adapted from Moutinho and Smith (2000)

3.5 DIMENSIONS OF SERVICE QUALITY

The knowledge of service quality in the banking industry is important for an understanding of customer behaviour. Service quality is fundamental for survival and success within banking (Clemes, 2007:54). In addition, Clemes (2007:54) maintains that banks have incorporated service quality in their strategies to gain a competitive advantage over their competitors since product offerings by banks are easy to duplicate and almost identical. Similar to customer satisfaction, service quality stems from the variance between expected service quality and the actual service quality performed by a bank (Kamilia & Jacques, 2000:18). A previous study investigating service quality has been carried out by Parasuraman *et al.* (1988) showing that five dimensions are a basis for service quality relationships, namely empathy, tangibles, reliability, assurance and responsiveness. Table 3.3 presents in more detail these dimensions of service quality.

Table 3.3: Dimension factors of service quality

Dimensions	Description
Empathy	Caring and one-on-one attention that the customers receive from their service provider.
Assurance	The employees' capacity to establish confidence and trust and their courtesy and knowledge.
Reliability	The consistency of delivering the service that has been promised.

Responsiveness	Showing a willingness to assist and offer prompt service to customers.
Tangibles	Staff appearance, equipment and physical facilities.

Source: Parasuraman *et al.* (1988)

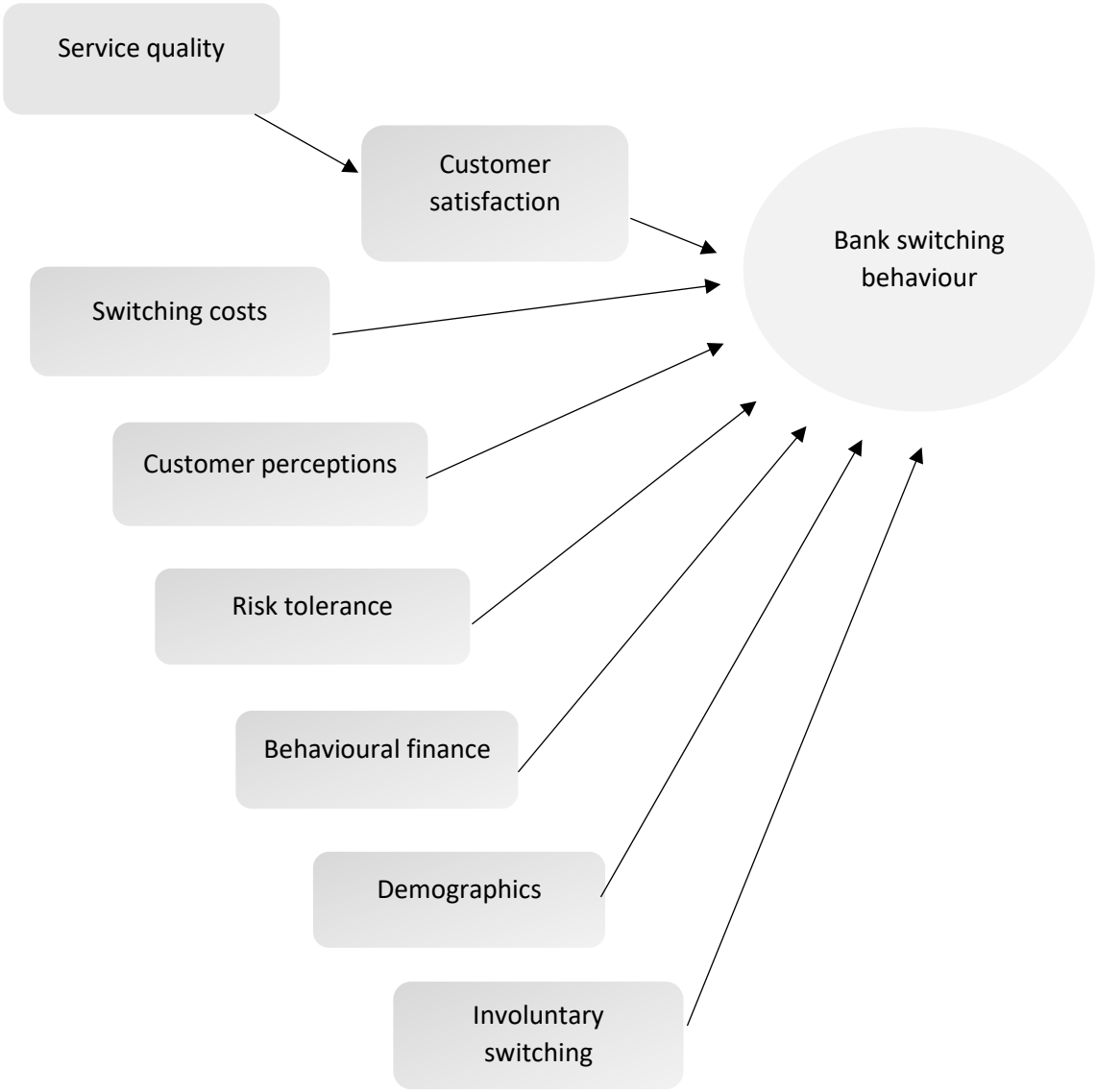
Zhu *et al*. (2002:79) maintains that these five dimensions of service quality identified by Parasuraman *et al*. (1991) have been utilised within the banking sector as the measurement tool. However, it was later shown by other researchers that these dimensions can be extended or vary based on a study. Bahia and Nantel (2000) discovered six dimensions of service quality as follows: price, access, reliability, effectiveness and assurance, service portfolio and tangibles. In the study by Ennew and Binks (1996), three dimensions of service quality in banking were identified as follows: product characteristics, personalised service delivery, advice, and knowledge offered by utilising factor analysis. Avkiran (1994) study discovered four dimensions of banking service quality, namely communication, credibility, teller service access and staff conduct. The research study by Philip and Bart (2001) indicated that there is a concern by bank customers of staff knowledge, efficiency, courtesy, appearance and customers had great expectations of the service provided to them. Furthermore, Gerrard and Cunningham (2004) and Colgate and Hedge (2001) also found that unpleasant service experience of customers with the bank staff is one of the major factors that lead to customers bank switching. According to Zeithaml and Bitner (2003:89), service quality (SERVQUAL) success in understanding satisfaction of customers and retention in a wide variety of businesses imply that service quality dimensions might illuminate the switching behaviour of bank customers.

A study of Yavas *et al*. (2004) investigated the relationship between customer satisfaction, background characteristics, service quality and behavioural outcomes. The findings indicated that the quality of service is fundamental for the satisfaction of customers since it can be associated with bank switching behaviour (Yavas *et al.*, 2004). According to Manrai and Manrai (2007:210), this means that customer satisfaction with a bank service merely describes the bank switching behaviour to a certain degree. Therefore, a relationship between customer satisfaction of a service and bank switching likelihood associated with that service should be enhanced to consider the importance of that service (Sivadas & Baker-Prewitt, 2000:74). Moreover, Manrai and Manrai (2007) suggest that bank switching and customer satisfaction relationships vary across the different dimensions of service quality. Thus, considering the impact of significance might lead to the stabilisation of these relationships across the dimensions of service quality (Olorunniwo *et al.*, 2006:60).

3.5.1 Hypothesised research model

A number of factors that influence the bank switching behaviour of customers have been revealed in the literature. The following conceptualised framework is proposed based on these factors. Figure 3.4 depicts how the independent variables affect the behaviour and decision of customers to switch banks. However, service quality has a mediating variable (customer satisfaction), which might evoke the switching behaviour of customers.

Figure 3.4: Hypothesised research model



Source: Author compilation

The summarised hypothesised relationships between the dependent variable (bank switching) and independent variables are proposed as follows:

(1) There is significant relationship between bank switching and customer satisfaction,

(2) There is significant relationship between switching costs and bank switching,

(3) There is significant relationship between customer perceptions and bank switching,

(4) There is significant relationship between risk tolerance and bank switching,

(5) There is significant relationship between behavioural finance and bank switching,

(6) There is significant relationship between demographics and bank switching,

(7) There is significant relationship between involuntary switching and bank switching.

3.6 SYNOPSIS

The focus of this chapter was based on several determinant factors that influence the bank switching behaviour of customers. The initial objective for this chapter was to define bank switching behaviour in terms of the relevant literature explained in this chapter. Thus, to instil a comprehensive understanding regarding the bank switching concept.

This was achieved through the theoretical objectives set out for this chapter. The analysis and evaluation of the determinants of customer bank switching were presented as a literature review. This included switching costs, customer perceptions, risk tolerance as well as demographical factors. The literature suggested that switching costs acts as a barrier for returning customers, however, dissatisfied customers are found to switch banks regardless of the level of the costs. In terms of perception, the literature provided that when customers feel discomfort with a certain situation dealing with the bank, they usually feel unsatisfied and that might incline them to switch banks. The literature also proposed that risk levels of customers vary in nature and tend to determine their decisions to switch banks. Moreover, demographical factors play a crucial role in determining customers' bank switching behaviour. The geographical factor, involuntary switching, was also discussed as it also proves to be the contributing factor in bank switching since customers might switch banks because of a change in residence. For an understanding of customers' reasoning patterns and decision-making process, the chapter also provided the behavioural finance literature. Customers have biases in their decision-making process when they encounter different financial situations.

Another theoretical objective was also reviewed in the literature on customer satisfaction and the dimensions of service quality. Customer satisfaction has a pivotal role and relationship with most of the determinants of bank switching behaviour. Satisfaction has been suggested to be

the factor that affects the final decision of customers' intentions to switch to another bank the most. As customers tend to have high expectations, banks need to provide a high quality of service to reduce the bank switching rate. The dimensions of service quality in banking vary based on numerous studies in the literature. Service quality and customer satisfaction are both linked to bank switching behaviour. Thus, banks need to incorporate both these factors into their business strategies if they are to retain their customers.

The next chapter explains the research methodology and design used in the study to achieve both the empirical and primary objectives.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The emphasis of this chapter is on the research design and methodology of the study. This will include population, sampling, ethical considerations and data collection. The importance of the research design and methodology is that it provides the researcher with a plan and method to implementing the research. The intent of the research design and methodology is to ensure that obtained data are applied and converted effectively into eloquent information to achieve the empirical objectives of the study. The following empirical objectives were formulated, based on the primary objective of the study:

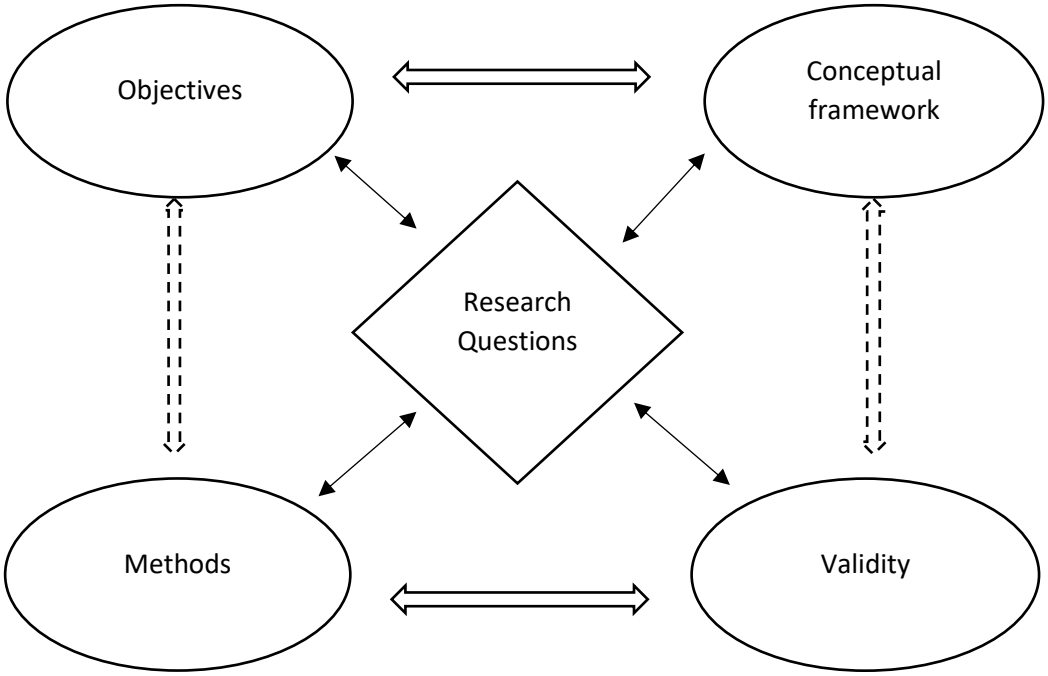
- Establish service quality factors influencing bank switching behaviour
- Determine how bank reputation influences bank switching behaviour of depositors
- Determine how demographical characteristics influences switching behaviour of depositors
- Determine the risk tolerance level and influence of demographic information
- Determine how demographic information influences behavioural finance
- Determine the most significant determinant influencing bank switching behaviour of depositors.

A research design with methodological rigour had to be structured to achieve both the primary and empirical objectives. Therefore, various sections that form part of the research design and methodology will be explained in detail. The research design is described in Section 4.2, where a comparison and discussion of the research paradigms are presented as well as various methodological methods. Moreover, a chosen research design and methodology of the study is comprehensively described in Section 4.3. This will be followed by Section 4.4, which describes the population, sample frame, sample size and method. The measuring instrument of the study and the method for collection of data will be described in Section 4.5. Furthermore, the discussions about the design of the questionnaire, layout, format and administration are presented. Section 4.6 describes the analysis of the data used for this study, where a data preparation procedure is outlined. The various statistical procedures to be followed, such as descriptive statistics, regression analysis, validity and reliability and factor analysis are stipulated in the last section of this chapter.

4.2 RESEARCH DESIGN

Decisions about what, by what means, how much, when and where, concerning an inquiry, establish a research design (Kothari, 2004:31). Therefore, Kothari (2004:31) defines research design as the conceptual framework for conducting research, it establishes the blueprint for the collection of data, measurement and data analysis. The research design refers to a method of how to collect information that will be used to answer the objectives of the research study (Du Plessis & Rousseau, 2007:19). According to Maxwell (2005), the research design is a continuous process utilised for guidance in creating a robust and coherent research study that connects research questions, conceptual framework, objectives and validity. Figure 4.1 depicts the research design interactive model.

Figure 4.1: Research design model



Source: Maxwell (2005)

4.2.1 Research paradigms

Research intent, expectations and motivation are set by the choice of a paradigm. Thus, a paradigm (or worldview) should be nominated as the initial step to form a foundation for subsequent choices concerning research design, methodology and methods (Mackenzie & Knipe, 2006:194). A paradigm comprises of ontology (realism theory), epistemology (knowledge theory), methodology (inquiry theory) and methods (Scotland, 2012:9). A paradigm is a framework of norms that guide action (Guba, 1990:17). The term paradigm can

be defined as a motivation or philosophical intent for conducting a research study (Cohen & Manion, 1994:38). For this study, a paradigm can be defined as the concepts, propositions, or logically related assumptions orientating thinking and inquiry (Bogdan & Biklen, 1998:22). In literature, a discussion of numerous worldviews such as emancipatory, pragmatism, critical, transformative, participatory, and constructivist is presented. Table 4.1 represents the basic features of the worldviews.

Table 4.1: Four main paradigms features

Paradigm	Method	Main focus	Tools
Positivist	Quantitative methods predominate, however, can also be used in qualitative studies.	Variables observation, causation, knowledge and testing of theory.	Scales; experiments; tests; and quasi-experiments
Constructivist	Predominated by qualitative methods but can also be used in quantitative studies.	Understanding or meaning of a certain event created by participants.	Observations; visual data analysis; documents reviews; interviews
Participatory	Mainly utilises qualitative methods but also used in mixed methods.	Politics and liberation of individuals from oppressive practices.	Engagement of participants to establish collaboration.
Pragmatist	Either quantitative and/or qualitative methods can be used depending on the research purpose and specific research questions.	Truth depends on what may work at the time, seek results from an external world which is independent of the mind.	May utilise both constructivist and positivist paradigms tools.

Source: Mertens (2005); Mackenzie and Knipe (2006)

Positivism paradigm is sometimes used interchangeably with science research. It diverges from relying on metaphysics and theological views of the world (Newman *et al*., 1998:4). Positivism is an empiricist philosophy that relies on rationality (Mertens, 2005:8) and a notion of causation determines the outcome (Creswell, 2003:7). Positivism view aims to describe an experience through measurement and observation (O'Leary, 2004:5). However, positivism has limitations, as human behaviour cannot be fully explained through the scientific method (Berliner, 2002:20). It is rarely explanatory to reduce variables from empirical generalisation (Scriven, 1970:101), as other variables may be present when their impact is evident (House,

1991:6). As Schulze and Kamper (2012:132) points out, a great setback for a positivism method is of its major dependence on rationality, thus, it ignores subjective knowledge regarding beliefs and values (Muposhi, 2015:150).

Constructivism is another paradigm, which is focused on the investigation of individuals' interaction, phenomenon understanding based on perspectives of individuals as well as the cultural and historical contexts inhabited by people (Creswell, 2009:8). The research goal of this paradigm, then, is depending on the subjective views of the participants to understand the social world (Creswell & Poth, 2017:20). Constructivist recognises that the research impact is shaped by their experiences and backgrounds (Mackenzie & Knipe, 2006:3). Moreover, constructivist generally develops a pattern or theory inductively than beginning with a theory in comparison with post-positivism (Creswell & Poth, 2017:21). Constructivist rely mostly on analysis and qualitative methods or mixed methods (Mackenzie & Knipe, 2006:3). Therefore, quantitative data may only be used to effectively describe the phenomenon in support of the qualitative data (Mackenzie & Knipe, 2006:3). The shortcoming of the constructivism method is it that it does not advocate adequate action to assist marginalised individuals (Creswell & Poth, 2017:21).

