

Open Access Article



<https://doi.org/10.55463/hkjss.issn.1021-3619.60.21>

### Influence of Behavioural Finance, Customer Satisfaction, and Service Quality on Bank-Switching Behavior

S.J. Ferreira-Schenk\*, Z. Dickason-Koekemoer

*School of Economic Sciences, North-West University, South Africa*

*Received: July 18, 2022 ▪ Reviewed: August 13, 2022*

*▪ Accepted: September 2, 2022 ▪ Published: January 5, 2023*

#### Abstract:

As banking clients and depositors became more service- and price-conscious in their purchasing behavior of financial services, their banking behavior was increasingly prone to change. Thus, bank customers tend to switch banks due to underlying factors that influence their behavior. However, banks strive to retain and attract more clients as this may increase their future income and reduce the risk of liquidation. The banking industry of South Africa is characterized by a concentration of dominance by fewer large banks. Hence, this study used a self-administered questionnaire in the economic hub of South Africa where most bank customers reside, Gauteng, South Africa. Customer satisfaction has been recognized to play a crucial role in success in a competitive banking environment. Thus, this paper investigated the influence of customer satisfaction on bank-switching behavior in a South African context using structural equation modeling. The findings show that customer satisfaction and bank reliability and empathy significantly influence depositors' behavior to switch between banks. It was also found that a relationship exists between behavioral finance biases and the bank-switching behavior of depositors. The novelty of this paper is that understanding how depositors make their financial decisions and how they form their risk perceptions will contribute to managing banking risks. It may also advise banks on what will cause bank customers to switch from their bank to another.

**Keywords:** bank switching, customer satisfaction, service quality, depositors.

### 行为金融学、客户满意度和服务质量对银行转换行为的影响

#### 摘要:

随着银行客户和储户在金融服务购买行为中变得更加注重服务和价格，他们的银行行为越来越倾向于改变。因此，银行客户往往会因为影响其行为的潜在因素而更换银行。然而，银行努力留住和吸引更多客户，因为这可能会增加他们未来的收入并降低清算风险。南非银行业的特点是少数大银行集中主导。因此，本

Corresponding Author: S.J. Ferreira-Schenk, Ph.D., School of Economic Sciences, North-West University, South Africa; email: [23261048@nwu.ac.za](mailto:23261048@nwu.ac.za)

研究在大多数银行客户居住的南非经济中心，即南非豪登省，使用了一份自填问卷。客户满意度已被公认为在竞争激烈的银行业环境中取得成功的关键因素。因此，本文使用结构方程模型研究了南非背景下客户满意度对银行转换行为的影响。研究结果表明，客户满意度、银行可靠性和同理心显著影响存款人在银行之间转换的行为。还发现行为金融偏差与储户的银行转换行为之间存在关系。本文的新颖之处在于，了解储户如何做出财务决策以及他们如何形成风险认知将有助于管理银行业风险。它还可以就什么会导致银行客户从他们的银行转向另一家银行向银行提出建议。

**关键词：**银行转换、客户满意度、服务质量、储户。

## 1. Introduction

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

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

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). 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 (2012) indicates that online banking was utilized more by males compared to females, whereby security issues were under scrutiny by non-online bankers. The influence of demographic factors will play

a significant role in determining the levels of risk tolerance of South African depositors. Several 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 to mitigate risks and maximize revenues. The bank-switching behavior 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).

The realization of future profit for any company is influenced by customer switching (Ghourri et al., 2010). Hence, customer bank switching can reduce the income of one bank and increase the income of another bank, creating risk for banks and liquidation problems. Customers incur costs when switching between financial institutions. Switching costs are the costs that prevail over 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 the establishment of satisfying relationships with customers that are valued. Thus, attaining value perception of customers' insight as a foundation for service development and quality improvements is through learning from their switching behavior and complaints (Edvardsson & Roos, 2003).

It can unlikely be argued that customer satisfaction is crucial for the 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 of technology, banks need to be highly competitive to retain customers and manage risks. Delivering offerings that consist of value or competitive benefits to a customer is vital for the effective competency of an organization in a certain market (Devlin, 2000).

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

## 2. Literature Review

The emergence and evolution of new business models and technology will give rise and change to customer expectations in terms of banking services. Customer retention and bank services are believed to be enhanced by incorporating new technology (Yang & Peterson, 2004). Previously, automated teller machines (ATM's) were a breakthrough regarding technology in the banking sector. The more ATMs were introduced, the more it was accessible to various customers. In more recent years, technology has even developed further where online banking has become a pivotal influence on the banking structure and is leading the new nature of banking (Abdullahi, 2012). Abdullahi (2012) elaborated 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. Online banking is defined by Jamaluddin (2013) as a system that enables customers, businesses, and financial institutions to obtain information about products and services, transact business, and access accounts at home or from offices. Moreover, Banstola (2007) stated that an increasing number of banks across the world provide deposit products and credit online.

As more banks are shifting toward online banking, Banstola (2007) indicates that banks may find new opportunities along with emerging strategic and operational risks. The benefits include efficiency, a competitive advantage, improved business turnover, enhanced automation models and improved image. The growing competition in online banking has encouraged banks to incorporate innovative automation to remain competitive (Abdullahi, 2012). The online banking benefits are accompanied by challenges. The lack of e-commerce knowledge and technology costs are among the major challenges (Ojeka & Ikpefan, 2011). Security concern is the most crucial challenge (Yang & Peterson, 2004). Additionally, 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 use 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).

The 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 to drive retention and satisfaction (Mburu, 2012). Additionally, Mburu (2012) maintained 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), the risk perception of depositors about their banks is crucial to the banks' profitability and prosperity. Hence, depositors' perceptions need to be considered by the 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). This gap is due to service providers assuming that they are informative about the perceptions of customers (Cole & Dale, 2005).

### 2.1. Bank Switching

Increased switching behavior of customers was driven by global banking deregulation early in the 1980s (Clemes et al., 2007). An immense pressure in the global landscape during the 1970s to deregulate the financial markets led to the liberalization of international banking (Singleton & Verhoef, 2010). 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). The financial sector was dominated by banks for many years because of the high entrance cost, distribution network facilities, and strict government regulation. The removal of regulatory restrictions within the banking industry has allowed new entrants to enter the market, thus enhancing competition, which may force banks to improve their competency (Singleton & Verhoef, 2010).

