TESTING BRAND EQUITY DIMENSIONS OF BANK BRANDS, CONSUMER BEHAVIOUR AND FIRM FINANCIAL PERFORMANCE

By

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A Dissertation Submitted in Partial Fulfilment of the Requirement for Award of the Degree of Masters of Applied Economics and Business

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled, Testing Brand Equity Dimensions of Bank Brands, Consumer Behaviour and Firm Financial Performance, requirements for award of the degree of Master of Business Administration of Mzumbe University.

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I, Mwasi Raiya Masunu, declare that this dissertation is my own original work and that it has been presented and will not be presented to any other university for similar or any other degree award.

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Thank you for your love and patience.

ABSTRACT

Over the years the concept of brand equity has been studied extensively. The concept has been applied to study how customers respond to a brand offering. These studies have been carried out in varying industries and in relation to a number of other concepts. Brand equity and firm financial performance are such an example. These studies are few. And, furthermore, few of such studies have been carried out on the banking industry and even fewer in the African context.

This study looks at consumer-based brand equity from two perspectives. Cognitive behavioral perspective and information economic perspective. These brand equity perspectives are tested in relation to firm financial performance.

The study found some significance in the relationship between consumer-based brand equity and firm financial peformance. Cognitive behavioural perspective consumer-brand equity dimensions showed more significance in relation to firm financial performance than information economic perspective consumer-based brand dimensions.

In addition, the results imply high levels of brand equity significance does not connote high firm financial performance.

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

In this chapter the background of the research, purpose and problem is presented. It highlights the academic and practical relevance of the research as well as the objectives and questions. The overview of the dissertation is presented at the end of the Chapter.

1.2 Background of the Study

Economies are becoming more and more capitalist and even those that are in transition from less capitalist practices are experiencing streaks of a complex and highly capitalist business world. The new business world is not only complex but dynamic in a manner that is fast paced and full of innovativeness. Increasingly intangible assets play a large role in businesses and economies Ökten (2019).

As summarised by Ökten (2019), intangible assets can be classified into three categories. The first category is computerised information which includes software and database. The second category is innovative property which includes scientific and non-scientific research, copyright, designs and trademarks. And the final category is economic competencies which include brand equity, firm specific human capital, networks joining people and institutions, organisational know how that increases enterprise efficiency, and aspects of advertising and marketing.

Brand equity is a phrase used in the marketing industry which describes the value of having a well-known brand name, based on the idea that the owner of a well-known brand name can generate more revenue simply from brand recognition. Common benefit that typically results from a strong brand equity is the financial benefit, which allows for a company to demand a premium price for its product and create more sales through customer loyalty. In simple terms, brand equity measures the value of a brand. When we speak of customer-based brand equity, we look at the value of a brand in the eyes of a customer.

Despite brand equity being an essential part of any organisation there are still no clearly defined theories that link brand equity to firm financial performance. The application of brand equity has evolved over the years and is now more complex than ever before. Brand equity can also be viewed as the tracking of the source of brand power (Kapferer, 2008). Next to sales and profit, brand equity is now an important KPI for many firms. 'When product differentiation is no longer the key profit margin generator to the company, developing the brand and brand differentiation is the essential and primary solution' (Swayne, 2011). Aaker (1991) viewed brand equity as a set of liabilities that adds or subtract from a product or service. Erdem & Swait (1998) define brand equity as 'the value of brand signal to consumers.' Yet most of the brand equity and financial firm performance studies do not have a clear link of the relationship.

Many have noted that the ultimate goal of any organisation, big or small, is to build strong brand equity. It is believed that building a strong brand equity opens opportunities that benefit an organisation. Among such benefits include larger margins, and favourable customer response to changes in price or product/service design (Aaker, 1995). More research needs to be conducted to create a clear link between brand equity and firm financial performance. A clear relationship will provide more justification for marketing efforts and brand investments.

Although there has been similar research, Narteh (2018), Verbeeten & Vijn (2016), Hsu et al (2013), Tsai et al (2010), Mizik (2014), Baldauf et al (2003), Kim et al (2003), Kim & Kim (2005), Broyle et al (2009) and Durk et al (2016) this study aims to widen the perspective of the existing literature by applying both cognitive psychology view and information economic perspectives of brand equity in the analysis of the relationship between brand equity and firm financial performance. It will therefore apply two perspectives of measuring consumer-based brand equity and findings will be analysed in line with firm's financial performance. This will allow for the study to test existing grounded theories on brand equity and firm financial performance relationships.