Participatory is an alternative worldview that may be utilised by researchers. The participatory paradigm accepts the outer world of ontological nature as objectively given as well as represented subjectively in the human mind (Breu & Peppard, 2001:245). Participatory researchers hold a belief that an inquiry has to be interwoven with a political agenda and politics (Creswell, 2003:10). Moreover, the participatory paradigm assumes that the researcher will collaboratively proceed in order not to marginalise the participants further as a research result (Mackenzie & Knipe, 2006:3). Participatory research addresses as the pivotal point, issues such as alienation, suppression, domination, oppression, inequality and empowerment (Creswell, 2003:11). In studying these issues, the voice of the participants is provided for improving their lives and raising their consciousness as qualitative methods are utilised (Creswell & Poth, 2017:22). Furthermore, the action of the participatory is recursive and aims to bring change in practices, thus, improving a political agenda for change (Creswell & Poth, 2017:22).

Pragmatism has several forms. The focus of knowledge is based on the outcomes of consequences, actions and situation of inquiry instead of antecedent conditions as opposed to post-positivism (Creswell, 2003:13). In terms of applications, there is a concern of what works as well as problem-solving (Patton, 1990). Therefore, the crucial point of research is studying the problem and questions arising from the problem rather than focusing on the methods

(Creswell & Poth, 2017:22). There is a freedom of choice in the pragmatism research, whereby researchers are allowed to choose the procedures, techniques and methods that will fit their purposes and needs (Cherryholmes, 1992:13). Rather than enhancing structural and fundamental change in society, pragmatism has been criticised that it might encourage incremental change (Johnson & Onwuegbuzie, 2004:19).

4.2.2 Methodologies

Qualitative and quantitative methods have been dominant in past research studies. In the past, advocates of qualitative and quantitative research were drawn in ardent dispute (Johnson & Onwuegbuzie, 2004:14). Quantitative and qualitative comprise of philosophical roots in the positivistic and naturalistic philosophies, respectively. Quantitative research mostly places an emphasis on common reality whereby there can be an agreement between people, despite the existing theoretical differences (Newman *et al*., 1998:2). On the other hand, despite the existing theoretical differences, most qualitative research shows a perspective of individual phenomenology (Newman *et al*., 1998:2). Recently, research methods in terms of design are becoming more complex and in terms of their application, becoming more flexible with a new mixed method being more common and acceptable (Mackenzie & Knipe, 2006:7).

4.2.2.1 Qualitative method

Van Maanen (1979:520) defines the qualitative method as an interpretative technique which strives to translate, decode, describe and reach in the social world occurring natural phenomena. Similarly, the qualitative method is ethnographic and interpretative in nature (Atieno, 2009:13). Glesne (2006) is of the view that the qualitative method attempts to comprehend a certain type of social experience through involved individual perspectives (Szyjka, 2012:111). Thus, interpreting, understanding and contextualising is the main purpose of such studies (Slevitch 2011:7). Moreover, there are two crucial assumptions which comprise of situational variables that are difficult to measure, interwoven and highly complex as well as a bias that there is socially constructed reality (Newman *et al*., 1998:9). The inductive inquiry is the initial step of the qualitative research method which might generate a theory of participants (Szyjka 2012:111).

The researchers are free to choose the best strategy that fit their research purpose in various qualitative research inquiry methods (Paley, 2000:143). According to Bogdan and Biklen (2003); Patton (2002); and Creswell (2003) qualitative research methods include narratives, phenomenology, case studies, grounded theory and ethnographies. Szyjka (2012:111) points out that each methodology depends on certain procedures which include surveys, fieldwork,

content analysis, observations, interviews and also audiotaped and video transmissions. Qualitative data results should provide a comprehensive description that the quantitative method is unable to provide (Denzin & Lincoln, 2000). Patton (2002) is of the view that qualitative research methods involve how a phenomenon or process occurs within the research inquiry confinement. Hence, the qualitative study constructs and interprets or analyses data in a non-chronological and non-linear process (Paley, 2000:143).

Qualitative methods are extremely interactive and also subjective in terms of interpretation. Thus, indicating biases, values and experiences of the researcher (Rossman & Rallis, 1998). Fundamental researchers utilising the qualitative method rationalise this method due to their profound views that personal experience constructs knowledge (Kothari, 2004:5). Whereby, truth relies on several reality constructions which involves biases (Szyjka, 2012:112). Schwandt (2000) and Creswell (2003) hold the notion that due to situational context, the truth cannot be subjected to any kind of generalisation. Nonetheless, the significance of qualitative research depends on how the researcher compiles and explains the process and investigated results (Paley, 2000:143).

Krefting (1991:216) is of the view that qualitative research validity relies on the method a study crosschecks and regulates the collected data. This method is described as triangulation or a method that strives to enhance the validity of the researcher's findings (Mathison, 1988:29). Triangulation can be described as a process that attempts to provide a complete depiction of a phenomenon, whereby various sources of data are appropriately aligned to support or confirm a finding (Szyjka, 2012:112). Triangulation can also influence the decision of ceasing the inquiry of the study to avoid saturation and redundancy.

The inquiry of qualitative results can deliver insights to problems or social complex situations (Slevitch, 2011:4). Thus, revealing the personal experience of an individual with a phenomenon leading to a more meaningful context. Qualitative research method can be utilised as an instrument for evaluating different agendas to provide immediate feedback to participants upon completing the evaluation (Patton, 2002). Findings of qualitative research cannot be strongly generalised to other populations or group of interest (Szyjka, 2012:112). According to Berliner (2002:19), qualitative results credibility is supported loosely as robust scientific evidence in various fields within the social sciences.

4.2.2.2 Quantitative method

The quantitative method stems from the positivist paradigm (Arghode, 2012:155). It is empirical in nature and sometimes referred to as the scientific method (Atieno, 2009:13). The

quantitative researchers are concerned with prediction and generalisation of outcomes as a tool for describing a specific phenomenon (Szyjka, 2012:113). In addition, Slevitch (2011:6) maintains that quantitative research assumes that social facts have an independent objective reality separate from that of the researcher's subjective view of the world. Quantitative method is defined as an investigation into a human or social problem which is based on hypothesis (theory) testing comprised of variables, examined with statistical procedures and measured with numbers (Creswell, 1994). The quantitative method comprised of numerical data collection to predict and describe the phenomena of interest (Gay & Airasian, 2000).

The quantitative research has a deductive experimental nature (Szyjka, 2012:113). The collected data are subsequently reduced through statistics, indices, numbers associated with the research design (Libarkin & Kurdziel, 2002:79; Glesne, 2006). The quantitative method often begins with hypothesis testing by utilising formalised tools (Newman *et al*., 1998:3). Before usage, these tools should be indicated to be both valid and reliable (Slevitch, 2011:8). Furthermore, this method can be classified into a simulation, experimental and inferential research methods (Atieno, 2009:13). Assuming that certain quantitative statistical assumptions have been met, generalisations of the research results can be made to other related populations.

The generalisation of the investigation findings often happens when the results strongly rely on random choice across and within related populations under the inquiry (Szyjka, 2012:113). Quantitative research explains and determines the effect and cause amongst selected variables of the study (Sogunro, 2002:4). The quantitative method is perceived to be more credible to policymakers and administrators (Feuer *et al*., 2002:11). However, the quantitative method tends to measure a phenomenon merely at a certain moment in time (Amaratunga *et al*., 2002:23). Moreover, the hypothesis testing or agenda of the researcher might be unable to reveal the needs of the participants involved immediately (Amaratunga *et al.*, 2002:23). This may be due to limitations placed on variables, thus the opportunity to create a new theory of the investigated event might be impossible (Kothari, 2004:4). The application of the results also might be hindered by extreme levels of generalisation (Johnson & Onwuegbuzie, 2004:19). Therefore, human behaviour cannot be completely explained by a scientific method (Berliner, 2002:20).

4.2.2.3 Mixed method

In the research community, both qualitative and quantitative methods are best thought of as complementary and, therefore, should be mixed (Amaratunga *et al*., 2002:23). Mixed method is the third major method in research as it is increasingly becoming attached and articulated to

research practice (Bazeley, 2006:67). Researchers tend to base mixed-method knowledge claims towards the pragmatic paradigm (Creswell, 2003:21). Mixed method is defined as a single study, which includes collection and analysis of both qualitative and quantitative data, whereby data collection is sequential or concurrent (Creswell *et al*., 2003:165). According to Johnson and Onwuegbuzie (2004:17), a mixed-method study is described as a mix of both qualitative and quantitative methods within a single study.

A combined method of research in social sciences has been perceived as a crucial element for major improvement (Gorard, 2004:7). The research inquiry is based on the notion that the collection of diversified data can greatly explain a study problem (Creswell, 2003:22). Therefore, attention towards triangulation has been growing in research (Yin, 2003). Triangulation can be defined as a mix of methodologies in a single study investigating the same phenomenon (Amaratunga *et al*., 2002:23). Mixed methods procedures have been developed and comprise of the following:

- Sequential procedures are whereby the researcher attempt to expand or elaborate on the results of one method with another method (Creswell, 2003:18).
- Concurrent procedures involve converging qualitative and quantitative data to comprehensively provide research problem analysis (Creswell, 2003:18).
- Transformative procedures are whereby theory is utilised as a comprehensive standpoint in a research design which comprises of qualitative and quantitative data (Creswell, 2003:18).

Rather than constraining or restricting the choices of researchers, mixed methods research attempts to validate the utilisation of numerous methods in answering the questions of the inquiry (Johnson & Onwuegbuzie, 2004:17). The strength of the mixed methods is its focus on combining both qualitative and quantitative relevant strengths to comprehensively explain a phenomenon (Amaratunga, 2002:23). On the other hand, is expensive and time-consuming as it requires great knowledge and skill of both qualitative and quantitative methods (Gorard, 2004:7). Table 4.2 provides a summary of the methods.

Table 4.2: Methodologies

Methods	Explanation	Advantages
Qualitative	• Utilises emerging methods • Questions are open-ended	• Provide a comprehensive experience of individuals • deliver insights to problems or social complex situations

	• Observations, audio or interviews form part of data • Analysis of image and text	• Constructs and interprets or analyses data in a non-chronological and non-linear process
Quantitative	• Methods are predetermined • Basis questions on instruments • Measurable numeric data • Statistical interpretation	• Generalisation of findings • Quick collection of data • Both the researcher and findings are independent • Accuracy of results
Mixed method	• Emerging and established methods • Both closed and open-ended questions are used • Both qualitative and quantitative data are used. • Each database is used to interpret data.	• Comprehensively explain a phenomenon • Findings are more accurate • Generates new theories that can be tested • Surpasses the qualitative and quantitative limitations

Source: Amaratunga *et al*. (2002:23); Kothari (2004:5); Johnson and Onwuegbuzie (2004:17); Slevitch (2011:4)

4.2.2.4 Methodological method for this study

The research design and method chosen for a study relies on the intent of the inquiry rather than a paradigm preference (Cavaye, 1996:229). Hence, positivism was the chosen paradigm for this study. Positivism impartially explores the world objectively, discovering absolute knowledge (Scotland, 2012:10). Positivism research seeks to predict, explain the social world experience through searching for causal relationships and regularities between the elements of the phenomena (O'Leary, 2004:5). Positivism and scientific paradigm are used interchangeably and is based on empirical and rational philosophy (Mertens, 2005:8). Positivism research has adopted high rigour standards as well as an attempt to formulate methods that produce accepted findings (Scotland, 2012:11).

Following the selection of the research paradigm, the research design involves the selection of the research method. A comparison between qualitative, quantitative and mixed methods was discussed and the distinctions amongst these methods analysed. The qualitative method is good for managing and simplifying data without destroying context and complexity (Atieno, 2009:16). It can create a new theory, nonetheless, the findings of the quantitative investigation are limited to a small scale of population, thus, cannot be generalised (Szyjka, 2012:112). The

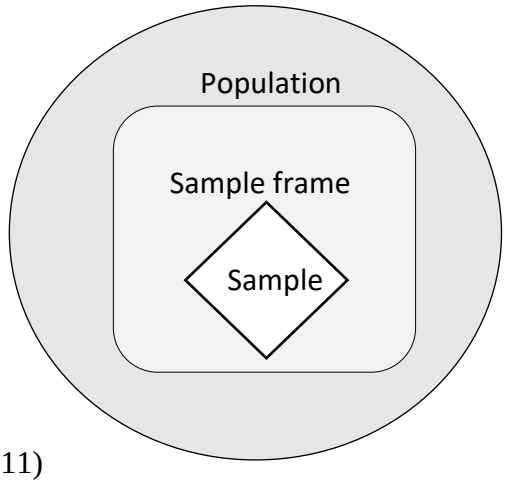
mixed methods research requires a high level of knowledge of both quantitative and qualitative methods and although it provides better findings, it is more expensive (Gorard, 2004:7).

The quantitative method stems from the positivist paradigm (Slevitch, 2011:76). Positivism seeks to predict and generalise, it often generates quantitative data (Scotland, 2012:10). Therefore, this study will be using the quantitative method, which may involve a description of the phenomena, questionnaires and standardised tests utilising standardised observation instruments (Pring, 2000:34). In addition, the analysis of the quantitative method includes inferential and descriptive statistics, where inferential statistics allow generalisation of the wider population through the sample results (Scotland, 2011:10).

4.4 SAMPLING DEVELOPMENT

It is time-consuming, expensive and often impossible to acquire information or research answers from a large group of people (Walliman, 2011:93). Thus, there is a need to examine some of the individuals within the group as representatives; this process is called sampling (Walliman, 2011:93). According to Tailor (2005:121), a sample can be defined as the universe or population portion. Taherdoost (2016:18) added that sampling is the process of reducing the number of individuals to be investigated from a large set of individuals. The development of the target methods, sample size and target population are described in the sections below. Figure 4.2 depicts the sample link to sample frame and population.

Figure 4.2: Sampling development



Source: Walliman (2011)

4.4.1 Target population

Defining the target population is the initial step in the sampling process (Taherdoost, 2016:19). A large number of people are often referred to as a population. Nonetheless, in research, a

population is a collective term that refers to a total quantity of cases (or participants), which are the research study's subject (Walliman, 2011:94). The selection of the target population is based on the intent of the inquiry; hence, categories such as gender, age, income can serve as a basis (Coyne, 1997:624). Therefore, South African bank depositors living in Gauteng older than 18 years, having some level of education and earning an income deposited in their bank account, are the main target for this study.

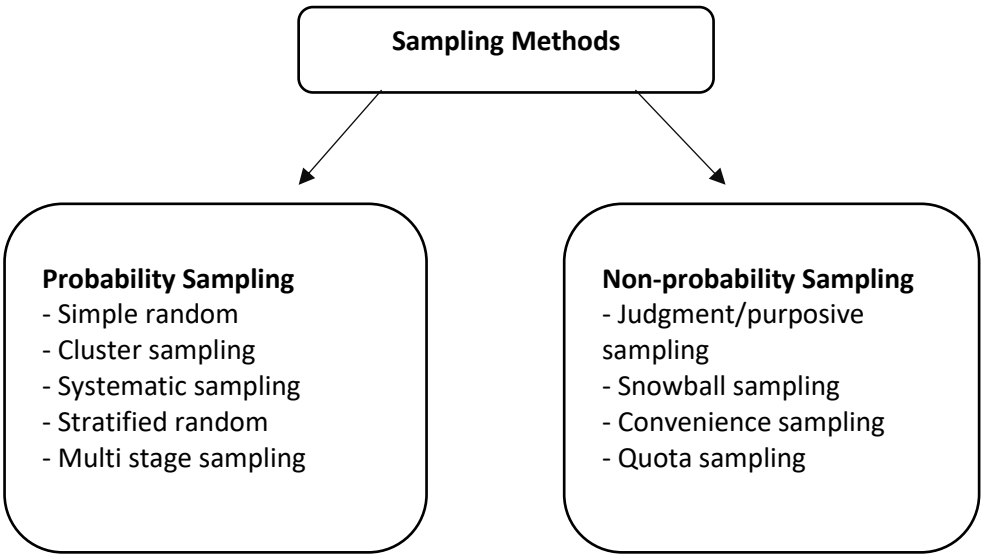
4.4.2 Sample frame selection

The sample frame should be representative of the entire population targeted (Taherdoost, 2016:20). It is a list made up of actual cases or features from the target population. The sample frame of the study comprises of individuals banking with the top five larger banks in South Africa. The banks included are First National Bank, Amalgamated Bank of South Africa, Nedbank, Capitec Bank and Standard Bank.

4.4.3 Sample technique

Sampling is extracting a subset from a selected sample frame or target population (Etikan, 2016:1). Sampling can be utilised to generalise a phenomenon concerning an existing theory or make an inference regarding the population (Marshall, 1996:522). Broad sampling method needs to be decided before choosing a certain type of sampling method. Sampling methods can be differentiated between probability and non-probability sampling. Figure 4.3 illustrates the different types of sampling methods.

Figure 4.3: Sampling methods



Source: Taherdoost (2016)

4.3.3.1 Probability sampling

A probability sampling method provides a highly reliable representation regarding the entire population (Walliman, 2011:96). Sample selection depends on utilising random methods. Probability sampling is defined as an equal opportunity every participant has of being chosen from the population (Etikan *et al.* 2016:1). Probability sampling is free from bias, however, in terms of effort and time, it can be costly (Taherdoost, 2016:20). The types of probability sampling are presented in Table 4.3

Table 4.3: Probability sampling

Type	Description
Simple random sampling	A process whereby every participant has an equal chance of being included in the sample from the population.
Cluster sampling	Dividing the entire population into groups. Then, lastly, a random sample is then drawn from these groups to be utilised in the sample.
Systematic sampling	A simple method whereby, every nth participant is selected after randomly starting.
Stratified random sampling	Subsequently taking a random sample from every subgroup (or strata) after a division of a population into subgroups.
Multi-stage sampling	A gradual process of moving to a narrow from a broad sample.

Source: Ackoff (1953); Wilson (2010); Quinlan (2011:210); Taherdoost (2016)

4.3.3.2 Non-probability sampling

Non-probability sampling mostly depends on the researcher's judgment and, thus, cannot be utilised for generalisations concerning the entire population (Walliman, 2011:96). Non-probability sampling is a process whereby participants do not have an equal opportunity to be chosen for the sample (Etikan *et al.*, 2016:1). The non-probability sampling method is frequently related to qualitative and quantitative research (Yin, 2003). Table 4.4 represents non-probability technique methods.