The entrance of new competitors provides customers with various choices. Customers become more service- and price-conscious in their purchasing behavior of financial services (Vyas & Raitani, 2014). Furthermore, as products and services in banking are virtually identical, this might prompt the likelihood of customers switching between banks (Vyas & Raitani, 2014). Generally, customers indicate a low bank switching propensity (Gerritsen & Bikker, 2018). A research finding by Callari et al. (2016) in the United Kingdom also points toward lower bank switching propensity as they indicated that, in a given year, only 3% of customers switched between banks.

After many years of strict regulation in the South African banking sector, deregulation has become a fundamental factor. The implementation of financial liberalization programs within the banking industry has been beneficial to banking customers (Singleton & Verhoef, 2010). The performance standard increased due to the competition brought by new banks and non-bank financial institutions (Bick et al., 2004). This granted customers choices and access to more financial services from competitive banks (Singleton & Verhoef, 2010). The bank-switching behavior of customers has been explored in a large and growing body of literature. The term *bank-switching behavior* is coined as a customer's exit from one bank to another. Bank switching occurs when a customer stops purchasing certain services. However, customer switching behavior involves replacing the services of the current bank with the services of another bank. Similarly, bank-switching behavior can be seen as a shift of customers from one bank to another or choosing the services of another bank. Moreover, customer bank-switching behavior is

an act of loyalty to one bank, however, they switch to another bank due to poor services or bank problems. The reasons that explain the decision of customers to switch banks are complex and numerous.

Many researchers, such as Ghouri et al. (2010) and Vyas and Raitani (2014), have shown that customer bank-switching behavior is influenced by various factors. These factors include prices, advertising (Ghouri et al., 2010), service failures, inconvenience, competition, customer satisfaction and reputation (Vyas & Raitani, 2014). Some literature categorized pricing, service failure, and denied services as major factors for bank-switching behavior of customers. A research finding by Yavas et al. (2004) points toward customer services in terms of quality.

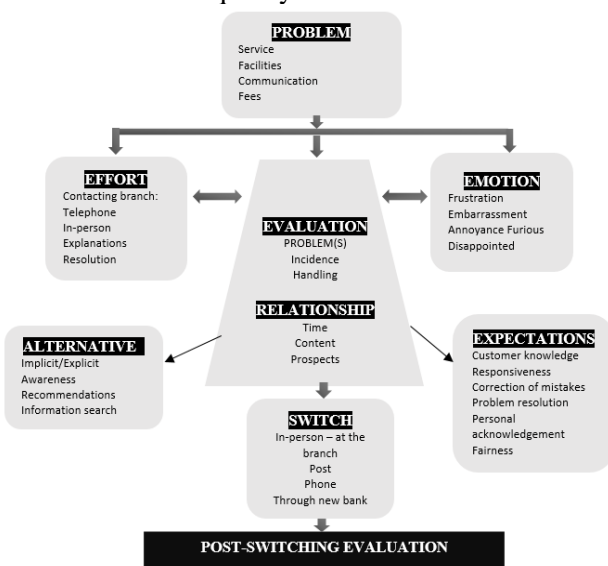


Figure 1. The switching process model

Moreover, Yavas et al. (2004) point out that positive word-of-mouth is closely related to tangible aspects of the quality of service, while satisfaction and switching behavior are related to the quality of service elements of time. Satisfied customers might share their customer service experience at an organization with more than five people, whereas dissatisfied customers can share it 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 behavior.

### 2.2. Customer Service

Recently, a considerable amount of 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 (Mishra, 2010). In contrast, instead of retaining existing customers, managers continuously focus on attracting new customers. Customer satisfaction is considered an important business strategy and the scale, on which many banks establish their standards (Mburu, 2012). However, for superior service, customer satisfaction is insufficient as a single factor, as customers switch

between banks due to bank failures and service quality. The customer’s decision to switch to another bank is illustrated in Figure 1.

### 2.3. Behavioral Finance

The financial decision-making behavior of depositors depends on behavioral finance biases. Behavioral finance consists of three elements: firstly, knowledge of finance, secondly, knowledge of economics and lastly, cognitive psychology when making financial decisions (Zindel et al., 2014). Behavioral finance originated from the irrational manner, in which market participants make financial decisions.

Behavioral finance biases emanate from previous research that suggests that individual financial choices under uncertainty are contradictory to rational financial decisions. These biases are aimed at explaining the causation of depositors’ financial decision-making behavior. Generally, the behavioral approach of bank customers focuses on product or service repurchase, bank charges, brand allegiance, and complaining behavior until customers decide to switch banks. These measures stem from customers’ behavioral intentions. Additionally, the behavioral intentions of customers can be perceived through their decision to switch or remain with the bank. Behavioral intentions are related to customer experience. Thus, if a 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). Emotions, experiences and financial events can be understood using models whereby there is incomplete rationality of agents. Table 1 highlights the behavioral finance biases in the context of depositors.

Table 1. Behavioral finance biases of depositors

Theory	Description
Representativeness	Depositors base their financial decisions on their perception of the past performance of a bank.
Overconfidence and over-optimism	Depositors base their financial decisions on their superior financial knowledge.
Frame dependence and anchoring	Depositors base their financial decisions on a single piece of information (past or present) to make financial decisions.
Gamblers fallacy	Depositors inaccurately predict financial market movements by basing decisions on future trends or the performance of the bank.
Availability bias	Depositors make inaccurate financial decisions due to basing decisions on available or current information only.
Loss aversion	Depositors will tend to keep their deposits at their current bank instead of changing to another bank.
Regret aversion	Depositors base financial decisions on past feelings of regret, guilt, or grief.
Mental accounting	Depositors group information and financial decisions into separate mental compartments.
Self-control	Depositors exercise self-control when making financial decisions to avoid large financial losses.