Borrowing the question raised by Narteh (2018), 'does brand equity automatically translate into financial performance,' this research attempts to test brand equity and to clarify further the relationship between brand equity and firm's financial performance. In pursuit of this, the research will therefore test the grounded theory that links brand equity to firm financial performance by using two different measures of consumer-based brand equity; cognitive psychology view and information economic perspective of brand equity. A number of studies have, one way or the other, explored the various effects of brands on consumer behaviour and the effectiveness of marketing programs (Hoeffler and Keller, 2003). This study will look at this in combination to the effect brand equity and consumer behaviour have on firm financial performance.

1.3 Statement of the Problem

The study is deductive, verifying existing theory that firms with strong brand equity have consumers with behaviour that results in purchase intent and high financial performance of the firms of the products or services. Decision making in terms of consumer behaviour towards bank selection is complex and ridden with multiple stimuli. The study aspires to add to the existing research in four ways: first it aims to bring the study closer to creating a theory on the relationship between brand equity and firm financial performance. Second, the study aims to test the theory inherent in brand equity theoretical and empirical that there is a strong link between brand equity and firm financial performance. Third, the study aims to fill in the gap in the literature by applying a different approach to consumer-based brand equity as well as using a different method and design. And finally, fourth, the study aims to explore other factors such as consumer behaviour and choice that may influence firm financial performance and measure their relevance against brand equity. Furthermore, studies have been conducted on the relationship between brand equity and firm's financial performance, but literature review has found that few have been conducted in the African context and none have been conducted on Tanzanian banks.

1.4 Research Questions

This research tries to answer the questions:

i. Does strong brand equity mean presence of good firm financial performance?
ii. Does brand equity have any relevance in influencing consumer behaviour and choice toward a brand?

1.5 Objectives

The research objectives for this study are:

i. To test whether the existence of strong brand equity connotes presence of good firm financial performance.
ii. To explore the relevance of brand equity in influencing consumer behaviour and choice toward a brand.

1.6 Scope, significance, rationale and justification of the study

Understanding how consumers react to a brand is not only useful to the marketing unit of an organisation but it can also be important for setting up strategies and policies (Raymond, 2014). Measuring brand equity correctly can provide an appropriate metric for evaluation the long run impact of marketing decisions. Furthermore, having a clear link between brand equity and firm financial performance will provide a better anchor for brand management.

This study will contribute as follows:

1. Provide insight (add to the knowledge) of brand equity as applied to service brands.
2. Provide bank managers with an understanding of the relationship between building a strong brand and firm's bottom line.
3. Provide a link of how consumer behaviour intervenes marketing efforts in building strong brands and influences customers to buy services.
4. Provide an exploration of application of information economic perspective to brand equity nexus firm financial research.

1.7 Chapter Summary and Organisation of the Dissertation

The background and focus of the study have been summarised in this chapter. The main areas that this research will explore are the inverse of brand equity theory and explore the relationship between Consumer Based Brand Equity, Consumer Behaviour and Choice and Firm Financial Performance. The chapter has also hinted on the research approach. In the next chapter the key concepts of the study will be explored from a literature perspective. Theoretical and empirical literature will be presented, and the prevailing theories and existing studies of the study focus will be described.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter outlines the theoretical and empirical review of key concepts that surround the constructs of brand equity, firm financial performance and consumer behaviour.

2.2 Theoretical Review

This section looks at the theoretical review of the study. It lays out the framework of area of the study including theories, definitions and concepts.

2.2.1 Definition of Key Terms

2.2.1.1 Brand

The American Marketing Association, AMA Dictionary defines a brand as ‘a name, term, sign, symbol, design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to distinguish them from those of competitors’

There are other definitions such as those defined by a financial accountant’s perspective were, ‘the product is left out of the scope of the brand,’ (Kapferer, 2008). The power of the brand goes beyond the scope of what a firm offers. Brand, therefore, becomes a set of added perception. Kapferer (2008) also describes brands as intangible and conditional. Brands are conditional because their existence is dependent on the product and/or service they represent. He makes a good observation, that as powerful as a brand can be it needs a good product or service to uphold its stance.

One of the fields that has a universal definition of a brand is the legal profession. Internationally, an agreed legal definition of a brand is, ‘a sign or set of signs certifying the origin of product or service and differentiating it form the

competition.' Brela (2019). In legal, the definition of a brand has a practical purpose in that it is there to protect the creator of the brand from theft.

Marketers talk a lot about branding. Branding is now considered to be a key part to any organisation's success. The root of branding is the psychological associations that people and society have with a brand. The brand construct as we understand today has much evolved over the years. It has come far from its original existence. Branding has been known to represent a marking or a burn that signifies ownership. A good example of its origins is the branding of livestock with a form of marking by burning. In ancient Egypt oxen were branded using hieroglyphics (Bastos & Levy, 2012).