Table 4.4: Non-probability sampling

Type	Description
Judgmental or purposive sampling	A method whereby events or participants are intentionally selected to provide vital information that other choices cannot provide.
Snowball sampling	A technique whereby few participants are used to assist in encouraging interest from other individuals to also participate. It often used for inaccessible small populations.

Convenience sampling	A method of choosing participants due to their ease of accessibility and availability.
Quota sampling	A method whereby a selection of participants is based on predetermined distribution characteristics for the total sample and the entire population to have the same characteristics.

Source: Maxwell (1996); Breweton and Millward (2001); Davis (2005); Dörnyei (2007)

The non-probability purposive method was utilised for this study to meet the sample criteria, which consist of individuals living in Gauteng, older than 18 years, with some level of education and bank with one of the top five major banks in South Africa.

4.4.4 Determining the Sample size

Observational or experimental units (participants) should be appropriately chosen from a target population (Lenth, 2001:187). This is because it is rarely efficient and practical to investigate the entire population (Marshall, 1996:522). According to Slevitch (2011:76), a large sample size ensures better generalisability and representativeness of the results and also appropriate utilisation of statistical instruments. Larger sample size avoids biases or sample errors since they accurately represent the population's characteristics (Taherdoost, 2016:23). Nonetheless, the research findings can be weakened by an oversized sample (Gill *et al*., 2010). Table 4.5 indicates the necessary sample size for provided combinations of population percentage of 50 percent, confidence levels and precision.

Table 4.5: Sample size preferred accuracy

	Population variance (P=50%)					
	(95% Confidence level) Error margin			**(99% Confidence level) Error margin**		
Population size	**5**	**3**	**1**	**5**	**3**	**1**
50	44	48	50	46	49	50
75	63	70	74	67	72	75
100	79	91	99	87	95	99
150	108	132	148	122	139	149
200	132	168	196	154	180	198
250	151	203	244	181	220	246
300	168	234	291	206	258	295
400	196	291	384	249	328	391

500	217	340	475	285	393	485

Source: Gill *et al*. (2010)

Selection of sample size by previous researchers is constructed based on the average sample size of another similar study (Ferreira, 2018:96). A study by Kiser (2002) predicted switching costs and switching behaviour of households by using a sample of 1 500 from the Michigan Survey of Consumers data. A study by Manrai and Manrai (2007) utilised 445 samples to investigate the switching behaviour of customers for bank services in United States. In a study by Brunetti *et al*. (2016) a sample consisting of 3 043 households from Italy was used to explore bank switching behaviour.

Sample size can be restricted by financial costs, access to samples and time (VanVoorhis & Morgan, 2007:46). Moreover, VanVoorhis and Morgan (2007:46) maintains that generating an adequate sample size sufficiently provides the researcher with power as well as the capacity to collect the sample. Hence, this study will utilise a sample size of 324 (6 items per variable) bank customers considering time, financial costs and access to samples. This sample size is in line with the similar study of Manrai and Manrai (2007). In general, Tabachnick and Fidell (1996) propose that for factor analysis, over 300 observations are a good rule of thumb. A sample that consists of more than four items at least per variable is required (Malhotra & Birks, 1999:120). Therefore, this study meets the statistical requirements for the analysis to achieve the objectives of the study.

4.5 DATA COLLECTION METHOD AND MEASURING INSTRUMENT

It is crucial for all forms of research to appropriately select and implement data collection methods for the analysis of the study (Peersman, 2014:1). Irrespective of the type of instrumentation or extent of the structure utilised, it is vital to capture data and convert it into an amenable format for analysis (Devers & Frankel, 2000:268).

4.5.1 Data collection method

This study used a quantitative method, which involves quantification of information from collected data, to refute or support knowledge claims (Williams, 2007:66). According to Walliman (2011:97), questionnaires are an appropriate tool for quantitative data collection and this method is referred to as a survey. Utilising a survey design, questionnaires form part of the key instruments for data collection (Bryman, 2016:220). The self-administered questionnaire method was used for the collection of data through online and hand delivery to participants

since they can be easily distributed to many people. The self-administered questionnaire refers to the completion of a survey by participants without the presence of the researcher (Mitchell & Jolley, 2012:262). Furthermore, this allows participants to honestly respond to the highly personal survey questions if there is anonymity (Mitchell & Jolley, 2012:262).

4.5.1.1 Ethical considerations

This study conforms to the North-West University academic research ethical standards regarding the collection and management of data. This study was approved by the Social and Technological Sciences Research Ethics Committee of the Faculty of Economic Sciences with an ethical number, NWU-00718-19-A4. The following aspects were considered for ethics:

- **Voluntary participation** − the participants had a choice to voluntarily participate or freely decline to participate and could withdraw at any point of the study.
- **Guaranteed anonymity** − identifying marks were not provided by the participants, therefore, anonymity was guaranteed.
- **Information truly reflected** − participants were presented with true information, clear of any deliberate misrepresentation or deception.
- **Truly representation of findings** − the research findings will be reported in an academic study as a dissertation and also in research articles. The data and findings published will truly reflect the collected and analysed data.
- **Management of data** − before being confidentially destroyed, data will be stored for five years.

4.5.1.2 Questionnaire design

The process of a questionnaire design should be guided by clear concepts, relationships and variables being investigated (Welman *et al*., 2005:174). Gathering research data from a defined population sample through a questionnaire is a standardised method that allows the findings of the investigation to be generalised to the entire population (Rattray & Jones, 2007:235). As Foddy (1993) describes it, a questionnaire is a complex communication procedure that creates meaning from the interactions between participants and researchers. Defining the objectives of the study is the initial step of any questionnaire survey (Brace, 2018:8). Defined objectives help the participants to understand the goal the research attempts to achieve. According to Dillaman *et al.* (2014), an attractive outlay of a self-administered questionnaire is highly likely to increase the rate of response. This is because the layout facilitates the answering of relevant questions to the respondent (Dillaman *et al*., 2014). Issues of validity and reliability are crucial

to the findings obtained from questionnaires and underpins questionnaire development (Rattray & Jones, 2007:235). A poorly designed or developed questionnaire survey will fail to provide the required data, thus, might lead to misleading results (Brace, 2018:1). According to Fink (2003), statements or questions of the questionnaire should be kept short to enhance the comprehension of participants.

This study utilised a questionnaire design that allows participants older than 18 years with some level of education to be able to comprehend the purpose of the survey. The questionnaire had a cover page not exceeding a page, which described the importance of the study, participation and request of permission from participants. In terms of the questionnaire presentation, considerations were given to the order of the items, language used and type of question. Participants were restricted from proceeding to the next question if the response was not given to the previous question to avoid non-response error. The questionnaire comprised of 50 scaled items and completion, on average, took 15 minutes.

4.5.1.3 Questionnaire format

A structured questionnaire format was utilised for this study. According to Brace (2018:2), a structured questionnaire refers to fixed or prepared interview schedule, whereby each participant is requested to answer a series of questions. The questionnaire should only include questions that are related to the research questions (Welman *et al*., 2005:174). There are four types of data utilised to measure the questionnaire responses and they include the following:

Table 4.6: Types of data

Data type	Description
Nominal measurement	Numbers are assigned to individuals for differentiation of the measured attribute.
Ordinal measurement	Ranking scales which are sometimes referred to as comparative scales. Based on the question criteria, respondents are requested to place nominal categories.
Interval measurement	It comprises of both nominal and ordinal characteristics; however, it provides more information concerning the difference degree between single items of data within a group.
Ratio measurement	Consist of an interval scale, whereby each point on the ratio scale has a constant distance that can be meaningfully interpreted and also with a zero-point having real meaning.

Source: Welman *et al*. (2005); Brace (2018)

A variety of response style and scales can be utilised when a questionnaire is being developed. They provide varying levels or types of data that will influence the analysis of the research study (Rattray & Jones, 2007:235).

This study utilised a Likert scale, which assumes the experience strength is linear (Rattray & Jones, 2007:235). The service performance (SERVPERF) scale was used for performance measurement. Both of these scales are validated and assisted in capturing the collected data for individual observations and perceptions. The questionnaire questions were tailored based on the objectives and research questions of this study.

4.5.1.4 Layout of the questionnaire

The method used to layout a questionnaire is crucial for successful and accurate data capturing (Brace, 2018:141). In addition, Brace (2018:141) maintains that wrong questions may be asked and incorrect answers recorded if the layout of the questionnaire is poor. The self-administered questionnaire was used to collect primary data and correct questions were asked for this study. The sections and structure of the questionnaire layout are explained below.

4.5.1.4.1 Section A: Demographics

This section included various demographic questions such as gender, age, ethnicity, the income of depositors, and level of education. Demographics were part of the inclusion criteria for this study to capture the correct sample. Depositors with more than 5 years of banking experience with a salary deposited into their bank account were requested to complete the questionnaire. Previous studies by Ferreira (2018), Dickason (2017) and Redda (2015) and Grable (1999) have all found demographics to be contributing factors to stakeholders' behaviour in the financial sector. The education level is also asked due to the fact that depositors need to have a certain level of financial knowledge when taking out a savings account.

4.5.1.4.2 Section B: Customer Service Quality

A diagnostically robust and psychometrically sound service quality scale provides more insights about service shortfalls to company managers to utilise correct actions (Jain & Gupta, 2004:25). SERVPERF is a recommended scale for generally evaluating service quality (Jain & Gupta, 2004:25). A 31-item SERVPERF scale was used to measure customer satisfaction regarding the service quality of the banks.

4.5.1.4.3 Section C: Bank perception

Customers' perception of the bank is measured using four items. Customers had to choose one option for each question according to how they perceive their banks. The options included strongly disagree (1), disagree (2), somewhat agree (3), somewhat disagree (4), agree (5), and strongly agree (6). Customers' bank perception was measured to find out how customers perceive their banks before switching to another bank.

4.5.1.4.3 Section D: Behavioural finance

Behavioural finance intends to enhance and demonstrate an understanding of the reasoning pattern of depositors (Ricciardi & Simon, 2000:27). Behavioural finance biases are known to influence the decisions of market participants. A nine-item behavioural finance scale was used, which included statements that coherently convey the biases on which depositors base their financial decisions. A six-point Likert scale (1 = strongly disagree, 6 = strongly agree) was utilised for depositors to relate their decisions to withdraw on behavioural finance biases. Since this was a self-constructed scale by Ferreira (2018) based on the literature, the internal consistency reliability needed to be confirmed.

4.5.1.4.4 Section E: Risk tolerance

The SCF scale was used to measure the risk tolerance of the participants. This was done by choosing the closest financial risk amount participants are willing to take. Since Grable and Lytton (1999) developed the SCF scale, an increasing number of studies have investigated the risk tolerance of individuals. The scale is based on subjective measures. Financial risk tolerance variables are not fully incorporated in the SCF (four-item scale) but for experience and investment choice attitudes, it is a comprehensive measure (Grable & Lytton, 2001:43). The SCF scale is the only single measure of risk tolerance.

4.5.1.4.5 Section F: Price factors

The level of the fees charged by the banks on depositors account is likely to influence bank switching behaviour. High bank charges may incline customers to switch to a competitive bank to pay less costs.

4.5.1.4.6 Section G: Involuntary switching

It has conclusively been shown that customers switch banks involuntary because of locating to a new area, changing jobs or a change in third party alliance (Keaveney, 1995; Gerrard &

Cunningham, 2004). The six-point Likert scale was used (1 = very unlikely, 6 = very likely) as well as three items to determine the likelihood of participants to withdraw from their banks.

4.5.1.5 Questionnaire pre-testing and pilot study

Questionnaires require testing before the distribution of the survey to the intended target population (Brace, 2018:163). Whether the questionnaire questions have been utilised before and adapted for a new study or development of a new questionnaire to achieve specific objectives; it is a crucial precaution to test it before it is distributed (Brace, 2018:163). A considerable pilot study is required to refine content and wording during the questionnaire development for item generation (Rattray & Jones, 2007:237). The type of language used, questions and items order may all lead to bias responses, therefore, item presentation should be considered. Pre-testing is utilised to identify errors and refine the design of the questionnaire (Reynolds *et al*., 1993:1).

The questionnaire was pretested by experienced researchers in the field of economics, marketing and risk management to oversee any measurement or content errors. The South African diverse culture allowed different races to be included in the sample to ensure that all participants from different cultures understand the information. Upon receiving feedback, technical errors, vocabulary adjustments, language and grammatical errors, as well as the six-point Likert scale instead of a seven-point scale, were refined. The final questionnaire was distributed to participants with a cover letter. The questionnaire's average time for completion is 15 minutes.

4.5.1.6 Administration of the questionnaire

The questionnaire was distributed electronically as well as by physical distribution from July 2019. These were self-administered questionnaires, which took up to 15 minutes to complete. A minimum sample of 500 was used, which assumed a 64.8 percent response rate. The sample size was selected by means of purposive sampling, which included 324 South African depositors. After the collection of completed questionnaires, captured data were analysed.

4.6 PRELIMINARY DATA ANALYSIS

The quantitative data analysis often begins with the data cleaning process, incomplete records can be automatically imputed or edited, the transformation of non-normal data and also the calculation of aggregated scores might be performed (Hox & Boeiji, 2005:598). Preliminary data analysis is based on interpretations, assumptions and research purpose (Bannon, 2013:16).

Preliminary data are used to highlight flaws in data generation, sample collection and design (Winchester *et al*., 2017:568), enabling full research study design to improve (Winchester *et al*., 2017:568). There were minimal errors detected after the data were captured and electronically coded.

4.7 STATISTICAL ANALYSIS

This is a quantitative study, which made use of SPSS, version 25, to analyse the collected primary data. The statistical methods in Table 4.7 will be used for the captured data.

4.7.1 Descriptive analysis

The methods utilised to describe, summarise and organise a data set are referred to as descriptive statistics (Welman *et al*., 2005:231). The main goal is to simply summarise and organise data (Gravetter & Forzano, 2016:443). Table 4.7 represents the three classifications of descriptive statistics.

Table 4.7: Descriptive statistics classifications

Descriptive statistics		
Central tendency measurement	Mean	Division of the sum of added scores by the number of individuals/objects
	Median	Data set middle score
	Mode	Score with the greatest frequency
Dispersion measurements	Variance	Difference of the scores from the mean by calculating average distance.
	Range	The score in a data set derived from the minimum and maximum scores
	Standard deviation	The variance square root and explains the average distance from the mean
Shape measurements	Skewness	Asymmetry measure
	Kurtosis	Flatness measure

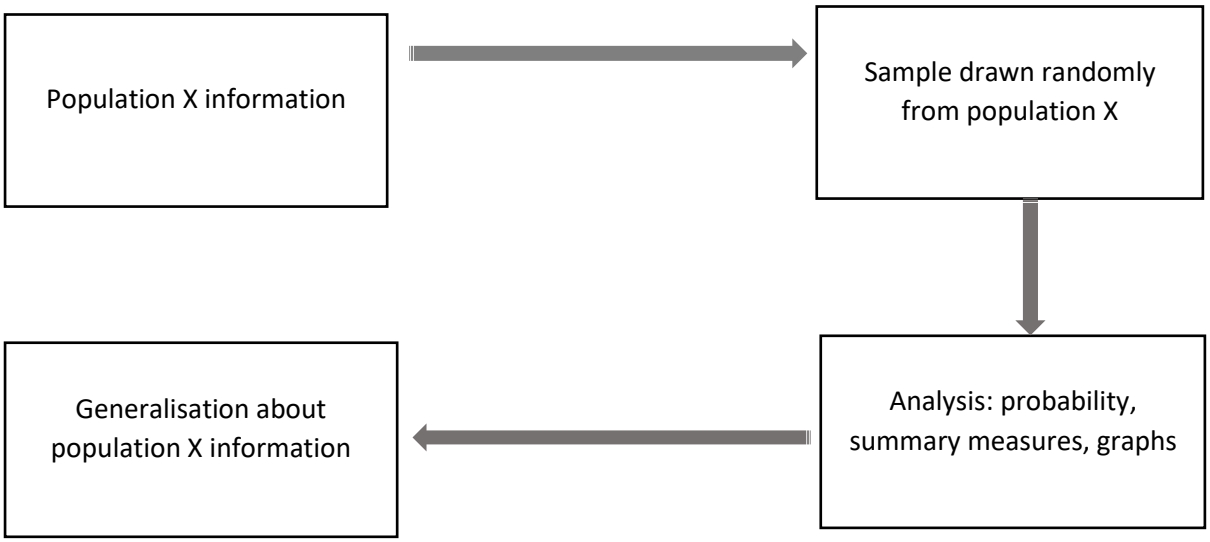
Source: Gravetter and Forzano (2016)

Ordinal and nominal scales merely permit a certain performance of the descriptive statistics (Ferreira, 2018:115). For this study, race, gender and age were represented by the mode. The range, median, mode and frequency were considered by the ordinal scale descriptive statistics. The same standard deviation, variance and mean were included as well as the descriptive statistics for interval scale measurement.

4.7.2 Inferential statistics

According to Welman *et al.* (2005:236), inferential statistics are generally concerned with the use of the sample's limited information as the basis to generalise about the population. Figure 4.4 illustrates the inferential statistics phases.

Figure 4.4: Inferential statistics



Source: Asadoorian and Kantarelis (2005)

The types of inferential statistics involve the **chi-square analysis**, which is concerned with dividing data into various categories, such as male and female, to determine differences (Welman *et al*., 2005:236). The **T-test** is another inferential statistic measure, which determines whether there are different or equivalent mean scores between two groups (Welman *et al*., 2005:237). **Multiple regression** involves discovering the linear equation that yields the estimated values of the dependent variable (Y) accurately utilising independent variables (X) more than once (Gravetter & Forzano, 2016:458). **Correlation** measures and explains the extent and direction of a relationship between two variables (Gravetter & Forzano, 2016:457).