### 3. Methodology

#### 3.1. Research Purpose and Design

This paper used a self-administered questionnaire. The first section included various demographic questions such as gender, age, ethnicity, the income of depositors, and level of education. This study utilized a questionnaire design that allowed participants older than 18 years with some level of education to be able to comprehend the purpose of the survey. The second section consisted of the SERVPERF, which is a recommended scale for generally evaluating service quality. The 31-item SERVPERF on a six-point Likert scale was used to measure the service quality of the banks. The scale consisted of four dimensions (empathy, 13, 14, 19, 21, 29, 30, 31; Reliability, 1, 2, 3, 4, 5, 16, 18; Responsiveness, 6, 7, 8, 9, 10; Tangibility, 11, 12, 13, 14, 15, 17). The SERVPERF scale was adopted for the banking industry and included the following amended statements:

1. When my bank promises to do something by a certain time, it does so in a speedy manner;
2. My bank performs the service right the first time;
3. My bank provides its services at the time it promises to do so;
4. My bank performs the service accurately;
5. My bank tells you exactly when services will be performed;
6. Employees in my bank have the required skills and knowledge to perform the service;
7. The employees at my bank are always willing to help;
8. Employees at my bank are always courteous;
9. My bank gives me individual attention;
10. The employees at my bank understand my specific need;
11. My bank's physical facilities are visually appealing;
12. My bank's employees are neat in appearance;
13. My bank offers a complete range of services;
14. It is easy to get in and out of my bank quickly;
15. My bank provides easily understood statements;
16. My bank provides error-free records;
17. My bank uses the latest technology;
18. Employee behavior instills customer confidence;
19. Show sincere interest in solving customer problems;
20. Customers best interests are at heart;
21. Operating hours are convenient for all customers;
22. Visually appealing materials associated with the services;
23. I feel safe doing transactions in my bank;
24. If people asked me, I would strongly recommend that they deal with my bank.

To determine customer satisfaction, the following

three statements were constructed:

1. Overall, I am satisfied with my main bank;
2. I am pleased with my banking experience at my main bank;
3. I am delighted with the service quality of my main bank.

The questionnaire also comprised the following section: bank perception (customers' subjective perception of their bank):

1. My perception of a bank is based on the level of confidence that I have in the bank;
2. My perception of a bank is based on how its performance meets my expectations;
3. My perception of a bank is based on the level of trust I have in the bank;
4. My perception of a bank is based on the level of satisfaction regarding the service from the bank.

The nine-item behavioral finance scale 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 used for depositors to relate their decisions to withdraw based on behavioral finance biases. Since this was a self-constructed scale by Ferreira (2018) the internal consistency reliability needed to be confirmed. The behavioral bias scale had a Cronbach's alpha value of 0.61, indicating fair internal reliability.

For bank-switching behavior, the following statements formed the dependent variable:

1. I think it would take much time and effort to change to another bank;
2. I would have difficulty familiarizing myself with the procedures of a new bank;
3. I think that changing from one bank to another is too much of a bother;
4. I have invested a lot in this relationship with my main bank.

Therefore, for this research article, secondary data analysis was the most appropriate method to achieve the primary research question. Which factors behavioral and demographic factors contribute toward depositors intention to switch banks?

#### 3.2. Study Area and Sample

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 included individuals banking with the top five larger banks in South Africa at the time (2020): First National Bank, Amalgamated Banks of South Africa (ABSA), Nedbank, Capitec Bank, and Standard Bank. The participants had the choice to voluntarily participate or freely decline to participate and could withdraw at any point of the study. The sample was selected using purposeful sampling. Sample size can be restricted by financial costs, access to samples and time. Moreover, generating an adequate sample size sufficiently provides the researchers with power and the capacity to collect the sample. A similar study by Manrai and Manrai (2007) utilized 445 samples to investigate the

switching behavior of customers for bank services in the United States. As a result, the determination of the sample size was consistent with the recommendation that empirical, consumer-based studies should use a sample size that ranges from 200 to 500. Given that maximum likelihood estimation, which assumes multivariate normal data, was used to estimate the model, the sample size of 300 depositors was considered adequate for conducting SEM with IBM SPSS® Amos™, Version 27. The study used a final sample size of 324 South African depositors.

**3.3. Hypotheses**

Previous researchers had found that customer satisfaction, service quality, and demographics influenced bank-switching behavior. Hence, to concur with previous findings, the following hypotheses were formulated:

*H01:* There is no significant relationship between bank switching and customer satisfaction.

*H02:* There is no significant relationship between bank switching and service quality domains (empathy, assurance, reliability, responsiveness, tangibility).

*H03:* There is no significant relationship between bank switching and customers bank perception.

*H04:* There is no significant relationship between bank switching and behavioral finance biases customers are subject to.

**3.4. Structural Equation Model**

A structural equation model (SEM) was deemed the best model to represent the data. The implementation of an SEM allows for the combination of multiple statistical techniques (factor analysis and regression) and is used to observe structural relationships between variables that can be observed or measured. The SEM, provided multivariate statistical analysis to demonstrate the complex relationship between the bank-switching behavior and service quality, bank perception and behavioral finance biases. To assess the validity of the specified structural model. The second type of goodness-of-fit indices includes incremental indices where they evaluate how well the measurement model is supported by the data compared to a base model that assumes that all variables are uncorrelated (Malhotra et al., 2017). Incremental indices include the normal fit index (NFI), non-normal fit index (NNFI), comparative fit index (CFI), Tucker Lewis index (TLI) and relative non-centrality index (RNI). Values for these indices range from zero to one where values greater than 0.9 are deemed a good model fit. The parsimony fit indices are used for comparing complex models rather than single models. The parsimony goodness-of-fit index (PGFI) and parsimony normal fit index (PNFI) require higher values for model fitness and parsimony. These measures should only be used in a relative sense to compare alternative models. Values close to 0.9 indicate a marginal goodness-of-fit.

**4. Results**

This section reports the results after investigating the switching behavior of customers for bank services in Gauteng, South Africa. The following section provides the validity and reliability of the structural model as well as the influence of the variables explaining the dependant variable.