4.7.3 Reliability

Reliability is constructed by the findings of the investigation and is associated with the credibility of the findings (Welman *et al*., 2005:145). Furthermore, quantitative research focuses more on reliability, which is consistent and stable measurement of data as well as replicability (Welman *et al*., 2005:145). Reliability is defined as consistent results that accurately represent the entire population of the research study over time (Joppe, 2000:1). Measurement of reliability is influenced by unsystematic sources of variation, such as the following:

- **Test-retest:** It measures a strength or correlation of a relationship between two different points or sets of scores (Kimberlin & Winterstein, 2008:2277). This instrument's attribute is referred to as stability (Golafshani, 2003:599).
- **Parallel-forms:** Utilises interchangeable test versions to equally measure the same construct. Scores obtained are correlated after the administration of the different versions (Welman *et al*., 2005:146).
- **Internal consistency:** The test is merely administered once to a representative sample larger in size (Welman, 2005:147).

4.7.4 Validity

Validity refers to the extent to which the findings of research represent the actual occurrence of a situation accurately (Welman *et al*., 2005:142). A test can be assumed valid if it measures the claims or thoughts of the researcher (Coolican, 1992:35). Validity requires a reliable instrument; however, a measuring instrument can be reliable irrespective of validity (Kimberlin & Winterstein, 2008:2278). For instance, an incorrectly calibrated scale yields the same weighted values. Validity can be undermined by research errors, such as poor samples, faulty research process and inaccurate measurement (Welman *et al*., 2005:142). Independent variable is related to different types of validity.

Construct validity is the initial notion, concept, hypothesis or question that determines the kind of data collection and the process of collecting it (Golafshani, 2003:599). The measuring instrument construct validity refers to the extent to which an intended construct is measured rather than measurement error (Welman, *et al*., 2005:142). **Criterion-related validity** is concerned with the correlation of the scores on the new measure with other measures of similar construct that should be related theoretically by providing evidence (Kimberlin & Winterstein, 2008:2279). It refers to the extent to which selection and diagnostic tests predict the relevant criterion correctly (Welman *et al.*, 2005:144).

4.7.4.1 Validity and reliability of the study

Reliability and validity are crucial elements that influence correlation coefficients (Williams, 2007:67). This study first adopted the test-retest reliability to measure two distinct evaluation correlations utilising an identical set of questions. Internal consistency was used for the scale's reliability. Cronbach's alpha is widely utilised for assessing the reliability of internal consistency (Kimberlin & Winterstein, 2008:2277). Face validity was used for this study. Face validity refers to the opinion of experts (Salavati *et al*., 2017:39). Before the distribution of the

questionnaire, it was distributed to experienced researchers within the field of study. Content validity was used to ensure all theoretical variables are included in the questionnaire (Neuman, 2011:214). The term content validity refers to the coverage of all content needed in respect of the variables (Heale & Twycross, 2015:66). The correlation of the Cronbach's alpha and inter-item were determined by using construct validity of the measures utilised. Moreover, concurrent validity, which is the extent to which consistency of values are measured (Keating *et al*., 2019:4), was utilised for achieving a stronger criterion validity. The study used the SCF scale for risk tolerance and Grable and Lytton (1999) granular scale of risk tolerance.

4.7.5 Statistical techniques outline adopted

Inferential and descriptive statistics adopted for this study to achieve the empirical objectives are summarised in Table 4.8.

Table 4.8: Inferential and descriptive statistics adopted

Objective	Technique
1. Establish determinant factors influencing bank switching behaviour.	Descriptive Linear regression Correlation Factor analysis
2. Determine the causation of bank switching.	Correlation Linear regression
3. Determine the level of customer satisfaction and quality of services.	Descriptive Correlation
4. Determine risk tolerance level of depositors.	Descriptive Correlation
5. Determine how demographical factors influence the switching behaviour of depositors.	Correlation T-tests ANOVA
6. How bank reputation can influence the switching behaviour of depositors.	Correlation

Source: Author compilation

4.7.5.1 The conducted descriptive and inferential statistics

Regression and factor analysis was used to identify the behavioural biases that drive the behaviour of depositors. In order to determine the behaviour of depositors regarding the source of information, descriptive statistics were used, whereby these sources will be the Internet, various social media platforms, electronic newspaper, television and word-of-mouth.

4.8 SYNOPSIS

The research design and methodology were eloquently explained in this chapter. The design, as well as the methodology, were formed, based on achieving the empirical objectives of the study. The research question was shaped by the positivist worldview. The positivist paradigm is predominated by the quantitative method, which was used in the study since the qualitative method was found to be inadequate for the purpose of this study. The method chosen for the study was convenient for the researcher considering the access, cost and time constraints.

The techniques and procedures for sampling utilised for data collection were elaborated. An outline of the sequential steps followed in the process of sample design was provided. The non-probability purposive method was utilised for this study to achieve the number of participants required. A self-administered structured questionnaire, as well as validated scales, were utilised as a means of collecting data. The sample population variance of 50 percent is recommended for data collection, therefore, this study obtained 324 participating South African bank depositors in Gauteng out of 500 sample size, which surpassed the recommended size. The obtained sample size is aligned with the statistical analysis adopted by this study. The quantitative measures prior to questionnaire distribution were handled and the questionnaires were initially distributed to experts in the field of the study.

The chapter also comprehensively discussed the statistical analysis of the study. The quantitative data were analysed through the use of various statistical measures, namely descriptive statistics, validity, reliability and correlation analysis. Chapter 5 will report on the interpretation and analysis of the study.

CHAPTER 5: ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS

5.1 INTRODUCTION

This chapter provides a report on the findings of the conducted empirical study. The primary intent of the study was to examine the determinant factors for bank switching behaviour. The results were analysed and interpreted according to the empirical objectives presented in Chapter 1 as follows:

- Establish determinant factors influencing bank switching behaviour;
- Determine the causation of bank switching;
- Determine the level of customer satisfaction and quality of services;
- Determine the risk tolerance level of depositors;
- Determine how demographical factors influence switching behaviour of depositors; and
- How bank reputation can influence the switching behaviour of depositors.

A structure for a complete presentation of results had to be laid out for the achievement of empirical objectives as well as the primary objective. The various sections of the analysis and interpretation are described in this chapter as follows:

- A questionnaire pre-testing is discussed in Section 5.2;
- The preliminary data analysis is described in Section 5.3;
- The sample demographics of South African depositors living in Gauteng is elaborated by descriptive analysis in Section 5.4 and Section 5.5;
- Section 5.6 discusses the factor analysis explored to identify the behavioural biases that drive the behaviour of depositors;
- The hypotheses testing of all empirical objectives is discussed in Section 5.7;
- Section 5.8 describes the conducted factor analysis;
- The analysis of depositors' likelihood to withdraw is explained by demographical factors` influence on depositors' behaviour; and
- Section 5.10 discusses the analysis relating to each empirical objective.

5.2 QUESTIONNAIRE PRE-TESTING

Ten experienced researchers in the study pretested the questionnaire before the intended target population. The aim of pretesting was to identify any likely challenges encountered by participants and to ensure content validity (Ferreira, 2018:128). The final study included both the hard copy and online questionnaires.

5.3 ANALYSIS OF PRELIMINARY DATA

Preliminary data analysis is based on interpretations, assumptions and the research purpose (Bannon, 2013:16). Preliminary data are used to highlight flaws in data generation, sample collection and design (Winchester *et al*., 2017:568), thus enabling the full research study design to improve (Winchester *et al*., 2017:568). The steps undertaken in the preliminary data analysis are discussed below.

5.3.1 Process of data gathering

A final sample size of 324 participants was used from a total amount of 500 distributed self-administered questionnaires. The cover letter of the questionnaire explained the importance of the research study and it was indicated that participants are free to decline or accept to complete the questionnaire. Errors, responsive patterns and incomplete questionnaires were identified and excluded during the data collection. The questionnaires that passed the data integrity process assumed a response rate of 70 percent.

5.3.2 Coding

Section A consist of five questions concerning the demographics of the participants. Questions in Section A included gender, age, race, the income of depositors, and level of education. In Section B, a 31 item SERVPERF scale on a six-point Likert scale was used to measure customer satisfaction regarding the service quality of the banks. In Section C, four items were used to measure bank perception of customers. Section D contained nine items, which aimed to obtain information about biases that drive financial decisions of participants. Section E consisted of three items with the purpose of obtaining information about the financial risk participants are willing to take when making a deposit. Section F contained three items whereby information is obtained about how likely participants are to withdraw their deposit upon experiencing interest rate changes. Section G consisted of three items to obtain information regarding the likelihood of participants to withdraw their deposits upon experiencing involuntary switching events.

5.4 DESCRIPTIVE ANALYSIS OF DEMOGRAPHICS

Table 5.1 represents an overview of the demographical information of the sample that participated in the study. A total of 324 participants were used in the final sample of the study.

Table 5.1: Sample descriptive analysis

Item	Demographic variable		Frequency	Valid Percent
1	Age	18-29	156	48.1
		30-39	89	27.5
		40-49	55	17.0
		50-59	19	5.9
		60+	5	1.5
2	Gender	Male	132	40.7
		Female	192	59.3
3	Race	African	261	80.6
		White	51	15.7
		Coloured	10	3.1
		Asian/Indian	2	0.6
4	Education	High school	46	14.2
		Further training	35	10.8
		Diploma	45	13.9
		Undergraduate degree	97	29.9
		Honours degree	78	24.1
		Master’s degree	22	6.8
		Other	1	0.3
5	Income	Below R100 000	141	43.5
		R100 000-R200 000	82	25.3
		R200 001-R400 000	73	22.5
		R400 001-R550 000	19	5.9
		R550 001-R700 000	5	1.5
		R700 001-R1 500 000	2	0.6
		R1 500 001 and above	2	0.6

5.4.1 Distribution of Age

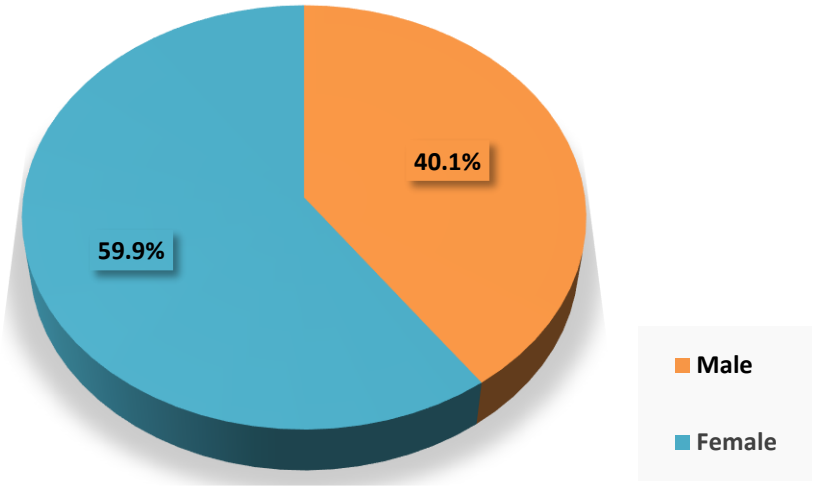
As indicated in Table 5.1, the majority of participants was between the ages of 18-29 with 48.1 percent, followed by the age group of 30-39 with 27.5 percent. The third age group was 40-49

with 17 percent, then the age group of 50-59 with 5.9 percent. The lowest age group was that of 60 and above with 1.5 percent participation.

5.4.2 Gender composition

In this study, more females (59.9%) participated in comparison to male (40.1%) counterparts as shown in Figure 5.1.

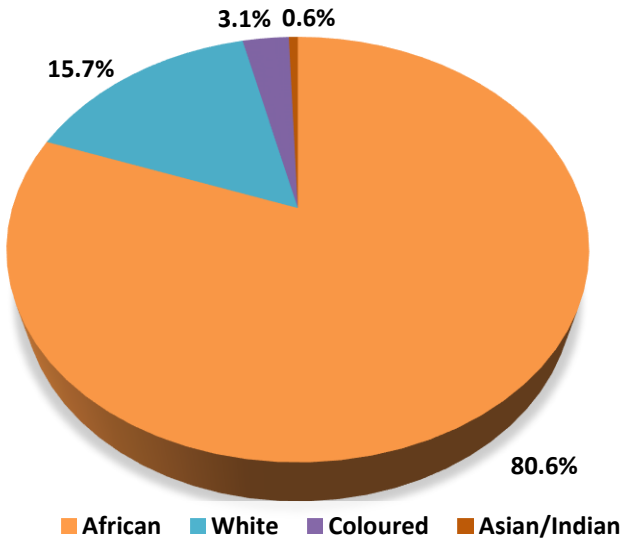
Figure 5.1: Gender composition of the sample



5.4.3 Race

In terms of race, Figure 5.2 illustrates that the majority of the bank depositors were African (80.6%), followed by White (15.7%) bank depositors. Coloured (3.1%) bank depositors accounted for a smaller portion than Asian/Indian (0.6%) bank depositors.

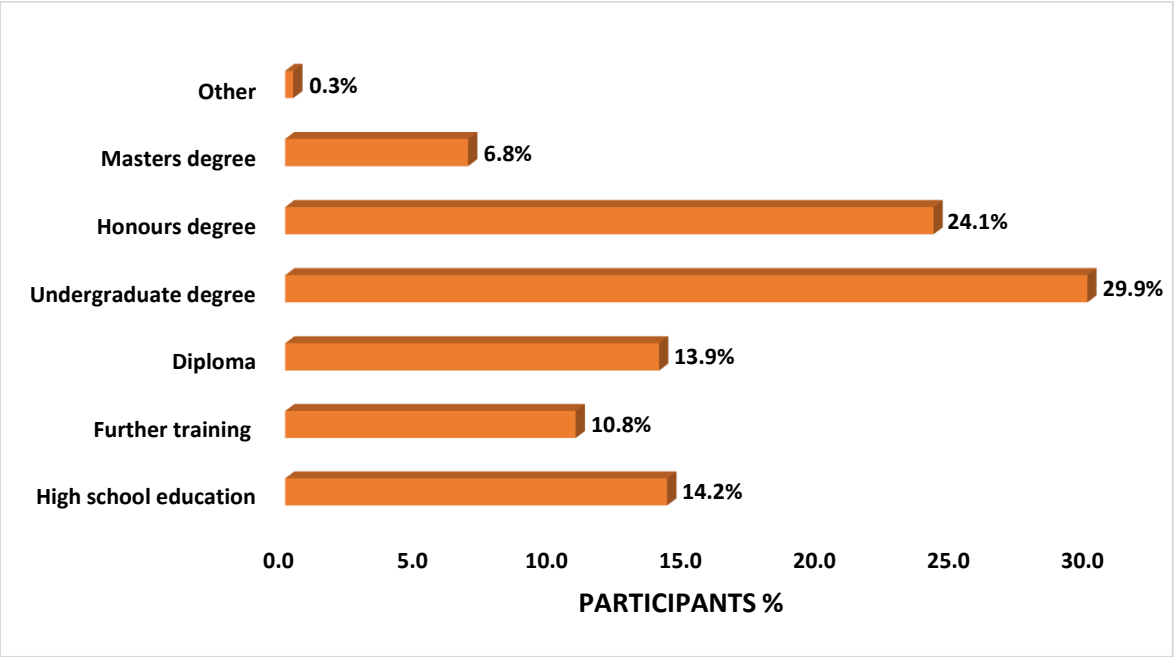
Figure 5.2: Race sample composition



5.4.4 Level of education

Figure 5.3 depicts the various levels of education from the sample. The majority of the depositors hold an undergraduate degree (29.9%), followed by depositors in possession of honours degrees (24.1%), then high school education (14.2%). Bank depositors holding a diploma accounted for 13.9 percent, followed by depositors with further training (10.8%). Participants who held a Master's degree (6.8%) were amongst the lowest group as well as depositors in possession of other (0.3%) qualifications.

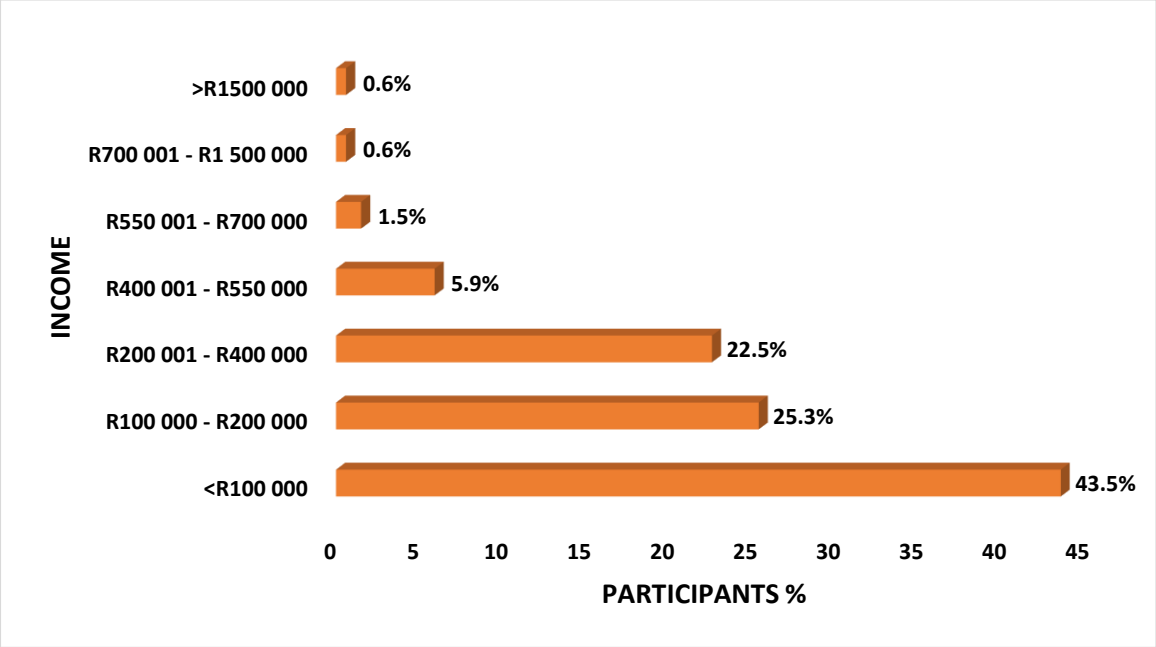
Figure 5.3: Level of education



5.4.5 Income

Figure 5.4, indicates that the largest group (43.5%) of depositors earns below R100 000. This explains that the majority of participants earn a salary of between R1− R8 333 per month. A second largest group (25.3%) earns an income of between R100 000 − R200 000 annually, followed by a third largest group (22.5%) of participants earning an annual income of between R200 001 − R400 000. A small group (5.9%) of depositors earn an income of between R400 001 − R550 000 per annum. The following group, which consisted of less than 2 percent of participants (1.5%) earn an annual income of between R550 001 – R700 000, then a group (0.6%) of depositors who earn between R700 001 − R1500 000 annually. Less than 1 percent of participants (0.6%) earn the highest income of >R1 500 000 per annum.

Figure 5.4: Annual income levels



5.5 DESCRIPTIVE ANALYSIS

A summary of statistics, which involves the calculation of standard deviation and means was executed to derive a complete data set overview. Section B intended to obtain information about customer satisfaction regarding service quality performance of banks, which might invoke switching behaviour of depositors. The six-point Likert scale was utilised whereby depositors had to choose amongst the following options: strongly disagree (1), disagree (2), somewhat disagree (3), somewhat agree (4), agree (5) and strongly agree (6). The total number of depositors who formed part of the sample was 324. Table 5.2 indicates the frequencies acquired on the measuring six-point scale.

Table 5.2: Section B descriptive analysis – Bank service quality

Item	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Mean	Standard deviation
B1	6	11	25	75	160	47	4.58	1.057
B2	2	5	22	80	162	53	4.71	0.916
B3	1	4	15	88	160	56	4.76	0.857
B4	3	3	12	84	169	53	4.77	0.866
B5	2	18	17	99	131	57	4.57	1.055

Item	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Mean	Standard deviation
B6	2	8	18	64	177	55	4.76	0.926
B7	6	5	22	89	138	64	4.67	1.035
B8	3	10	20	82	161	48	4.64	0.974
B9	5	8	24	98	135	54	4.58	1.030
B10	2	9	28	91	142	52	4.60	0.989
B11	2	3	21	42	167	89	4.96	0.920
B12	3	2	11	45	155	108	5.07	0.900
B13	2	6	15	59	147	95	4.94	0.962
B14	7	24	55	87	93	58	4.26	1.265
B15	3	7	10	62	164	78	4.89	0.942
B16	2	11	33	77	138	63	4.63	1.053
B17	3	5	8	45	124	139	5.16	0.965
B18	3	12	15	85	138	71	4.72	1.035
B19	3	10	16	79	154	62	4.72	0.991
B20	4	8	17	116	130	49	4.56	0.976
B21	12	47	38	66	105	56	4.15	1.425
B22		8	14	96	152	53	4.71	0.879
B23	3	10	19	47	162	83	4.86	1.023
B24	4	8	19	59	142	92	4.86	1.051
B25	12	26	36	59	97	94	4.50	1.409
B26	17	40	41	77	89	60	4.11	1.450
B27	15	28	42	71	85	83	4.33	1.440
B28	6	18	22	87	124	67	4.56	1.164
B29	1	9	13	61	145	95	4.93	0.969
B30	1	7	17	66	149	84	4.87	0.950
B31	2	6	11	66	166	73	4.87	0.904

As shown in Table 5.2, there was a high response on the positive side of the six-point scale continuum, which included somewhat agree, agree and strongly agree. This led to higher means being recorded. The mean is indicative of the average total value of the data scores while the standard deviation indicates the existing variation from the mean (Wan *et al*., 2014:2). A smaller standard deviation explains a low spread from the mean, thus, it is clustered with the

mean, whereas a large standard deviation indicates a high spread from the mean, hence the divergent (Wan *et al*., 2014:2).

As seen in Table 5.2, item B17 recorded the highest mean, since 95.1 percent of participants agree that their bank utilises the latest technology. The high standard deviation of 1.450 was obtained from item B26, suggesting a variation in views of depositors regarding experiencing difficulties when familiarising with the new bank, while 69.8 percent of the participants agree and 30.2 percent of the participants disagree.

In the questionnaire, Section C asked the participants how they base perception regarding their respective banks. The intent was to find out which factors depositors consider in order to hold a certain perception about their banks. The descriptive analysis of Section C is indicated in Table 5.3.

Table 5.3: Descriptive analysis of Section C - Customer bank perception

Item	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Mean	Standard deviation
My perception of the bank is based on the level of confidence that I have in the bank	2	8	19	70	151	74	4.80	0.981
My perception of the bank is based on how its performance meets my expectations.		2	9	48	159	106	5.10	0.796
My perception of a bank is based on the level of trust I have in the bank	1	3	16	41	150	113	5.08	0.895
My perception of a bank is based on the level of satisfaction regarding the service from the bank	1	2	8	29	126	158	5.32	0.826

As observed in Table 5.3, the positive side of the continuum recorded more responses than the other side leading to high mean values above 5 in most items. Such responses include agree and strongly agree. The last item recorded the highest mean score, suggesting that 96.7 percent of depositors are likely to base their bank perception on the level of satisfaction they receive from their banks. All items recorded lower standard deviation scores, suggesting significant

agreement amongst depositors. Hence, the results imply that bank perception of depositors is based on the level of satisfaction, confidence, trust and performance expectations.

Section D of the questionnaire aimed to obtain information about the financial behaviour of participants regarding what drives their financial decisions. The descriptive analysis of Section D is indicated in Table 5.4.

Table 5.4: Descriptive analysis of Section D – Behavioural finance

Behavioural bias	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Mean	Standard deviation
Representativeness	9	19	22	95	126	53	4.45	1.183
Overconfidence	5	15	15	99	135	55	4.57	1.069
Anchoring	25	71	59	79	66	24	3.50	1.417
Gambler's fallacy	4	30	44	93	115	38	4.23	1.180
Availability bias	2	5	26	96	144	51	4.63	0.937
Loss aversion	14	21	26	63	128	72	4.50	1.330
Regret aversion	13	34	33	101	95	48	4.16	1.323
Mental accounting	19	24	33	77	125	46	4.24	1.351
Self-control	3	9	25	73	128	86	4.77	1.071

As observed in Table 5.4, most responses were obtained from the side of the positive continuum, which includes somewhat agree, agree and disagree. This could imply that there are common behavioural biases that depositor's exhibit. All the behavioural biases obtained higher mean scores >4, except for anchoring bias, which obtained a median score of 3.50. Availability bias was the only behavioural bias that recorded the lowest standard deviation score <1. The result suggests greater agreement that depositors base their decisions on the most recent information. The highest standard deviation was obtained from anchoring bias, suggesting a variation in views of depositors regarding their reliance on a single piece of information to make financial decisions. All other behavioural finance biases obtained higher standard deviations (>1), suggesting varying views amongst depositors regarding behavioural biases that drive their financial decisions.

In Section E, using a SCF, participants were asked about the amount of risk they are willing to take when depositing their funds at a bank. Table 5.5 represents the obtained results regarding depositor's risk tolerance.

Table 5.5: Section E - Risk tolerance (SCF)

Risk tolerance (SCF)	N	%
Take substantial financial risks expecting to earn substantial returns	47	14.5
Take above-average financial risks expecting to earn above-average returns	66	20.4
Take average financial risks expecting to earn average returns	129	39.8
Not willing to take any financial risks	82	25.3

As shown in Table 5.5, the majority (39.8%) of the depositors indicated that they are willing to take average financial risks, expecting to earn average returns, followed by 25.3 percent of depositors who indicated that they are not willing to take any financial risks. Another group of depositors (20.4%) indicated that they are willing to take above-average financial risks, expecting to earn above-average returns. A small group of depositors (14.5%) indicated that they are willing to take substantial financial risks, expecting to earn substantial returns.

Section F of the questionnaire asked the depositors how likely are they to withdraw their deposits upon experiencing increased bank interest rates and fee changes. Table 5.6 indicates mean scores, whereby a higher mean score indicates that depositors are likely to withdraw from their current bank to another bank due to price factors. A lower mean score indicates depositors are somewhat unlikely to withdraw from their current bank due to price factors.

Table 5.6: Section F - Price factors

Price factors		Mean	Standard deviation
F1	The bank charged high fees	3.73	1.521
F2	The bank charged high interest on loans	3.91	1.488
F3	The bank provided low-interest rates on savings account	4.09	1.456

As indicated by Table 5.6, all the mean scores are above the median 3.50 with item F3 obtaining the highest mean score of 4.09. However, the standard deviation for all items is >1, suggesting a variation in views of respondents regarding switching banks due to price factors. The highest standard deviation score of 1.521 was obtained by item F1 suggesting that depositors are somewhat unlikely to withdraw their funds when the bank charges high fees. Item F2 has the second-highest standard deviation score of 1.488, suggesting that depositors are somewhat unlikely to withdraw their funds when the bank charges high interest for loans. A standard deviation of 1.456 was obtained from item F3, indicating that depositors are somewhat unlikely to withdraw their deposits when the bank provides low interest rates on savings accounts.

Section G asked participants how likely they are to withdraw their funds upon experiencing involuntary switching events. In Table 5.7, a higher mean represents depositors' likelihood to withdraw from current bank to another due to involuntary switching. Whereby, a lower mean indicates depositors are somewhat unlikely to withdraw due to involuntary switching.

Table 5.7: Section G – Involuntary switching

Involuntary switching		**Mean**	**Standard deviation**
G1	Bank branches in my area were closed	3.35	1.589
G2	The bank moved to a new geographical location	3.32	1.487
G3	I moved to a new geographic location	3.33	1.583

As shown in Table 5.7, all the items obtained a mean lower than the median (3.50). Item G1 obtained a mean score of 3.35, item G2 obtained 3.32 mean score and item G3 a score of 3.32. Hence, depositors are somewhat unlikely to withdraw due to involuntary switching. The standard deviation of item G1 is the highest with 1.589. The results suggest variation in views of depositors regarding the likelihood to withdraw funds when bank branches in their areas were to close. All other items also had higher standard deviations >1, indicating variation in views of respondents regarding switching banks due to involuntary switching.

5.6 EXPLORATORY FACTOR ANALYSIS (EFA)

Factor analysis contains numerous statistical methods, which aim to simplify multifaceted sets of data (Kline, 2014:3). The exploratory factor analysis (EFA) utilises fewer variables to describe a complex set of data (Samuels, 2017:1). Hence, exploratory factor analysis intends to discover the main dimensions or constructs through exploring the field (Kline, 2014:7).

5.6.1 Section B: Service quality exploratory factor analysis

Section B intended to assess the level of satisfaction depositors receive from service quality provided by banks. EFA was performed to validate the questionnaire scales of items in all constructs, which included:

- Section B: Customer service quality
- Section C: Bank perception
- Section D: Behavioural finance
- Section E: Risk tolerance
- Section F: Price factors

- Section G: Involuntary switching

The analysis was performed with SPSS, version 25. To ensure that the correlation matrix was not random, Bartlett's test of sphericity was utilised and the Kaiser-Meyer-Olkin (KMO). The indicator of KMO should be 0.5 or above for appropriate factor analysis in terms of sampling adequacy measures (Samuels, 2017:2). The index of KMO ranges from 0.00 to 1.00 and can be calculated for correlation matrix total and each measured variable (Watkins, 2018:226). As described by Kaiser (1974), the values of KMO are marvellous in the range of 0.9, meritorious at 0.8, middling at 0.7, mediocre at 0.6, average at 0.5 and unacceptable below 0.5. It is recommended that the size of the sample should at least exceed 150 and at least five cases per variable for a ratio (Pallant, 2013:190). The sample size (324) of this study has yielded a ratio of six cases per variable. As shown in Table 5.8, a higher KMO value (0.932) was obtained as recommended and falls under the marvellous category (0.9), which indicates that the sample data were a good fit for factor analysis.

Bartlett's test of sphericity was utilised as an objective test of factorability to statistically test the null hypothesis to determine whether the correlation matrix comprises zeros on the off-diagonal and ones on the diagonals (Watkins, 2018:226). The Bartlett's test of sphericity is significant at $p<0.05$ (Field, 2009:660). Therefore, p-values for Section B was <0.05, thus significant for factor analysis. Principal component analysis (PCA), as well as Oblimin with Kaiser Normalisation, was used for factor extraction in this study. Absolute value scores >0.4 were obtained for most of the grouped items loaded into factors and also few items had an absolute value score >0.3. Practically, the pattern coefficients usefulness has been judged to be at the range of (0.3) to (0.4) (Hair *et al.*, 2010; Bandalos & Gerstner, 2016).

Table 5.8: KMO and Bartlett's test of sphericity for Section B

KMO and Bartlett's test of sphericity		**Section B: Customer service quality**
Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)		0.932
Bartlett's test of sphericity	Approx. chi-square	5266.708
	Degree of freedom (df)	465
	Significance (Sig)	0.000

5.6.1.1 Naming and interpretation of dimensions

Five factors in total were extracted for factor analysis as shown in Table 5.9. Five of the dimensions accounted for approximately 58.86 percent of the variance. These results are in line with Manrai and Manrai (2007) study, which investigated the switching behaviour of customers for bank services.

Factor one, named *empathy* consisted of nine variables relating to cognitive and emotional feelings about the quality of service provided by banks to depositors. It has accounted for 36.741 percent of the total variance with an eigenvalue of 11.390. A study by Chakravarty *et al.* (2004) considered empathy important in influencing customers' tendency to switch banks.

Factor two, comprised of four variables relating to the reluctance of depositors to switch from their current bank to another, therefore, it is labelled *bank switching*. It accounted for 7.068 percent of the total variance with an eigenvalue of 2.191.

Factor three, named *reliability*, comprised of seven variables relating to reliability of timeous and accurate service performance by the bank. It accounted for 5.973 percent of the total variance and obtained an eigenvalue of 1.852. In a previous study, customers were found to switch banks when their current bank was unreliable (Colgate & Hedge, 2001).

Factor four, consisted of five variables, which accounted for 4.987 percent of the total variance. The variables relate to responsiveness of skills required to perform the services and willingness to understand and help depositors with their banking needs. The factor is labelled *responsiveness* and it obtained an eigenvalue of 1.546. In a previous study by Philip and Bart (2001), it was found that customers expected employees to be efficient and knowledgeable about the bank services.

Factor five, comprised of six variables relating to tangibles of the bank, such as physical facilities, technology and employee appearance. It was labelled as tangibilities and accounted for 4.092 of the total variance and obtained an eigenvalue of 1.268. This factor is in accordance with other previous studies (Bahia & Nantel, 2000; Othman & Owen, 2001).

5.6.1.2 Reliability of scale: Section B

It is important for scales to be consistent in terms of measurement to be considered reliable (Babbie & Mouton, 2002). Calculation of Cronbach's alpha values was conducted to validate the internal consistency reliability scale of all five factors. All the factors met the recommended

requirement of Cronbach's alpha (0.7), four factors obtained values above 0.8 and one factor with above 0.7 value as observed in Table 5.9, thus, achieving high internal consistency reliability for factor analysis (Churchill, 1979). It has been noted that a 0.7 score of Cronbach alpha is a widely accepted reliability coefficient (Cooper & Schindler, 2006).

Table 5.9: Pattern matrix: customer service quality

Items	Factors				
	1	2	3	4	5
B21	0.652				
B30	0.644				
B31	0.642				
B19	0.626				
B20	0.614				
B29	0.578				
B14	0.554				
B23	0.542				
B22	0.537				
B26		0.871			
B27		0.849			
B25		0.749			
B28		0.574			
B2			0.825		
B3			0.787		
B1			0.769		
B4			0.678		
B5			0.579		
B18			0.301		
B16			0.276		
B8				0.721	
B7				0.630	
B9				0.602	
B10				0.535	
B6				0.488	
B11					0.797

Items	Factors				
	1	2	3	4	5
B12					0.790
B13					0.634
B15					0.554
B17					0.503
B14					0.319
Eigenvalue	11.390	2.191	1.852	1.546	1.268
% of Variance	36.741	7.068	5.973	4.987	4.092
Cumulative %	36.741	43.810	49.783	54.770	58.862
Cronbach's alpha	0.880	0.810	0.846	0.860	0.778

5.6.2 Correlation matrix of customer service quality

Correlation analysis amongst the factors was conducted to determine the inter-factor relationship. Therefore, greater correlation coefficients amongst the independent variables can lead to greater sampling error (Ferreira, 2018:152). The results assumed a two-tailed significance level at level $p<0.1$. Cohen's d-measure was adopted for measuring the importance of effect sizes. Below is the outline of the effect sizes amongst the factors (Gravetter & Wallnau, 2014:453).

- $r = 0.10 – 0.29$ = Small effect
- $r = 0.30 – 0.49$ = Medium effect
- $r = 0.50 – 1.00$ = Strong effect

Table 5.10: Inter-factor correlation

Factors	Empathy	Bank switching	Reliability	Responsiveness	Tangibilities
Empathy	1.000				
Bank switching	0.329**	1.000			
Reliability	0.347**	0.319**	1.000		
Responsiveness	0.263**	0.137**	0.242**	1.000	
Tangibilities	0.429**	0.268**	0.404**	0.295**	1.000
**. Correlation is significant at the 0.01 level (2 tailed).					

To determine the existing relationship amongst the customer service quality factors, Pearson's correlation was utilised. Table 5.10 indicates that each variable strongly correlates with itself

(r =1.00). The relationship between all the factors is significant at p<0.1 level of Pearson's correlation coefficient, positively showing a linear relationship amongst each of the factors implying nomological validity (Hair *et al*., 2010:710). All the factors ranged between small (r = 0.10 – 0.29) and medium effect (r = 0.30 – 0.49), indicating low multicollinearity. This suggests a limited sampling error for this study.