**4.1. Structural Model and Model Fit Assessment**

The section below established the validity of the structural model and the corresponding hypothesized theoretical relationships between the dependent variable (long-term investment intentions) and independent variables (demographic variables, personality traits, satisfaction with life, behavioural finance and investor risk tolerance). To assess the validity of the specified structural model illustrated in Figure 3, the appropriate model fit indices were utilized (CMIN/DF, CFI, RMSEA). The chi-square value was obtained by dividing the minimum sample discrepancy by the degrees of freedom (CMIN/DF). A CMIN/DF value of 2.645 was found, which represents a good model fit since a standard for good fit criteria requires values between 3.0 and 5.0. In terms of incremental fit indices, a comparative fit index (CFI) value of 0.789 was obtained. CFI varies from 0–1, with values greater than 0.90, indicating a good model fit (Malhotra et al., 2017). Absolute badness-of-fit indices require lower values since they measure error or deviation. The RMSEA value of 0.071, with a 90 per cent confidence interval [0.068;0.075], indicated a good model fit, as values of 0.08 or less are preferred (Malhotra et al., 2017). Even though the CFI value was slightly below the ideal value of greater than 0.9, both the CMIN/DF and RMSEA values showed a good model fit. For that reason, the specified structural model is a good fit for the data and proved satisfactory in terms of construct validity and is therefore deemed valid. The structural model of depositors bank-switching behavior, customer satisfaction, service quality, bank perception and behavioral finance biases can be seen in Figure 2.

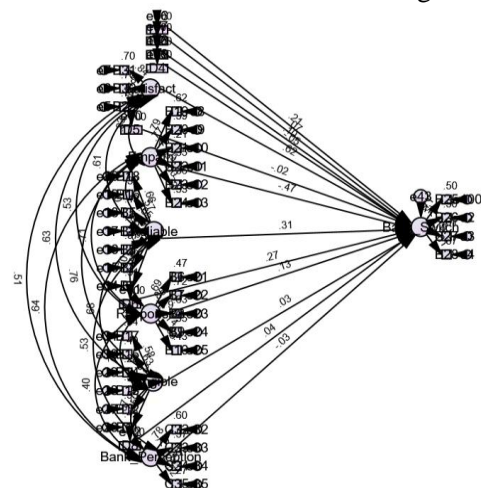


Figure 2. Structural model of depositors’ bank-switching behavior, customer satisfaction, service quality, bank perception, and behavioral finance biases  
 Notes: Figure indicates the structural relationship between the

dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception, and

behavioral finance bias.

Table 2. Standardized weights of customers' bank-switching behavior

Constructs		Estimate	P-value
Bank-switching behavior	<--- Customer satisfaction	.623	***
	<b>Service quality dimensions</b>		
	<--- Empathy	-.468	.026
	<--- Reliability	.313	.003
	<--- Responsiveness	.133	.271
	<--- Tangibility	.026	.837
	<b>Bank perception</b>		
	Customer bank perception	-.026	.772
	<b>Behavioral finance biases</b>		
	<--- Representativeness	.211	***
	<--- Overconfidence and over optimism	.071	.164
	<--- Frame dependence and anchoring	.100	.051
	<--- Gamblers fallacy	-.046	.366
	<--- Availability bias	-.023	.650
	<--- Loss aversion	.269	***
	<--- Mental accounting	.039	.441
CMIN/DF	2.645	RFI	0.665
CFI	0.789	IFI	0.792
NFI	0.704	TLI	0.761
RMSEA	0.071	[0.068:0.075]	

Notes: Table 2 indicates the structural model between the dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception and behavioral finance bias; \*\*\* Significant at 0.01 level; \*\* Significant at 0.05 level; \* Significant at 0.1 level

The demographic factors of age, gender, education and income level indicated that there was no significant correlation found in all of the determinant factors at 1 percent ( $p < 0.01$ ) level of significance, thus, demographic variables were found not to influence bank-switching behavior of depositors and were excluded from the model. In terms of customer satisfaction, this variable (standardised coefficient = 0.623) contributed significantly ( $p < 0.05$ ) to explaining depositors' behavior to switch from one bank to another to a compelling degree. Considering service quality and its four dimensions (empathy, reliability, responsiveness and tangibility), two dimensions proved to have relatively strong weightings in terms of bank-switching behavior (standardised coefficient = 0.468 for empathy; standardised coefficient = 0.313 for reliability). Responsiveness and Tangibility had relatively small weights and were not significant at any level. Hence responsiveness and tangibility did not contribute to explaining the depositors' behavior to switch from one bank to another. The bank perception construct (standardized coefficient = -0.26) was found to not contribute to explaining depositors' behavior to switch from one bank to another.

Considering behavioral finance, the loss aversion construct (standardized coefficient = 0.269) contributed significantly ( $p < 0.01$ ) to explaining depositors' behavior to switch between banks. The representativeness bias also contributed to depositors' bank-switching behavior (standardized coefficient = 0.211) significantly ( $p < 0.01$ ). The overconfidence, frame dependency, gambler's fallacy, and mental accounting bias had no significant contribution to explaining why depositors chose to switch banks.

Figure 2 illustrates the structural relationship

between the dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception and behavioral finance bias. After the structural model had been verified and deemed reliable, all of the contributing factors were included in the final modified model. Therefore, the structural modified model is indicated and laid out for specification in the section below. The validity of the modified structural model was reassessed and is discussed below.

The CMIN/DF value of 2.757 represents a good model fit, since a standard for good fit criteria requires values between 3.0 and 5.0. In terms of incremental fitness, a comparative fit index (CFI) value of 0.892 was obtained, where values larger than 0.9 are preferred and deemed a good model fit (Malhotra et al., 2017). In terms of the absolute badness-of-fit index, a RMSEA value of 0.074, with a 90 per cent confidence interval [0.066; 0.081], indicated a good model fit, as values of 0.08 or less are preferred (Malhotra et al., 2017). Overall, the CFI indicated acceptable goodness of fit with a value greater than 0.9, both the CMIN/DF and RMSEA values also indicated a good model fit. For that reason, the specified structural model is a good fit for the data and proved satisfactory in terms of construct validity and is therefore deemed valid. In terms of customer satisfaction, this variable (standardized coefficient = 0.583) contributed significantly ( $p < 0.05$ ) to explaining depositors' behavior to switch from one bank to another to a compelling degree. These results are similar to those of Athanassopoulos et al. (2001) who also found customer satisfaction to be a significant contributing factor to the bank-switching behavior of depositors. Other researchers, such as Ghouri et al. (2010) and Vyas and Raitani (2014), have shown that

customer bank-switching behavior is influenced by service failures, inconvenience, competition, customer satisfaction and reputation (Vyas & Raitani, 2014).