5.6.3 Section C: Bank perception exploratory factor analysis

Exploratory factor analysis in Section C was used to identify factors used by depositors in formulating their perception and ultimately bank reputation. The five items consisted of the level of trust, satisfaction, confidence, expectations, and confidence in the bank (Schreiber, 2011:92). Bank reputation was used to construct the four items. Bartlett's test of sphericity needs to be at p<0.05 significance level to be appropriate (Malhotra, 2008; Field, 2009:660; Watkins, 2018:226). Bartlett's test of sphericity was conducted and the null hypothesis was significant at <0.05 as observed in Table 5.11. Therefore, the variables strongly signify the appropriateness of the Section C data for factor analysis. Principal component analysis (PCA) as well as Oblimin with Kaiser Normalisation were used for factor extraction in this study.

Table 5.11: KMO and Bartlett's test of sphericity for Section C

KMO and Bartlett's test of sphericity		**Section C: Bank perception**
Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)		0.735
Bartlett's test of sphericity	Chi-square	432.527
	Degree of freedom (df)	6
	Significance (Sig)	0.000

Bartlett's test of sphericity showed a non-random correlation matrix, while the KMO statistic (0.735) indicated a standard above the minimum requirement for performing factor analysis. The indicator of KMO should be 0.5 or above for appropriate factor analysis in terms of sampling adequacy measure (Samuels, 2017:2).

Table 5.12: Section C – total variance

Items	**Factor loadings**	**Eigenvalue**	**% of variance**	**Cumulative %**	**Cronbach's alpha**
C32	2.509	2.509	62.724	62.724	0.797
C33	0.731				
C34	0.433				

C35	0.327				

As observed in Table 5.12, the single factor (bank perception) was obtained from all the four items. The four items accounted for 62.724 percent of the total variance for bank perception with the eigenvalue of 2.509. A desired Cronbach's alpha value of 0.797 was obtained to ensure reliability of scale for measuring the perception of depositors and thus bank reputation.

5.6.4 Section F: Price factors exploratory factor analysis

Section F assessed how likely depositors are to withdraw their funds upon experiencing fees and interest rate changes from the bank. The three items used were based on fees charged and paid by the banks to depositors. Table 5.13 shows that the KMO value for sampling adequacy fell on average category (0.5), which indicates average sampling adequacy, however, it is acceptable, unlike the value below 0.5 (Kaiser, 1974). Bartlett's test of sphericity was also significant at $p<0.05$ level, indicating appropriateness of price factors for factor analysis.

Table 5. 13: KMO and Bartlett's test of sphericity for Section F

KMO and Bartlett's test of sphericity		**Section F: Price factors**
Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)		0.543
Bartlett's test of sphericity	Chi-square	166.167
	Degree of freedom (df)	3
	Significance (Sig)	0.000

As observed in Table 5.14, a single factor (price factor) was obtained from all the three items as desired. The factor accounted for 57.172 percent of the total variance and obtained an eigenvalue of 1.715. The Cronbach's alpha for Section F was 0.759, signifying internal consistency reliability in terms of price factor as a measuring scale (Churchill, 1979). However, this was after item F3 was omitted from the variable. This was done for the purpose of scale reliability since the prior results fell below the required 0.7 value of Cronbach's alpha.

Table 5.14: Section F – total variance

Items	**Factor loadings**	**Eigenvalue**	**% of variance**	**Cumulative %**	**Cronbach's alpha**
F1	1.715	1.715	57.172	57.172	0.759
F2	0.898				
F3	0.347				

5.6.5 Section G: Involuntary switching exploratory factor analysis

In this section, the focus for exploratory factor analysis was to determine involuntary events that caused depositors to switch banks. As indicated by Table 5.15, all three items were based on a geographical foundation. Bartlett's test of sphericity needs to be at $p<0.05$ significance level to be appropriate (Field, 2009:660). The null hypothesis was therefore significant at level $p<0.05$, signifying appropriateness of involuntary switching for factor analysis.

Table 5.15: KMO and Bartlett's test of sphericity for Section G

KMO and Bartlett's test of sphericity		**Section G: Involuntary switching**
Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)		0.662
Bartlett's test of sphericity	Chi-square	280.602
	Degree of freedom (df)	3
	Significance (Sig)	0.000

As shown in Table 5.15, the KMO value came out as a single factor for all three items falling under the average category (0.6). This indicates an average sampling adequacy (Samuels, 2017:2).

Table 5.16: Section G – total variance

Items	**Factor loadings**	**Eigenvalue**	**% of variance**	**Cumulative %**	**Cronbach's alpha**
G1	2.072	2.072	69.078	69.078	0.773
G2	0.581				
G3	0.347				

The factor account comprised of three items, which accounted for 69.078 percent of the total variance as seen in Table 5.16. The Cronbach alpha obtained a value of 0.773, which signifies internal consistent reliability as suggested by Churchill (1979), in terms of involuntary switching for measuring the likelihood of depositors to switch banks due to geographical events.

5.7 HYPOTHESIS TESTING

The formulation of null (accepted) and alternative (rejected) hypothesis is as follows:

H_{01}: There is no significant relationship between bank switching and customer satisfaction.

H_{a1}: There is a significant relationship between bank switching and customer satisfaction.

H_{02}: There is no significant relationship between switching costs and bank switching.

H_{a2}: There is a significant relationship between switching costs and bank switching.

H_{03}: There is no significant relationship between customer perceptions and bank switching

H_{a3}: There is a significant relationship between customer perceptions and bank switching.

H_{04}: There is no significant relationship between risk tolerance and bank switching.

H_{a4}: There is a significant relationship between risk tolerance and bank switching.

H_{05}: There is no significant relationship between behavioural finance and bank switching.

H_{a5}: There is a significant relationship between behavioural finance and bank switching.

H_{06}: There is no significant relationship between demographics and bank switching.

H_{a6}: There is a significant relationship between demographics and bank switching.

H_{07}: There is no significant positive relationship between involuntary switching and bank switching.

H_{a7}: There is a significant relationship between involuntary switching and bank switching.

5.8 INFLUENCE OF DEMOGRAPHICAL FACTORS ON BEHAVIOUR OF DEPOSITORS

The intent of this section is to determine how demographical factors influence the behaviour of depositors. The following demographic information was chosen for this section since it was included in the sample:

- Age
- Education level
- Level of income
- Gender
- Race.

5.8.1 Demographics and bank switching non-parametric correlation

Spearman's correlation was utilised for demographic information of depositors and depositor behaviour to test the relationship. As indicated in Table 5.17, the significance level was at 1 percent ($p > 0.01$), which assumes a two-tail level of significance. Table 5.20 shows the obtained results from the non-parametric test.

Table 5.17: Demographical information and likelihood to switch

Determinant factor	Spearman correlation	Age	Education level	Income level
Satisfaction	Correlation coefficient	-0.087	-0.030	-0.074
	Sig. (2-tailed)	0.116	0.593	0.182
	N	324	323	324
Empathy	Correlation coefficient	**-.163****	-0.014	-0.108
	Sig. (2-tailed)	0.003	0.795	0.052
	N	324	323	324
Bank switching	Correlation coefficient	0.049	0.017	-0.015
	Sig. (2-tailed)	0.375	0.765	0.783
	N	324	323	324
Reliability	Correlation coefficient	-0.056	0.033	0.030
	Sig. (2-tailed)	0.311	0.554	0.588
	N	324	323	324
Responsiveness	Correlation coefficient	-0.036	-0.001	0.037
	Sig. (2-tailed)	0.523	0.992	0.507
	N	324	323	324
Tangibilities	Correlation coefficient	-0.088	0.023	0.032
	Sig. (2-tailed)	0.112	0.681	0.562
	N	324	323	324
Bank perception	Correlation coefficient	-0.048	0.060	-0.036
	Sig. (2-tailed)	0.394	0.285	0.518
	N	324	323	324
Price factor	Correlation coefficient	-0.059	0.045	-0.006
	Sig. (2-tailed)	0.290	0.420	0.917
	N	324	323	324
	Correlation coefficient	0.044	0.051	0.073

Determinant factor	Spearman correlation	Age	Education level	Income level
Involuntary switching	Sig. (2-tailed)	0.428	0.359	0.193
	N	324	323	324
Low interest rates on savings account	Correlation coefficient	**-.164****	0.017	-0.038
	Sig. (2-tailed)	0.003	0.767	0.492
	N	324	323	324
**Correlation significant at the 0.01 level (2-tailed) * Correlation significant at the 0.05 level (2-tailed)				

5.8.1.1 Age groups

As observed in Table 5.17, eight out of ten determinants had a negative association with age while the other two determinants had a positive association. Only two determinant factors, empathy and low interest rates on savings account, were statistically significant at 1 percent level ($p < 0.01$), indicating a negative correlation with the likelihood to switch banks. However, the effect size of all the determinant factors was small ($r = 0.10 – 0.29$). Therefore, age partly affects the likelihood of depositor behaviour to switch banks due to empathy and interest rates on a savings account. The results are similar to a study by Gerritsen and Bikker (2018), which found that age is related to opening a new bank account when interest rates are high. A study by Chakravarty *et al*. (2004) had similar findings, whereby empathy was found to be negatively correlated with age.

5.8.1.2 Education level

Three out of ten determinant factors had a negative relationship, while the other determinants had a positive relationship with the level of education. All the determinant factors had shown a small effect ($r = 0.10 – 0.29$) on bank switching of depositors. The findings, therefore, suggest that education has no real impact on the determinants.

5.8.1.3 Income level

Six determinant factors (satisfaction, empathy, bank switching, bank perception, price factor and interest rates) recorded a negative relationship with income level. While the other four determinant factors (reliability, responsiveness, tangibilities and involuntary switching) recorded a positive relationship with income level. Nonetheless, all the factors have shown a small effect size ($r = 0.10 – 0.29$) of association with bank switching. There was no significant correlation found in all of the determinant factors at 1 percent ($p < 0.01$) level of significance, thus, income level was found not to influence bank switching behaviour of depositors. The

findings are in contrary with the literature as it suggests that the level of income influences bank switching behaviour of depositors (Colgate & Hedge, 2001; Lees *et al*., 2007; Clemes *et al*., 2010).

5.8.1.4 Gender

The mean values of bank switching likelihood by depositors concerning gender are indicated in Table 5.18. The Levene's test, which assumes equality of variances was adopted (Gastwirth *et al*., 2009:344). The t-test of independent sample assumes that both groups have the same mean values. Hence, a higher mean value implies a strong likelihood to switch banks, whereas a lower mean value indicates a lower likelihood to switch banks. The null hypothesis (H_0) states that the mean values of both genders are the same for the likelihood to switch banks. While the alternative hypothesis, (H_a), states that the mean values of both genders are not the same for bank switching likelihood. To determine the magnitude of the difference between the mean groups for the likelihood of bank switching, a calculation of effect sizes was conducted. The following guidelines were used for interpretation (Cohen, 1988:284):

- 0.2 – small effect
- 0.5 – medium effect
- 0.8 – Large effect.

Table 5.18: Independent t-test of gender

Gender		Levene's test for equality of variances		T-test for equality of means					
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Mean**	**Std. E difference**
Bank switching	Equal variance assumed	2.093	0.149	0.211	322	0.01		4.39	0.087

Gender		Levene's test for equality of variances		T-test for equality of means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Mean	Std. E difference
	Equal variance not assumed			0.216	304.0	0.01	0.026	4.37	0.083
*Significant at 0.01 level (2-tailed)									

As observed in Table 5.18, the mean value of male depositors (m = 4.39) was higher than that of the female depositors (M = 4.37), indicating a higher likelihood to switch banks. The *F* value for Levene's test is 2.093 with a significant value of 0.149 greater than 0.05 (p > 0.05); thus accepting the null hypothesis that there is no significant difference between the two groups' variances. The independence t-test p-value was not significant at 5 percent, hence the p-value (p = 0.829) for equal variance not assumed was used. Therefore, this suggests that male depositors are highly likely to switch banks than female depositors are. A small effect size (*r* = 0.02) was obtained.

5.8.1.5 Race

Bank switching by race has been assessed to determine which race group of depositors is likely to demonstrate a behaviour of bank switching. The tests of analysis of variances were conducted to compare means amongst the groups. Table 5.19, indicates the mean values of each race group in terms of their likelihood to switch banks.

Table 5.19: Race mean values for likelihood to switch banks

Bank switching	Mean	Std. deviation	Std. Error
African	4.32	1.11	0.06
White	4.54	0.99	0.13
Coloured	4.67	1.17	0.37
Indian/Asian	4.75	0.70	0.50

As shown in Table 5.19, Indian/Asian had a high mean value (M = 4.75), indicating a higher likelihood to switch banks compared to other race groups. However, due to the lowest number

of participants from Indian/Asian, results cannot be concluded. African depositors obtained a mean value of M = 4.32 and had the highest number of participants in this regard, thus, recording the highest effect size (r = 0.38) in comparison with Indian/Asian depositors.

Table 5.20 shows that homogeneity of variance test had obtained a Levene's F 0.497 with a p-value 0.684 that is not significant at 5 percent ($p > 0.05$) level of significance based on the mean. Therefore, homogeneity of variance null hypothesis, which states that there are no differences in mean values of the race groups, is accepted.

Table 5. 20: Race test of homogeneity of variances

		Levene Statistic	df1	df2	Sig.
Bank switching	Based on mean	0.497	3	320	0.684
	Based on median	0.365	3	320	0.779
	Based on median and with adjusted df	0.365	3	315.136	0.779
	Based on trimmed mean	0.444	3	320	0.721
Welch		0.800	3	4.588	0.549
BrownForsythe		1.091	3	18.377	0.378

Table 5.21 represents an analysis of variance for the likelihood of depositors to switch banks within different race groups.

Table 5.21: Bank switching ANOVA of race

	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	3.179	3	1.060	0.884	0.450
Within groups	383.632	320	1.199		
Total	386.812	323			

Table 5.21 indicates no statistically significant effect between the depositor's likelihood to switch banks based on race groups since the p-value was not significant at 1 percent ($p > 0.01$). The findings are in contradiction with the literature, as some studies have found that race contributes to customer bank switching (Clemes *et al*., 2007:55). In the following section, demographic information's influence will further be analysed regarding risk tolerance of depositors.

5.9 RISK TOLERANCE AND INFLUENCE OF DEMOGRAPHICAL FACTORS

This section focuses on discussing the influence of demographic factors (age, education level, income level) on the risk tolerance of depositors. The use of non-parametric Spearman's correlation was adopted to test an association between depositors' demographic factors and their level of risk tolerance.

Table 5.22: Depositors risk tolerance non-parametric correlation

Determinant factor	Spearman correlation	Age	Education level	Income level
Risk tolerance	Correlation coefficient	0.002	**-.178****	-0.072
	Sig. (2-tailed)	0.971	0.001	0.199
	N	324	323	324
**Correlation significant at the 0.01 level (2-tailed)				

5.9.1 Age

The correlation coefficient for risk tolerance was $r = 0.002$, indicating a positive and small size effect ($r = 0.10 – 0.29$) association with bank switching as shown in Table 5.22. There was no statistical significance found at 1 percent ($p > 0.01$) significance level. Hence, there was no linear relationship found between age and risk tolerance. The findings are following a study by Anbar and Melek (2010), which investigated risk tolerance and demographic factors and did not find age to influence risk tolerance. Nonetheless, various studies in the literature found a negative non-linear association between age and risk tolerance (Hallahan *et al*., 2003; Grable *et al.*, 2006; Faff *et al.*, 2008).

5.9.2 Education level

Table 5.22 indicates that risk tolerance was statistically significant at 1 percent ($p < 0.01$) level of significance with a negative and small size effect ($r = 0.10 – 0.29$) on bank switching. The findings suggest that the level of education partly influences risk tolerance, thus, bank switching of depositors. The findings are supported in the literature since the education level was found to affect risk tolerance (Grable, 2008; Yao *et al.*, 2011). Education improves an individual's capacity to assess risk (Hallahan *et al*. 2004). However, the study conducted by Gibson *et al*. (2013) is in contradiction, as no significant relationship was found between risk tolerance and education level.

5.9.3 Income level

There was no statistical significance found for risk tolerance and income level at 1 percent significance level ($p > 0.01$). The correlation coefficient recorded a negative and small size effect ($r = 0.10 – 0.29$) between risk tolerance and income level. Therefore, risk tolerance was not found to influence the income level. The findings are in contradiction with the literature, as studies by O'Neill (1996), Grable (2000) and Yao and Hanna (2005) found a statistically significant relationship between risk tolerance and income level.

5.10 BEHAVIOURAL FINANCE AND INFLUENCE OF DEMOGRAPHIC FACTORS

Behavioural finance is founded by an integration of psychology, finance and sociology, which influences the process of decision making by individuals (Ricciardi & Simon, 2000:27). This implies that banking decisions made by depositors are influenced by behavioural finance. This section will focus on discussing the influence of demographic factors, including age, level of education and income level on behavioural finance of depositors regarding the likelihood of bank switching. The impact of behavioural finance on bank switching will also be analysed. The Spearman's correlation coefficient was employed to conduct the test.

5.10.1 Age

Table 5.23 indicates that five behavioural biases have a negative relationship with age while four other items have shown a positive relationship with age. All the behavioural finance items obtained a small size effect ($r = 0.10 – 0.29$) on age. Two behavioural biases were statistically significant at 1 percent ($p < 0.01$) significance level. The representativeness bias obtained a p-value of 0.000 <0.01, suggesting that age has a linear relationship with depositors who base their decisions on the past performance of the bank. The anchoring bias recorded a p-value $0.006 < 0.01$, suggesting a negative linear relationship between age and depositors who rely on only a single piece of information to make financial decisions.

5.10.2 Education level

In Table 5.23, five behavioural biases have a negative relationship with education level while four other behavioural biases have shown a positive relationship with education level. While all the behavioural biases had a small effect size on education level. Two behavioural biases, overconfidence and gambler's fallacy, were found to be statistically significant at 5 percent ($p < 0.05$) and 1 percent ($p < 0.01$) significance level respectively. Overconfidence bias obtained

a p-value of 0.017 and had a positive and small size effect (r = 0.133) on education level, suggesting that education level has an impact on superior financial knowledge that drives depositors' decisions. Gambler's fallacy bias obtained a p-value of 0.003 and had a negative and small size effect (r = -0.163) on education level. This implies that education level influences depositors' financial decisions based on future market prediction.