Considering service quality and its four dimensions (empathy, reliability, responsiveness and tangibility), two dimensions in the final model proved to have relatively strong weightings in terms of bank-switching behavior (standardized coefficient = 0.355 for empathy; standardized coefficient = 0.342 for reliability). Hence, only empathy and reliability contributed to explaining the depositors' behavior to switch from one bank to another. These results are similar to those of Yavas et al. (2004) who point toward customer services in terms of quality. Moreover, Yavas et al. (2004) point out that positive word-of-mouth is closely related to tangible aspects of the quality of service, while satisfaction and switching behavior are related to the quality of service elements of time. Satisfied customers might share their customer service experience at an organization with more than five people, whereas dissatisfied customers can share it with more than ten people (Mohsan et al., 2011). Hence managing customer satisfaction along with service quality is crucial for managing risk and retaining customers.

The representativeness bias also contributed to depositors' bank-switching behavior (standardized coefficient = 0.208) significantly ( $p < 0.01$ ). This group of participants may overreact in the market due to the perception of pattern repetition (Singh, 2012, p. 120). Therefore, depositors, subject to representativeness bias, base their financial decisions on the past performance of a bank. Considering behavioral finance, the loss aversion construct (standardized coefficient =

0.287) contributed significantly ( $p < 0.01$ ) to explaining depositors' behavior to switch between banks. As mentioned earlier, loss aversion is reflected by market participants where mentally a large financial loss is more significant than an equally large financial profit (Singh, 2012, p. 120). Hence, it can be concluded from this bias that depositors, subject to this bias, will keep their deposits in the non-performing risk with the hope that this bank will yield greater returns in the future.

Figure 3 illustrates the structural relationship between the dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception and behavioral finance bias. Table 3 exemplifies the standardized regression weight results for the specified structural model.

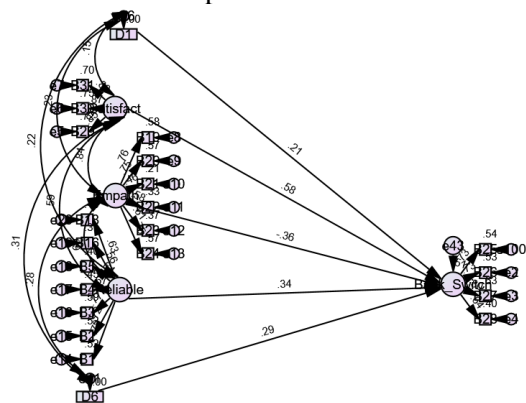


Figure 3. Modified model of depositors' bank-switching behavior, customer satisfaction, service quality, bank perception, and behavioral finance biases  
Notes: Figure 3 indicates the structural relationship between the dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception, and behavioral finance bias.

Table 3. Standardized weights of depositors' bank-switching behavior

Constructs		Estimate	P-value
Bank-switching behavior	←- Customer Satisfaction	.583	***
	<b>Customer service quality</b>		
	←- Empathy	-.355	.021
	←- Reliability	.342	***
	<b>Behavioral finance biases</b>		
	←- Representativeness	.208	***
	←- Loss aversion	.287	***
CMIN/DF	2.757	RFI	0.800
CFI	0.892	IFI	0.894
NFI	0.843	TLI	0.862
RMSEA	0.074	[0.066:0.081]	

Notes: Table 3 indicates the final modified model between the dependant variable bank-switching behavior of depositors and customer satisfaction, service quality, bank perception, and behavioral finance bias; \*\*\* Significant at 0.01 level; \*\* Significant at 0.05 level; \* Significant at 0.1 level

## 5. Conclusion

Several banks are attempting to find solutions and strategies on how to offer better quality services competitively to satisfy and retain their customers. Therefore, the main objective of this research article was to analyze the factors that influence the bank-switching behavior of depositors in Gauteng, South Africa. This article investigated the influence of demographic variables, customer satisfaction, service

quality, bank perception and personal behavioral finance biases. Based on the complexity of the variables, a multivariate statistical approach was preferred. The primary data were obtained from a self-administered survey using purposeful sampling.

The results in the final modified model indicated that bank depositors value good service quality, especially in terms of how reliable a bank is and how a bank treats its customers on an empathetic level. Behavioral finance biases also proved to be contributing



factors to depositors' bank switch behavior, where the representativeness bias and the loss aversion bias were significant in the modified model. Considering the demographic variables, no demographics contributed to explaining depositors' behavior to switch between banks. The novelty of this paper is that understanding how depositors make their financial decisions and how they form their risk perceptions will contribute to managing banking risks. It may also advise banks on what will cause bank customers to switch from their bank to another.

## 6. Limitations and Further Study

Regarding the empirical research findings of this paper, recommendations and managerial implications are warranted. Limitations form a part of any study, and this study is not an exception. The empirical results provided an overview of the variables that could explain why bank customers switch from one bank to another. Future researchers can, therefore, use this study as a foundation for a new direction. This article included demographic variables such as age, annual income and the highest level of education and race. However, these variables did not significantly contribute to the bank switching model. A complete demographic analysis should be included. A comprehensive risk profile of depositors could also have been included to see the risk-taking behavior and attitude of depositors. Some behavioral finance biases were analyzed; however, a full behavioral segmentation could be completed to profile depositors' behavior toward price switching. Other market-related factors, such as competition and macroeconomic factors, could also be considered. Even though the most economically active province in South Africa was used, containing the largest market share in terms of customers, the geographical region could be expanded to the wider South Africa.

Therefore, banks will benefit from the empirical findings of this study since they provide banks with an understanding of the factors causing the switching behavior of depositors. Therefore, banks can incorporate customer satisfaction-oriented strategies for customer retention to realize higher future profits and avoid liquidation problems. It is therefore recommended that banks focus on improving their customer satisfaction levels and service quality in terms of empathy and reliability to gain new customers and retain current customers. Depositors will also base their decision to switch between banks on the previous experiences they have had with the bank and will consider this history a pattern for repetition in the future.

## Acknowledgments

The authors would like to acknowledge L.S. Munyai's postgraduate studies in 2020 on bank-switching behavior. Special acknowledgment also to Ephrem Redda for his third supervisor's assistance in the supervision of the study of L.S. Munyai (2020)

“Determinants of bank-switching behavior within a South African context” (Master's dissertation, North-West University (South Africa)).

## Authors' Contributions

Prof. Sune Ferreira-Schenk and Prof. Zandri Dickason-Koekemoer specialize in financial risk management, having obtained their Ph.D. degrees in this field. Their main focus areas are financial risk tolerance, banking risk studies (such as operational and reputational risk studies), depositor behavior, investor behavior, and behavioral finance. These researchers have already published several articles in accredited journals regarding this field of interest. These researchers specialize in conducting SEM models to profile depositor and investor behavior in the financial and banking sectors.

## References

- [1] ABDULLAHI, Y. (2012). Services Automation and performance: evidence from deposit money banks in Nigeria. *International Journal of Advanced Research in Management and Social Sciences*, 1(2), 47-58. Retrieved from <https://garph.co.uk/IJARMSS/Aug2012/4.pdf>
- [2] ATHANASSOPOULOS, A., GOUNARIS, S., & STATHAKOPOULOS, V. (2001). Behavioural responses to customer satisfaction: an empirical study. *European Journal of Marketing*, 35(5/6), 687-707. <https://doi.org/10.1108/03090560110388169>
- [3] BABIN, B., & BABIN, L. (2001). Seeking something different? A model of schema typicality, consumer affect, purchase intentions and perceived shopping value. *Journal of Business Research*, 54(2), 89-96. <https://doi.org/10.1016/S0148-2963%2899%2900095-8>
- [4] BANSAL, H.S., TAYLOR, S.F., & JAMES, Y.S. (2005). Migrating to new service providers: toward a unifying framework of consumers' switching behaviours. *Journal of the Academy of Marketing Science*, 33(1), 96-115. <http://dx.doi.org/10.1177/0092070304267928>
- [5] BANSTOLA, A. (2007). Prospects and challenges of e-banking in Nepal. *The Journal of Nepalese Business Studies*, 5(1), 96-104. <http://dx.doi.org/10.3126/jnbs.v4i1.1034>
- [6] BARROSO, C., & PICON, A. (2012). Multi-dimensional analysis of perceived switching costs. *Industrial Marketing Management*, 41, 531-543. <http://dx.doi.org/10.1016/j.indmarman.2011.06.020>
- [7] BAUER, K., & HEIN, S.E. (2006). The effect of heterogeneous risk on the early adoption of Internet banking technologies. *Journal of Banking & Finance*, 30(6), 1713-1725. <https://doi.org/10.1016/j.jbankfin.2005.09.004>
- [8] BEERLI, A., MARTIN, J.D., & QUINTANA, A. (2004). A model of customer loyalty in the retail banking market. *European Journal of Marketing*, 38(1/2), 253-275.

- 217
- <http://dx.doi.org/10.5267/j.ac.2016.8.002>
- [9] BICK, G., BROWN, A.B., & ABRATT, R. (2004). Customer perceptions of the value delivered by retail banks in South Africa. *International Journal of Bank Marketing*, 22(5), 300-318. <https://doi.org/10.1108/02652320410549638>
- [10] CALLARI, S., MOORE, A., ROVEGNO, L., & SCHIRALDI, P. (2016). Searching and switching in retail banking. *Competition and Market Authority*, 1, 1-16.
- [11] CLEMES, M.D., GAN, C., & ZHENG, L.Y. (2007). Customer switching behaviour in the New Zealand banking industry. *Banks and Banks Systems*, 2(4), 50-66. Retrieved from <https://www.businessperspectives.org/index.php/journals/banks-and-bank-systems/issue-155/customer-switching-behaviour-in-the-new-zealand-banking-industry>
- [12] COLE, K.N., & DALE, P.S. (2005). Getting to the second generation questions. *Journal of Early Intervention*, 27, 92-93. <http://dx.doi.org/10.1177/105381510502700204>
- [13] DEVLIN, J. (2000). Technology and innovation in retail banking distribution. *International Journal of Banking Marketing*, 13, 19-25. <https://doi.org/10.1108/02652329510082915>
- [14] EDVARDSSON, B., & ROOS, I. (2003). Customer complaints and switching behavior-a study of relationship dynamics in a telecommunication company. *Journal of Relationship Marketing*, 2(1), 43-68. [http://dx.doi.org/10.1300/J366v02n01\\_04](http://dx.doi.org/10.1300/J366v02n01_04)
- [15] FERREIRA, S.J. (2018). *Reputational risk: depositor behaviour in South Africa*. Ph.D. thesis, North West University. <http://dx.doi.org/10.13140/RG.2.2.22852.76167>
- [16] GERRITSEN, D.F., & BIKKER, J.A. (2018). Bank switching and interest rates: examining annual transfers between savings accounts. *Journal of Financial Services Research*, 29, 1-21. <https://doi.org/10.1007/s10693-018-0305-x>
- [17] GHOURI, A.M., KHAN, N.U., SIDDIQUI, U.A., SHAIKH, A., & ALAM, I. (2010). Determinants analysis of customer switching behaviour in private banking sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2(7), 96-110. Retrieved from [https://www.researchgate.net/publication/228210751\\_Determinants\\_Analysis\\_of\\_Customer\\_Switching\\_Behavior\\_in\\_Private\\_Banking\\_Sector\\_of\\_Pakistan](https://www.researchgate.net/publication/228210751_Determinants_Analysis_of_Customer_Switching_Behavior_in_Private_Banking_Sector_of_Pakistan)
- [18] HARLE, P., HAVAS, A., KREMER, A., RONA, D., & SAMANDARI, H. (2015). *The future of bank risk management*. McKinsey & Company. Retrieved from [https://www.mckinsey.com/~media/mckinsey/dotcom/client\\_service/risk/pdfs/the\\_future\\_of\\_bank\\_risk\\_management.ashx](https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/risk/pdfs/the_future_of_bank_risk_management.ashx)
- [19] JAMALUDDIN, N. (2013). Marketing of shariah-based financial products and investments in India. *Management Research Review*, 36, 417-430. <https://doi.org/10.1108/01409171311315012>
- [20] MADUKU, D.K. (2013). Predicting retail banking customers' attitude towards internet banking services in South Africa. *Southern African Business Review*, 17(3), 76-100. Retrieved from [https://www.unisa.ac.za/static/corporate\\_web/Content/Colleges/CEMS/Schools,%20departments,%20bureau,%20centres%20&%20institute/SA%20Business%20Review/documents/Sabview\\_17\\_3\\_Chap%204.pdf](https://www.unisa.ac.za/static/corporate_web/Content/Colleges/CEMS/Schools,%20departments,%20bureau,%20centres%20&%20institute/SA%20Business%20Review/documents/Sabview_17_3_Chap%204.pdf)
- [21] MALHOTRA, N.K., NUNAN, D., & BIRKS, D.F. (2017). *Marketing research: an applied approach*. 5th ed. New York: Pearson Education Limited.
- [22] MANRAI, L.A., & MANRAI, A.K. (2007). A field study of customers' switching behavior for bank services. *Journal of Retailing and Consumer Services*, 14(3), 208-215. <http://dx.doi.org/10.1016/j.jretconser.2006.09.005>
- [23] MBURU, P.N. (2012). *Determinants of customer satisfaction and retention: a survey of the banking industry in Kenya*. Ph.D. thesis, Nelson Mandela Metropolitan University.
- [24] MISHRA, A.A. (2010). Factors affecting customer satisfaction and their relative importance in the retail banking sector: an empirical study. *The IUP Journal of Management Research*, 9(3), 6-23.
- [25] MOHSAN, F., NAWAZ, M.M., KHAN, M.S., SHAUKAT, Z., & ASLAM, N. (2011). Impact of customer satisfaction on customer loyalty and intentions to switch: evidence from banking sector of Pakistan. *International Journal of Business and Social Science*, 2(16), 263-270. Retrieved from [http://ijbssnet.com/view.php?u=http://ijbssnet.com/journals/Vol\\_2\\_No\\_16\\_September\\_2011/30.pdf](http://ijbssnet.com/view.php?u=http://ijbssnet.com/journals/Vol_2_No_16_September_2011/30.pdf)
- [26] OJEKA, S.A., & IKPEFAN, O.A. (2011). Electronic commerce, automation and online banking in Nigeria: challenges and benefits. *Iranian Journal of Management Studies*, 4(2), 29-52. <http://dx.doi.org/10.4018/jide.2012010102>
- [27] OKEAHALAM, C. (2007). Estimating Market Power in the South African Banking Sector. *International Review of Applied Economics*, 21(5), 669-685. <http://dx.doi.org/10.1080/02692170701474702>
- [28] SINGH, S. (2012). Investor irrationality and self-defeating behaviour: insights from behavioural finance. *The Journal of Global Business Management*, 8(1), 116-122.
- [29] SINGLETON, J., & VERHOEF, G. (2010). Regulation, deregulation, and internationalisation in South African and New Zealand banking. *Business History*, 52(4), 536-563. <http://dx.doi.org/10.1080/00076791003753152>
- [30] VYAS, V., & RAITANI, S. (2014). Drivers of customers' switching behaviour in Indian banking industry. *International Journal of Bank Marketing*, 32(4), 321-342. <https://doi.org/10.1108/IJBM-04-2013-0033>