5.10.3 Income level

As seen in Table 5.23, five behavioural biases had a positive relationship with income level while the other four behavioural biases had a negative relationship with income level. All the behavioural biases have obtained a small size effect (r = 0.10 – 0.29) on income level. Two behavioural biases were found to be statistically significant at 1 percent significance level ($p < 0.01$). Representativeness bias obtained a p-value of p = 0.001 and had a positive small association with income level. This suggests that income level influences depositors' financial decision based on the past performance of the bank. On the other hand, anchoring bias obtained a p-value of p = 0.000 and had a negative and small association with income level. This suggests that the level of income has an impact on depositors' reliance on a single piece of information to make financial decisions.

Table 5.23: Non-parametric correlation of financial biases and demographics

Behavioural bias	Spearman's correlation	Age	Education level	Income level
Representativeness	Correlation coefficient	.195**	0.054	.185**
	Sig. (2-tailed)	0.000	0.335	0.001
	N	324	323	324
Overconfidence	Correlation coefficient	-0.061	.133*	0.022
	Sig. (2-tailed)	0.274	0.017	0.692
	N	324	323	324
Anchoring	Correlation coefficient	-.151**	-0.048	-.235**
	Sig. (2-tailed)	0.006	0.391	0.000
	N	324	323	324
Gambler's fallacy	Correlation coefficient	-0.017	-.163**	-0.075
	Sig. (2-tailed)	0.755	0.003	0.177

Behavioural bias	Spearman's correlation	Age	Education level	Income level
	N	324	323	324
Availability bias	Correlation coefficient	0.046	-0.008	0.087
	Sig. (2-tailed)	0.408	0.881	0.117
	N	324	323	324
Loss aversion	Correlation coefficient	0.023	-0.081	-0.022
	Sig. (2-tailed)	0.678	0.147	0.689
	N	324	323	324
Regret aversion	Correlation coefficient	-0.037	-0.049	-0.004
	Sig. (2-tailed)	0.507	0.379	0.943
	N	324	323	324
Mental accounting	Correlation coefficient	0.048	0.001	0.071
	Sig. (2-tailed)	0.387	0.980	0.202
	N	324	323	324
Self-control	Correlation coefficient	-0.039	0.083	0.086
	Sig. (2-tailed)	0.484	0.136	0.123
	N	324	323	324

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

5.10.4 Behavioural finance and bank switching

Table 5.23 indicates that all behavioural biases had a positive relationship with bank switching. Only two behavioural biases, regret aversion and self-control, were not statistically significant. Six out of seven statistically significant behavioural biases had a small size effect on bank switching ($r = 0.10 – 0.29$). Only loss aversion bias had a medium size effect on bank switching ($r = 0.405$). Loss aversion bias was significant at 1 percent ($p < 0.01$) significant level, suggesting that depositors subjected to this bias would rather take the risk to keep their money at their current bank than to switch to another bank.

Table 5.24: Non-parametric correlation of behavioural biases and bank switching

Behavioural bias	Spearman correlation	Bank switching	Mean
Representativeness	Correlation coefficient	.203**	4.45
	Sig. (2-tailed)	0.00	
	N	324	
Overconfidence	Correlation coefficient	.117*	4.57
	Sig. (2-tailed)	0.036	
	N	324	
Anchoring	Correlation coefficient	.196*	3.50
	Sig. (2-tailed)	0.000	
	N	324	
Gambler's fallacy	Correlation coefficient	.135*	4.23
	Sig. (2-tailed)	0.015	
	N	324	
Availability bias	Correlation coefficient	.158**	4.63
	Sig. (2-tailed)	0.004	
	N	324	
Loss aversion	Correlation coefficient	.405**	4.50
	Sig. (2-tailed)	0.000	
	N	324	
Regret aversion	Correlation coefficient	0.044	4.16
	Sig. (2-tailed)	0.433	
	N	324	
Mental accounting	Correlation coefficient	.297**	4.24
	Sig. (2-tailed)	0.000	
	N	324	
Self-control	Correlation coefficient	0.058	4.77
	Sig. (2-tailed)	0.299	
	N	324	
**Correlation is significant at 0.01 level (2-tailed) *Correlation is significant at the 0.05 level (2-tailed)			

5.11 FACTORS CAUSING BANK SWITCHING BEHAVIOUR

This section expands on the impact of the determinants of depositor behaviour on bank switching. Non-parametric Spearman's correlation was utilised to determine; which factors cause the likelihood of depositors to switch from one bank to another. Furthermore, a regression analysis was conducted to observe how depositor behaviour influences bank switching.

5.11.1 Bank switching non-parametric correlation

Table 5.25 represents the non-parametric correlation of the determinants influencing and causing the likelihood of bank switching behaviour of depositors. The non-parametric correlation assumes 1 percent level of significance for a two-tailed level of significance.

Table 5.25: Non-parametric correlation of bank switching

Determinant factor	Spearman correlation	Bank switching	Mean
Satisfaction	Correlation coefficient	0.544**	4.892
	Sig. (2-tailed)	0.000**	
	N	324	
Empathy	Correlation coefficient	0.401**	4.644
	Sig. (2-tailed)	0.000**	
	N	324	
Reliability	Correlation coefficient	0.411**	4.676
	Sig. (2-tailed)	0.000**	
	N	324	
Responsiveness	Correlation coefficient	0.340**	4.650
	Sig. (2-tailed)	0.000**	
	N	324	
Tangibilities	Correlation coefficient	0.376**	4.879
	Sig. (2-tailed)	0.000**	
	N	324	

Determinant factor	Spearman correlation	Bank switching	Mean
Bank perception	Correlation coefficient	0.225**	5.075
	Sig. (2-tailed)	0.000**	
	N	324	
Price factor	Correlation coefficient	-0.102	3.822
	Sig. (2-tailed)	0.067	
	N	324	
Involuntary switching	Correlation coefficient	0.022	3.331
	Sig. (2-tailed)	0.688	
	N	324	
Low interest rates on savings account	Correlation coefficient	-0.059	4.09
	Sig. (2-tailed)	0.289	
	N	324	
**Correlation is significant at 0.01 level (2-tailed)			

The Spearman correlation coefficient for empathy had a medium positive linear effect (r = 0.401) with bank switching, which was significant at 1 percent ($p < 0.01$) level. Similarly, reliability also had a medium positive linear effect (r = 0.411) with bank switching at 1 percent significance level ($p < 0.01$). The association between responsiveness and bank switching was (r = 0.340), indicating a positive medium linear effect at a significant level ($p < 0.01$). Tangibilities and bank switching also had a positive medium linear effect (r = 0.376) at 1 percent ($p < 0.01$) level of significance. Bank perception of depositors and bank switching had a positive small linear effect (r = 0.225), which was at ($p < 0.01$) significance level. A negative and small linear effect (r = -0.102) was obtained for price factor and bank switching and it was not significant. Involuntary switching had a positive small linear association (r = 0.022) with bank switching and was not significant. Low interest rates on saving accounts and bank switching had a negative and small effect and thus showed no significance. The highest positive linear association (r = 0.544) was obtained for the satisfaction of depositors and bank switching at 1 percent ($p < 0.01$) significance level. This finding is in accordance with Clemes *et al*. (2007) study, which found that customer satisfaction is amongst the most significant factors that contribute to depositors switching behaviour. A study by Brunetti *et al*. (2016) also found

that bank service performance, which is the mediator for customer satisfaction is important as it can lead to a loss of customers instead of retaining new customers.

The results as observed in Table 5.25 indicate that six of the determinants have a positive medium to high linear relationship ($r = 0.30 – 1.00$) in causing the likelihood of bank switching behaviour. Three of the determinants have shown both a negative and positive small linear effect ($r = -0.10 – 0.29$) and were not significant in causing bank switching. Customer satisfaction was the only determinant that had the highest positive linear association in causing bank switching. Therefore, a null hypothesis (H_{01}), maintaining that there is no significant relationship between bank switching and customer satisfaction can be rejected and acceptance of the alternative hypothesis (H_{a1}), maintaining that there is a significant relationship between bank switching and customer satisfaction. A multiple linear regression analysis was conducted to assess the influence of the determinant factors on bank switching behaviour.

5.11.2 Multiple linear regression on bank switching

Multiple linear regression was conducted to determine the influence of the determinant factors on bank switching behaviour of depositors. A regression model summary was obtained whereby the R^2 indicated that the determinant factors combined explained 41.6 percent of the total variance in bank switching, as observed in Table 5.26. The F-ratio ($p < 0.01$) of the multiple linear regression was significant, indicating that the independent variables influence bank switching.

Table 5.26: Model summary

Model	Sum of Squares	Df	Mean Square	R Square	F–value	P-value
Regression	160.896	13	12.377	0.416	16.983	0.000***
Residual	225.915	310	0.729			
Total	386.812	323				

***Significant level (0.01)

As observed in Table 5.27, only four independent variables were statistically significant at 1 percent ($p < 0.01$) level of significance, indicating an influence on bank switching behaviour of depositors. All the other independent variables were not significant, suggesting no influence on depositors' bank switching behaviour. Each independent variable is explained below.

5.11.2.1 Representativeness bias

Depositors base their financial decisions on the past information of bank performance when subjected to representativeness bias. A statistically significant value was obtained for representativeness bias at 1 percent ($p < 0.01$) level of significance, suggesting an influence on behaviour of depositors' likelihood to switch banks. The beta coefficient shows that when there is a unit change in the likelihood of depositors to withdraw, it will result to a 0.174 change in bank switching variable scale.

5.11.2.2 Overconfidence bias

Depositors who are subject to the overconfidence bias base their financial decisions on their superior financial knowledge. Overconfidence bias was not significant at 1 percent level of significance ($p > 0.01$), indicating that depositors are somewhat unlikely to switch banks.

5.11.2.3 Anchoring bias

Depositors subject to the anchoring bias rely only on a single piece of information to make financial decisions. Anchoring bias was not significant at 1 percent level of significance ($p > 0.01$), suggesting that depositors are somewhat unlikely to switch banks.

5.11.2.4 Gambler's fallacy bias

Depositors subject to gambler's fallacy bias base their financial decisions on future market predictions. An insignificant p-value ($p > 0.01$) was obtained for gambler's fallacy bias, suggesting that depositors are somewhat unlikely to switch banks.

5.11.2.5 Availability bias

Depositors subject to availability bias base their financial decisions on the most recent information. Availability bias recorded an insignificant p-value ($p > 0.01$), suggesting that depositors are somewhat unlikely to switch banks.

5.11.2.6 Loss aversion bias

Depositors subject to loss aversion bias would rather take the risk to keep their money at their current bank than to switch to another bank. Loss aversion was statistically significant at 1 percent ($p < 0.01$) level of significance. The finding implies that loss aversion bias has an influence on behaviour of depositors' likelihood to switch banks. A unit change in loss aversion will lead to a 0.231 beta coefficient change on bank switching variable scale.

5.11.2.7 Mental accounting bias

Depositors subject to mental accounting bias will rather leave their bank accounts as they are to earn higher future interest rates since they receive a good interest rate on their accounts. Mental accounting bias had an insignificant p-value ($p > 0.01$), suggesting that it does not influence the likelihood behaviour of depositors to switch banks.

5.11.2.8 Bank perception

Perception of depositors regarding their banks include level of confidence, trust, satisfaction and performance meeting expectations. Bank perception was found not significant at 1 percent level of significance ($p > 0.01$), suggesting no influence on likelihood of depositors' behaviour to switch banks.

5.11.2.9 Satisfaction

Satisfaction of depositors was statistically significant at 1 percent ($p < 0.01$) significance level. This result suggests that satisfaction significantly influences the behaviour of a depositor's likelihood to switch banks. A unit change in behaviour of a depositor's likelihood to switch will lead to a 0.370 beta coefficient change on bank switching variable scale. Therefore, satisfaction is the most contributing variable in causing bank switching behaviour of depositors. The finding is in line with the literature; satisfaction was found to be a significant factor in influencing bank switching behaviour of customers (Levesque & McDougall, 1996; Vyas & Raitani, 2014). Bank customers have unfavourable behavioural responses when they are not satisfied (Athanassopoulos *et al*., 2001:689).

5.11.2.10 Empathy

Empathy measured the cognitive and emotional feelings exhibited by depositors regarding the service performance of banks. An insignificant p-value ($p > 0.01$) was obtained for empathy suggesting no influence on bank switching behaviour of depositors.

5.11.2.11 Reliability

Reliability measured the timeous and accurate service performance by the bank influences depositors' behaviour to switch to another bank. Reliability was found to be statistically significant at 1 percent ($p < 0.01$) level of significance. The finding implied that reliability significantly influences the behaviour of depositors' likelihood to switch banks. A unit change in likelihood of depositors' behaviour will lead to a 0.218 beta coefficient change on bank switching variable scale. The finding is similar to Colgate and Hedge's (2001) study, which

found reliability to be a contributing factor to bank switching behaviour of customers. A study by Chakravarty *et al.* (2004) found reliability negatively influences bank switching behaviour of customers.

5.11.2.12 Responsiveness

Responsiveness measured the skills required to perform the services and willingness to understand and help depositors with their banking needs. The finding contradicts a study by Arasli *et al.* (2005), which found an influence of responsiveness on customers switching behaviour.

5.11.2.13 Tangibilities

Tangibilities measured how banks' physical facilities, technology and employee appearance influenced depositors' behaviour to switch banks. Tangibilities obtained an insignificant p-value ($p > 0.01$) suggesting no influence on behaviour of depositors' likelihood to switch banks. The finding is similar to a study by Zhou (2004), which found that tangibilities have no significant impact on satisfaction and, ultimately, bank switching behaviour.

Table 5.27: Independent variables model summary

Variables	B	t	P-value
Representativeness	0.174	3.579	0.000***
Overconfidence	0.061	1.251	0.212
Anchoring	0.084	1.764	0.079
Gambler's fallacy	-0.029	-0.547	0.585
Availability bias	-0.014	-0.294	0.769
Loss aversion	0.231	4.530	0.000***
Mental accounting	0.042	0.806	0.421
Bank perception	-0.057	-1.042	0.298
Satisfaction	0.370	5.647	0.000***
Empathy	-0.119	-1.662	0.098
Reliability	0.218	3.273	0.001***
Responsiveness	0.025	0.401	0.688
Tangibilities	0.045	0.694	0.488

***Significant level (0.01)

5.12 SYNOPSIS

This chapter was intended to provide a report regarding the empirical findings of the study. The findings from the analysis and interpretation were presented in such a manner as to explain how the study's empirical objectives were achieved. The descriptive statistics and demographic factors of the sample were presented as the preliminary analysis of the study.

Five factors, which represented bank switching behaviour, were extracted using exploratory factor analysis. The study conducted internal consistency reliability in all the extracted factors and high reliability was found. The factors, based on importance, included empathy, bank switching, reliability, responsiveness and tangibilities. A greater than 0.6 Pearson correlation coefficient was obtained amongst each of the five factors, implying the practical level of significance ($p < 0.01$). The study conducted t-tests and non-parametric correlation tests to determine whether demographic characteristics influence the bank switching behaviour of depositors. The results that suggested education and income level do not significantly have an impact on the behaviour of depositors to switch banks which may point towards lack of financial literacy amongst different groups. Only age was found to have an impact on some depositors' behaviour towards bank switching.

A non-parametric correlation was utilised to determine the impact of demographics on risk tolerance and behavioural finance. The findings revealed that risk tolerance is influenced by only education level, whereas behavioural finance is influenced by age, education and income level. In terms of gender, males were found to be more likely to switch banks compared to their female counterparts. Moreover, satisfaction of depositors was found to be the most important determinant factor to influence bank switching.

The last chapter will present a synthesis of Chapter 5 findings. It will provide how the theoretical and empirical objectives, laid out in Chapter 1, were achieved. In general, Chapter 6 intends to point out the contribution made by the study to the body of academic knowledge. Nevertheless, limitations and recommendations always form part of the research study; hence, the final chapter will, therefore, advice on the limitations and recommendations for future research.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

In this chapter, an overview of the study is provided as well as an assessment and achievement of both the theoretical and empirical objectives. This is followed by a discussion of the main findings to highlight the key contributions made by the study. Subsequently, the chapter provides recommendations derived from the research findings. The limitations of the study are discussed by the chapter and recommendations made for future research studies. Finally, concluding remarks are provided.

6.2 OVERVIEW OF THE STUDY

As explained in Chapter 1, future profit realisation of any bank is influenced by the switching behaviour of depositors. Hence, bank switching by depositors and bank clients can reduce the income of one bank and increase the income of another bank, which creates risk for banks as well as liquidation problems. There are numerous factors that influence the switching behaviour of depositors. An introduction and background of the study were provided in Chapter 1 as well as the formulation of the problem statement. To achieve the fundamental purpose of the study, a formulation of the primary objective, theoretical objectives and empirical objectives were undertaken.

The research study's primary objective was to examine the determinant factors for bank switching behaviour in Gauteng, South Africa.

6.2.1 Theoretical objectives

In pursuit of the primary objective, the theoretical objectives of the study were formulated as the following:

I. Provide a comprehensive review of the landscape, history, purpose, regulations and structure of the banking sector in South Africa;
II. Discuss the risks within the banking sector,
III. Describe the challenges faced by the banks in the digitalisation era, and
IV. Provide a discussion of service quality dimension and bank switching.

Chapter 2 intended to achieve **theoretical objective I, II and III** as outlined in Chapter 1. First, Chapter 2 commenced with the nature of banks and risk types faced by banks. Secondly, the

chapter focused on the South African banking structure and contemporary regulation. Lastly, Chapter 2 discussed the challenges faced by banks in the digitalisation era.

Chapter 3 aimed at achieving **theoretical objective IV**. The chapter focused on reviewing the existing literature on bank switching behaviour. Moreover, the chapter presented an analysis of the extant literature of determinant factors for bank switching behaviour. Furthermore, the influence of customer satisfaction on bank switching behaviour was examined and found to be the most influential factor. Thereafter, the chapter provided an analysis of service quality, which is made up of several dimensions. Lastly, the chapter presented a hypothesised framework for bank switching behaviour.