- [31] YANG, Z., & PETERSON, R.T. (2004). Customer perceived value, satisfaction, and loyalty: the role of switching costs. *Psychology & Marketing*, 21(10), 799-822. <http://dx.doi.org/10.1002/mar.20030>
- [32] YAVAS, U., BENKENSTEIN, M., & STUHLREIER, U. (2004). Relationships between service quality and behavioral outcomes: a study of private bank customers in Germany. *The International Journal of Bank Marketing*, 22(2), 144-157. <https://doi.org/10.1108/02652320410521737>
- [33] ZINDEL, M.L., ZINDEL, T., & QUIRINO, M.G. (2014). Cognitive bias and their implications on the financial market. *International Journal of Engineering and Technology*, 14(3), 11-17.
- 参考文献:**
- [1] 阿卜杜拉希 (2012)。服务自动化和绩效：来自尼日利亚存款银行的证据。国际管理与社会科学高级研究杂志，1(2)，47-58。取自 <https://garph.co.uk/IJARMSS/Aug2012/4.pdf>
- [2] ATHANASSOPOULOS, A., GOUNARIS, S., & STATHAKOPOULOS, V. (2001)。对客户满意度的行为反应：一项实证研究。欧洲营销杂志，35(5/6)，687-707。 <https://doi.org/10.1108/03090560110388169>
- [3] BABIN, B., & BABIN, L. (2001)。寻求不同的东西？图式典型性、消费者影响、购买意图和感知购物价值的模型。商业研究杂志，54 (2)，89-96。 <https://doi.org/10.1016/S0148-2963%2899%2900095-8>
- [4] BANSAL, H.S., TAYLOR, S.F., & JAMES, Y.S. (2005)。迁移到新的服务提供商：走向消费者转换行为的统一框架。营销科学学院学报，33(1)，96-115。 <http://dx.doi.org/10.1177/0092070304267928>
- [5] 班斯托拉, A. (2007 年)。尼泊尔电子银行的前景和挑战。尼泊尔商业研究杂志，5(1)，96-104。 <http://dx.doi.org/10.3126/jnbs.v4i1.1034>
- [6] BARROSO, C., & PICON, A. (2012)。感知转换成本的多维分析。工业营销管理，41，531-543。 <http://dx.doi.org/10.1016/j.indmarman.2011.06.020>
- [7] BAUER, K., & HEIN, S.E. (2006)。异构风险对早期采用互联网银行技术的影响。银行与金融杂志，30(6)，1713-1725。 <https://doi.org/10.1016/j.jbankfin.2005.09.004>
- [8] BEERLI, A., MARTIN, J.D. 和 QUINTANA, A. (2004)。零售银行市场中的客户忠诚度模型。欧洲营销杂志，38(1/2)，253-275。 <http://dx.doi.org/10.5267/j.ac.2016.8.002>
- [9] BICK, G., BROWN, A.B., & ABRATT, R. (2004)。客户对南非零售银行提供的价值的看法。国际银行营销杂志，22(5)，300-318。 <https://doi.org/10.1108/02652320410549638>
- [10] CALLARI, S., MOORE, A., ROVEGNO, L., & SCHIRALDI, P. (2016)。零售银行业务中的搜索和切换。竞争与市场管理局，1，1-16。
- [11] CLEMES, M.D., GAN, C., & ZHENG, L.Y. (2007)。新西兰银行业的客户转换行为。银行和银行系统，2(4)，50-66。取自 <https://www.businessperspectives.org/index.php/journals/banks-and-bank-systems/issue-155/customer-switching-behaviour-in-the-new-zealand-banking-industry>
- [12] COLE, K.N., & DALE, P.S. (2005)。进入第二代问题。早期干预杂志，27，92-93。 <http://dx.doi.org/10.1177/105381510502700204>
- [13] 德夫林, J. (2000)。零售银行分销的技术和创新。国际银行营销杂志，13，19-25。 <https://doi.org/10.1108/02652329510082915>
- [14] EDVARDSSON, B., & ROOS, I. (2003)。客户投诉和转换行为——对电信公司关系动态的研究。关系营销杂志，2(1)，43-68。 [http://dx.doi.org/10.1300/J366v02n01\\_04](http://dx.doi.org/10.1300/J366v02n01_04)
- [15] 费雷拉, S.J. (2018)。声誉风险：南非的储户行为。博士论文，西北大学。 <http://dx.doi.org/10.13140/RG.2.2.22852.76167>
- [16] GERRITSEN, D.F., & BIKKER, J.A. (2018)。银行转换和利率：检查储蓄账户之间的年度转账。金融服务研究杂志，29，1-21。 <https://doi.org/10.1007/s10693-018-0305-x>
- [17] GHOURI, A.M., KHAN, N.U., SIDDIQUI, U.A., SHAIKH, A., & ALAM, I. (2010)。巴基斯坦私人银行部门客户转换行为的决定因素分析。当代商业研究跨学科期刊，2(7)，96-110。取自 [https://www.researchgate.net/publication/228210751\\_Determinants\\_Analysis\\_of\\_Customer\\_Switching\\_Behavior\\_in\\_Private\\_Banking\\_Sector\\_of\\_Pakistan](https://www.researchgate.net/publication/228210751_Determinants_Analysis_of_Customer_Switching_Behavior_in_Private_Banking_Sector_of_Pakistan)
- [18] HARLE, P., HAVAS, A., KREMER, A., RONA, D., & SAMANDARI, H. (2015)。银行风险管理的未来。麦肯锡公司。取自 [https://www.mckinsey.com/~media/mckinsey/dotcom/client\\_service/risk/pdfs/the\\_future\\_of\\_bank\\_risk\\_management.ashx](https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/risk/pdfs/the_future_of_bank_risk_management.ashx)
- [19] JAMALUDDIN, N. (2013)。在印度营销基于伊斯兰教法的金融产品和投资。管理研究评论，36，417-430。 <https://doi.org/10.1108/01409171311315012>
- [20] MADUKU, D.K. (2013)。预测南非零售银行客户对网上银行服务的态度。南部非洲商业评论，17(3)，76-100。取自 [https://www.unisa.ac.za/static/corporate\\_web/Content/Colleges/CEMS/Schools,%20departments,%20bureau,%20centres%20&%20institute/SA%20Business%20Review/documents/Sabview\\_17\\_3\\_Chap%204.pdf](https://www.unisa.ac.za/static/corporate_web/Content/Colleges/CEMS/Schools,%20departments,%20bureau,%20centres%20&%20institute/SA%20Business%20Review/documents/Sabview_17_3_Chap%204.pdf)
- [21] MALHOTRA, N.K., NUNAN, D., & BIRKS, D.F. (2017)。营销研究：一种应用方法。第5版。纽约：培生教育有限公司。

- [22] MANRAI, L.A., & MANRAI, A.K. (2007)。客户对银行服务转换行为的实地研究。零售和消费者服务杂志，14(3)，208-215。  
<http://dx.doi.org/10.1016/j.jretconser.2006.09.005>
- [23] MBURU, P.N. (2012)。客户满意度和保留率的决定因素：对肯尼亚银行业的调查。博士论文，纳尔逊曼德拉城市大学。
- [24] 米什拉, A.A. (2010)。影响客户满意度的因素及其在零售银行业的相对重要性：一项实证研究。联合会管理研究杂志，9(3), 6-23。
- [25] MOHSAN, F., NAWAZ, M.M., KHAN, M.S., SHAUKAT, Z., & ASLAM, N. (2011)。客户满意度对客户忠诚度和转换意愿的影响：来自巴基斯坦银行业的证据。国际商业与社会科学杂志，2(16)，263-270。取自  
[http://ijbssnet.com/view.php?u=http://ijbssnet.com/journals/Vol\\_2\\_No\\_16\\_September\\_2011/30.pdf](http://ijbssnet.com/view.php?u=http://ijbssnet.com/journals/Vol_2_No_16_September_2011/30.pdf)
- [26] OJEKA, S.A., & IKPEFAN, O.A. (2011)。尼日利亚的电子商务、自动化和网上银行：挑战和好处。伊朗管理研究杂志，4(2)，29-52。  
<http://dx.doi.org/10.4018/jide.2012010102>
- [27] OKEAHALAM, C. (2007)。估计南非银行业的市场力量。国际应用经济学评论，21 (5)，669-685。  
<http://dx.doi.org/10.1080/02692170701474702>
- [28] SINGH, S. (2012)。投资者的非理性和弄巧成拙的行为：来自行为金融学的见解。全球商业管理杂志，8(1), 116-122。
- [29] SINGLETON, J., & VERHOEF, G. (2010)。南非和新西兰银行业的管制、放松管制和国际化。商业史，52(4)，536-563。  
<http://dx.doi.org/10.1080/00076791003753152>
- [30] VYAS, V., & RAITANI, S. (2014)。印度银行业客户转换行为的驱动因素。国际银行营销杂志，32(4)，321-342。  
<https://doi.org/10.1108/IJBM-04-2013-0033>
- [31] YANG, Z., & PETERSON, R.T. (2004)。客户感知价值、满意度和忠诚度：转换成本的作用。心理学与市场营销，21(10)，799-822。  
<http://dx.doi.org/10.1002/mar.20030>
- [32] YAVAS, U., BENKENSTEIN, M., & STUHL DREIER, U. (2004)。服务质量与行为结果之间的关系：对德国私人银行客户的研究。国际银行营销杂志，22(2)，144-157。  
<https://doi.org/10.1108/02652320410521737>
- [33] ZINDEL, M.L., ZINDEL, T., & QUIRINO, M.G. (2014)。认知偏差及其对金融市场的影响。国际工程技术杂志，14 (3)，11-17。