Chapter 4 provided the followed research design and methodology that was outlined and described for the purpose of collecting and analysing the data of the research study's empirical portion. Chapter 4 presented justifications, arguments and discussions of the research approach, the process of the sample design and the utilised instrument in gathering and analysing data. The study adopted a quantitative research method by using a positivism worldview. The sample size of 324 was adequate to perform factor analysis on the sampled data. The study required that participants be older than 18 years, have acquired some of form of education, are employed and have an account in a South African top five bank. The study utilised a self-administered questionnaire.

Chapter 5 presented an empirical report of the quantitative analysis conducted in the research study. It provided the descriptive analysis of the findings and the demographic information. In ensuring the empirical objectives are achieved, the hypotheses were presented. The following section provides a summary of the key findings of the study in accordance with empirical objectives stated in Chapter 1.

6.3 MAIN FINDINGS OF THE STUDY

In support of the primary objective of this study, empirical objectives were formulated and achieved:

6.3.1 Establish service quality factors influencing bank switching behaviour

This objective was achieved in Section 5.6, whereby an exploratory factor analysis (EFA) was conducted to establish the determinant factors influencing bank switching behaviour of depositors. Five factors, in total, were extracted and they all indicated internal consistency

reliability. The five extracted factors of service quality were empathy, bank switching, reliability, responsiveness and tangibilities.

6.3.2 How bank reputation can influence switching behaviour of depositors

This objective was achieved in Section 5.11. Bank reputation (perception) is based on the perceptions formulated by depositors regarding their expectations. In this regard, bank reputation was formed by constructs, which include trust, satisfaction and expectations and confidence in the bank. A non-parametric Spearman correlation test was performed to determine the influence of bank reputation on bank switching. Bank perception was found to be statistically significant at 1 percent ($p < 0.01$) level of significance with bank switching and had a positive and small relationship; therefore, suggesting that perception of depositors influences their likelihood to switch banks.

6.3.3 Determine how demographical characteristics influences behaviour of depositors

In Section 5.8 this objective was achieved. Non-parametric Spearman correlation and ANOVA tests were conducted to determine how demographical factors influence switching behaviour of depositors. Age was found to be statistically significant in influencing two factors, namely empathy and interest rates for the likelihood to switch banks and had a negative and small relationship. There was a negative relationship between age and most of the factors. Education level had a positive and small relationship with most of the factors, however, there was no significance found. Income level had a combination of both negative and positive relationships with the factors, however, there was no significance found in all the factors. In terms of gender, males were found to react differently to bank switching than females.

6.3.4 Determine risk tolerance level and influence of demographic information

A large group indicated willingness to take average financial risks while a small group of depositors showed willingness to take substantial financial risks. A test was also performed between risk tolerance and demographical factors. Age and risk tolerance were not statistically significant at 1 percent ($p > 0.01$) level of significance and had a very small association. Therefore, age and risk tolerance were found not to be significant. Education level and risk tolerance were statistically significant at 1 percent ($p < 0.01$) level and had a negative small size association. Therefore, education level was found to have a significant relationship with risk tolerance. Income level and risk tolerance were not statically significant at 1 percent ($p > 0.01$) level of significance and had a negative small association. Therefore, income level and risk tolerance level were found not to be significant.

6.3.5 Determine how the demographic information influences behavioural finance

This objective was achieved in Section 5.10. Using a non-parametric Spearman correlation, a test was conducted to determine the influence of demographics on behavioural finance. Age, education and income level all had a combination of negative and positive relationships with some of the behavioural finance biases. Representativeness and anchoring biases were statistically significant with age and income level, suggesting that there is an influence. Overconfidence and gambler's fallacy biases were statistically significant with education level suggesting an influence.

6.3.6 Determine the most significant determinant influencing bank switching behaviour of depositors

In Section 5.11, this objective was achieved as a non-parametric Spearman correlation test was adopted to determine the most significant factor causing bank switching behaviour. Customer satisfaction prevailed as the most significant factor to cause bank switching behaviour since a strong positive linear association was found with bank switching. Moreover, in a multiple regression test, two behavioural biases (representativeness and loss aversion) were found to be significant in influencing bank switching behaviour of depositors. Other significant factors were customer satisfaction and reliability. Satisfaction was found to be the most important factor contributing to bank switching behaviour.

6.4 CONTRIBUTION OF THE STUDY

Customer bank switching behaviour has been widely studied internationally. However, there is limited research in South Africa covering this topic, as most studies have explored electronic banking and deposit insurance. Therefore, this study will significantly contribute towards the literature and empirical analysis. This will assist banks to understand factors causing depositors to switch banks. Hence, banks can incorporate depositor switching in their customer satisfaction strategies to retain customers. This will also help banks to realise higher future profits, expand their customer database and avoid liquidation problems.

6.5 RECOMMENDATIONS

It is unlikely to contend that losing customers reduces income and can have a detrimental impact on the business continuity of any bank; hence, it is vital to retain or attract new customers to keep the bank functional.

In view of the empirical research findings of this study, recommendations and managerial implications are provided. The research discovered that customer satisfaction, reliability, representativeness and loss aversion biases are the most significant factors for bank switching behaviour of depositors. Thus, the following recommendations can be made for bank managers:

- Develop strategies for customer satisfaction that will focus on meeting customer expectations. Due to increasing digitalisation in banking, expectations of customers are likely to change.
- Promptly solve service problems, as this will help to build trust.
- Positive interaction with customers to develop a positive relationship.
- Offering convenient and desired levels of services since customers seek a better user experience.
- Develop accessible applications, as customers may like to have access to banking services at any time of the day.
- Dependably perform the required service as promised to ensure reliability.
- Deliver services and products with better value.
- Maintain a good financial record since some bank clients base financial decisions on the past performance of the bank.

6.6 LIMITATIONS AND FUTURE RESEARCH

Limitations form part of any research study and this study is not an exception. Future researchers can, therefore, use this study as a foundation to take on a new direction. Although the sample size of this study meets the sample adequacy for the nature of this study. It is recommended that future studies expand the sample size and consider the cultural and demographic implications of a particular region, as this study merely focused on Gauteng depositors. Future researchers can also investigate the changes in the significance of the determinants for bank switching behaviour.

6.7 CONCLUDING REMARKS

Customer bank switching behaviour is not a new research development since it has been widely investigated internationally. Nonetheless, studies concerning customer bank switching behaviour in South Africa are limited. In this research journey, the researcher has utilised theoretical analysis and application of statistical processes and analysis to achieve the primary

objective of the study. Statistical processes such as EFA have been employed for the purpose of determining the important factors for bank switching behaviour of depositors in Gauteng. Banks will be able to mitigate the risk of losing customers by developing customer satisfaction strategies, as this can assist to retain customers. Furthermore, banks will be able to expand their customer database. The findings of this study will be valuable to banks and thus, an important addition in the growing field of customer bank switching behaviour literature in South Africa.

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ANNEXURE 1: QUESTIONNAIRE

Determinants of bank-switching behaviour in the South African context

You are being invited to take part in a research project that forms part of a Masters study. The purpose of this study is to identify key determinant factors for bank switching behaviour. This study will focus on the behaviour of depositors and the level of customer satisfaction in terms of their bank deposits.

Please complete if you meet the following criteria:

- **Older than 18 years;**
- **Bank at either Standard Bank, Absa Bank, Capitec Bank, FNB Bank or Nedbank;**
- **Has some level of education; and**
- **Live in Southern Gauteng.**

Please do not put your name, surname, or any identifying marks on your questionnaire. Also, your participation is entirely voluntary and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. The data will be **confidential** and your results will be reported in aggregate (as part of the whole sample) and not individually. The questionnaire should take, on average, 15 minutes to complete.

SECTION A

A1.

Age	18-29	30-39	40-49	50-59	60+

A2.

Gender	Male	1
	Female	2

A3.

Ethnicity	African	1
	White	2
	Coloured	3
	Asian/Indian	4

Other (5):_____

A4.

Highest level of education	High school education	1
	Further training	2
	Diploma	3
	Undergraduate degree	4
	Honours degree	5
	Master's degree	6
	Doctoral degree	7

Other (8):_____

A5.

What is your annual income that is deposited into your bank account?	Below R100 000	1
	R100 000-R200 000	2
	R200 001-R400 000	3
	R400 001-R550 000	4
	R550 001-R700 000	5
	R700 001-R1500 000	6
	R1500 001 and above	7

Section B: Customer Service quality

Please state the extent to which you agree or disagree with the following statements:

SERVPERF		Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
B1	When my bank promises to do something by a certain time, it does so in a speedy manner	1	2	3	4	5	6
B2	My bank performs the service right the first time	1	2	3	4	5	6
B3	My bank provides its services at the time it promises to do so	1	2	3	4	5	6
B4	My bank performs the service accurately	1	2	3	4	5	6
B5	My bank tells you exactly when services will be performed	1	2	3	4	5	6
B6	Employees in my bank have the required skills and knowledge to perform the service	1	2	3	4	5	6
B7	Employees in my bank are always willing to help	1	2	3	4	5	6
B8	Employees in my bank are always courteous	1	2	3	4	5	6
B9	My bank gives me individual attention	1	2	3	4	5	6
B10	Employees in my bank understand my specific needs	1	2	3	4	5	6
B11	My bank`s physical facilities are visually appealing	1	2	3	4	5	6
B12	My bank`s employees are neat in appearance	1	2	3	4	5	6
B13	My bank offers a complete range of services	1	2	3	4	5	6
B14	It is easy to get in and out of my bank quickly	1	2	3	4	5	6
B15	My bank provides easily understood statements	1	2	3	4	5	6
B16	My bank provides error-free records	1	2	3	4	5	6
B17	My bank uses the latest technology	1	2	3	4	5	6
B18	Employee behaviour instils customer confidence	1	2	3	4	5	6
B19	Show sincere interest in solving customer problems	1	2	3	4	5	6
B20	Customers best interests are at heart	1	2	3	4	5	6
B21	Operating hours are convenient to all customers	1	2	3	4	5	6
B22	Visually appealing materials associated with the service	1	2	3	4	5	6
B23	I feel safe doing transactions in my bank	1	2	3	4	5	6
B24	If people asked me, I would strongly recommend that they deal with my bank	1	2	3	4	5	6
B25	I think it would take a lot of time and effort to change to another bank	1	2	3	4	5	6
B26	I would have difficulties in familiarising myself with the procedures of a new bank	1	2	3	4	5	6
B27	I think that changing from one bank to another is too much of a bother	1	2	3	4	5	6
B28	I have invested a lot in the relationship with my main bank	1	2	3	4	5	6
B29	Overall, I am satisfied with my main bank	1	2	3	4	5	6
B30	I am pleased with my banking experiences with my main bank	1	2	3	4	5	6
B31	I am delighted with the service quality of my main bank	1	2	3	4	5	6

Section C: Bank Perception

Please state the extent to which you agree or disagree with the following statements:

Bank perception		Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
C32	My perception of a bank is based on the level of confidence that I have in the bank.	1	2	3	4	5	6
C33	My perception of a bank is based on how its performance meets my expectations.	1	2	3	4	5	6
C34	My perception of a bank is based on the level of trust I have in the bank.	1	2	3	4	5	6
C35	My perception of a bank is based on the level of satisfaction regarding the service from the bank.	1	2	3	4	5	6

Section D: Behavioural finance

Indicate to what extent the following statements drive your financial decisions:

Behavioural biases		Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
D1	I base my financial decision on the past performance of the bank	1	2	3	4	5	6
D2	My superior financial knowledge drives my decisions	1	2	3	4	5	6
D3	I rely only on a single piece of information (past or current information) to make financial decisions	1	2	3	4	5	6
D4	My financial decisions are based on future market predictions	1	2	3	4	5	6
D5	My decision are based on the most recent information	1	2	3	4	5	6
D6	I would rather take the risk to keep my money at my current bank than to switch to another bank	1	2	3	4	5	6
D7	My previously incorrect financial decisions which led to a financial loss drives my decisions	1	2	3	4	5	6
D8	I receive a good interest rate on my account and will rather leave my account as it is to earn higher future interest rates	1	2	3	4	5	6
D9	I exercise self-control when making financial decisions	1	2	3	4	5	6

Section E: Risk tolerance

E1. Which of the following statements comes closest to the amount of financial risk that you are willing to take when making a deposit? (Choose 1 option)		**Mark with an X**
A	Take substantial financial risks expecting to earn substantial returns	1
B	Take above average financial risks expecting to earn above average returns	2

C	Take average financial risks expecting to earn average returns	3
D	Not willing to take any financial risks	4

Section F: Price factors

Upon experiencing the following interest rate changes, how likely are you to withdraw your deposits? Mark with X

Charges		Very unlikely	Unlikely	Some-what unlikely	Some-what likely	Likely	Very likely
F1	The bank charged high fees	1	2	3	4	5	6
F2	The bank charged high interest for loans	1	2	3	4	5	6
F3	The bank provided low interest rates on savings accounts	1	2	3	4	5	6

Section G: Involuntary switching

Upon experiencing the following events, how likely are you to withdraw your deposits? Mark with X

		Very unlikely	Unlikely	Some-what unlikely	Some-what likely	Likely	Very likely
G1	Bank branches in my area were closed	1	2	3	4	5	6
G2	The bank moved to a new geographic location	1	2	3	4	5	6
G3	I moved to a new geographic location	1	2	3	4	5	6

THANK YOU!

ANNEXURE 2: CODE BOOK

Section A			
Question	**Code**	**Construct measured**	**Value**
Question 1	A1	Age	18-29 (1), 30-39 (2), 40-49 (3), 50-59 (4), 60+ (5)
Question 2	A2	Gender	Male (1), Female (2)
Question 3	A3	Ethnicity	African (1), White (2), Coloured (3), Asian/Indian (4), Other (5)
Question 4	A4	Highest level of education	High school education (1), Further training (2), Diploma (3), Undergraduate degree (4), Honours degree (5), Master`s degree (6), Doctoral degree (7), Other (8)
Question 5	A5	Annual income deposited into bank account	Below R100 000 (1), R100 000-R200 000 (2), R200 001-R400 000 (3), R400 001-R550 000 (4), R550 001-R700 000 (5), R700 001-R1 500 000 (6), R1 500 001 and above (7)
Section B			
Item	**Code**	**Construct measured**	**Value**
Item 1	B1	Service quality (SERVQUAL)	Strongly disagree (1), Disagree (2), Somewhat disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6)
Item 2	B2		
Item 3	B3		
Item 4	B4		
Item 5	B5		
Item 6	B6		
Item 7	B7		
Item 8	B8		
Item 9	B9		
Item 10	B10		
Item 11	B11		
Item 12	B12		
Item 13	B13		
Item 14	B14		
Item 15	B15		
Item 16	B16		
Item 17	B17		

Item 18	B18		
Item 19	B19		
Item 20	B20		
Item 21	B21		
Item 22	B22		
Item 23	B23		
Item 24	B24		
Item 25	B25		
Item 26	B26		
Item 27	B27		
Item 28	B28		
Item 29	B29		
Item 30	B30		
Item 31	B31		
Section C			
Item	**Code**	**Construct measured**	**Value**
Item 1	C32	Bank perception	Strongly disagree (1), Disagree (2), Somewhat disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6)
Item 2	C33		
Item 3	C34		
Item 4	C35		
Section D			
Item	**Code**	**Construct measured**	**Value**
Item 1	D1	Behavioural finance	Strongly disagree (1), Disagree (2), Somewhat disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6)
Item 2	D2		
Item 3	D3		
Item 4	D4		
Item 5	D5		
Item 6	D6		
Item 7	D7		
Item 8	D8		
Item 9	D9		
Section E			
Question	**Code**	**Construct measured**	**Value**

Question 1	E1	Risk tolerance	Take substantial financial risks expecting to earn substantial returns (1), Take above average financial risks expecting to earn above average returns (2), Take average financial risks expecting to earn average returns (3), Not willing to take any financial risks (4)
Section F			
Item	**Code**	**Construct measured**	**Value**
Item 1	F1	Price factors	Strongly disagree (1), Disagree (2), Somewhat disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6)
Item 2	F2		
Item 3	F3		
Section G			
Item	**Code**	**Construct measured**	**Value**
Item 1	G1	Involuntary switching	Strongly disagree (1), Disagree (2), Somewhat disagree (3), Somewhat agree (4), Agree (5), Strongly agree (6)
Item 2	G2		
Item 3	G3		

ANNEXURE 3: ETHICAL CLEARANCE

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Ethics Committee (EMS-REC)
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24 June 2019

Dr S Ferreira and Dr Z Dickason
Per e-mail

Dear Dr Ferreira and Dr Dickason,

FEEDBACK – ETHICS APPLICATION 21062019 – L S Munyai (23346183)(NWU-00718-19-A4) MCom in Risk Management – Dr S Ferreira and Dr Z Dickason

Your ethics application on, *Determinants of bank switching behaviour in the South African context,* that served on the EMS-REC meeting of 21 June 2019 refers.

Outcome:

Approved as a minimal risk study. A number, NWU-00718-19-A4, is given for three years of ethics clearance.

Kind regards,

AL Bevan-Dye

Prof Ayesha Bevan-Dye
Deputy Chairperson: Economic and Management Sciences Research Ethics Committee (EMS-REC) Vaal Campus

ANNEXURE 4: ANALYSIS OF QUOTATIONS IDENTIFIED BY TURN-IT-IN

Analysis of quotations identified by Turn-It-In

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NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

Name of student	L Munyai
Student number	23346183
Title of document	Determinants of bank-switching behaviour in the South African context
Study leader / promoter	Dr SJ Ferreira

INTRODUCTORY COMMENT:

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B) Appropriate brief quotations	2%	No action necessary
C) Jargon from the discipline	9%	No action necessary
D) Everyday use of language	6%	No action necessary
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Report by student and/or supervisor/promoter

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L. Munyai — Initials and surname of MA candidate

DR SJ FERREIRA — Initials and surname of supervisor

Report by entity director / school director / leader or chairperson of CAD in school

Initials and surname of director / leader / CAD chair

Date 26/05/2020