In the nineteenth century, in businesses branding began to take shape (Crosby & Johnson, 2001). During this era products where labeled, packaged and promoted giving the products more identity and eventually adding value to the products. The increasing use of radio broadcasting, TV, print advertising, e-marketing all gave shape to the evolution of branding (Moore and Reid, 2008). In the 1930s linking branding to psychology enriched the concept of branding (Bastos & Levy, 2012). By 1950s the concept of branding was on a steady growth path. And by the 1990s branding had reached maturity (Bastos & Levy, 2012) as it enveloped not only a marking of a product but also the emotions and a sense of partnership that a brand represents. It is a partnership in defining its consumer's identity and it resonates the consumer's feelings towards what the brand stands for. Now in many organisations branding is regarded as a significant element (Chen and Green, 2009). Brand is now a backbone of marketing and the concern of all company departments (Bastos & Levy, 2012)

2.2.1.2 Brand Equity

2.2.1.2.1 Cognitive Psychology View:

Brand Equity is a fairly recent concept that dates back a couple of decades. Its importance and relevance in the business world has not been fully uncovered. Its origins stem from observation of activities of mergers and acquisitions in the USA in the 1980s. These observations revealed that "purchase price paid by the firms largely reflect the value of the brands" (Leone et al, 2006). What this observation revealed is that brands is one of the important elements of the firm. Observation made in the 1980s changed this state of awareness of the importance of brands. The concept of brand equity or a financial value of the brand was born. This opened doors to the concept of brand activities which did not embrace the brand management concepts before such as industries, service sector and even banking sector.

A lot of arguments have been made in favour of brand equity, Aaker (1991,1993, 2014); Keller (1995,1997), Kapferer (2008). These studies have highlighted the relationship and importance of brand and value. Brand management paradigms have emerged as a result of advancement in both theory and practice of strategic management and marketing. Brand equity as one of the many brand management paradigms has increasingly been represented as both managerial and academic (Louro & Cunha, 2001).

Many studies arose from this discovery. There are three main approaches to brand equity namely; psychology-based approach (Krishnan,1996 and Henderson et al. ,1998), economic based approach (Erdem 1998; Montgomery & Wernerfelt, 1992; Sappington & Wernerfelt, 1985; Wernerfelt, 1988) and sociology-and biology-based approach (McCracken 1986, 1993; Richins, 1994; Muniz & O'Guinn, 2001; Schouten & McAlexander, 1995). These studies share some basic perspectives on brand equity. Most of these studies agree that the strength of the brand equity is dependent on the view of the brand from customer's perspective.

Brand Equity has no standard definition, Hanaysha *et al* (2013). Definition and dimensions of brand equity varies from study to study, depending on the perspective of the study. Table 1 adopted from Hanaysha et al, 2013 summarises some of these definitions.

Table 2.1: Summary of definitions of Brand Equity

Farquhar (1989)	"The added value endowed by the brand to product"
Aaker (1991)	"a set of the brand assets and liabilities linked to a brand, it's name and symbols that add to or subtract from you the value provided by a product or service to a firm and/or to that firm's customers."
Keller (1993)	"The differentiated effect of rand knowledge on customer response to the marketing of the brand"
Park and Srinivas (1994)	"The added value endowed by the brand to the product is perceived by a consumer"
Lassar, Mittal and Sharma (1995)	"The enhancement in the perceived utility in desirability a brand name conifers on the product."
Wood (2000)	"A relationship between customers and brands resulting in profit to be realised at a future date"
Yoo *et al* (2002)	"The difference in consumer choice between focal branding product and unbranded product given the same level of product features"
Vázquuez, Río and Iglesias (2002)	"The overall utility that customer place in a brand"
Rust *et al* (2004)	"The sum of customer's assessment of the brand's intangible qualities, positive or negative
Bailey and Ball (2006)	"the value that customers and business owners associate with a brand, and the influence of this association on customers' behaviour and subsequent financial performance of the brand."
Vatjanasaregagul and Wang (2007)	"The positive marketing result from a certain good or service that has a brand name, such as high brand preference, market share of profits."
Yasin *et al* (2007)	"the tremendous value inherent in a well-known brand name"
Sanyal and Benerjee (2008)	"A product's position in the minds of consumers in the marketplace."
Goldfarb, Lu and Moorthy (2009)	"The difference between equilibrium profit for the branded product and unbranded, store brand, equivalent."
Chen and Tseng (2010)	"the incremental value of the product due to the brand-name"
Loise and Lombart (2010)	" the added value brought by a brand to its products and services"
Haefner, Deli-Gray and Rosenbloom (2011)	"a summary Measure of the brand's ability to attract and retain loyal customers expressed in monetary terms."
Sedaphat *et al* (2012)	"The intangible value that accrues to a company as a result of its successful efforts to establish a strong brand

These varying definitions all provide an underlying meaning that brand equity is about the added value that the customer gets from experiencing a brand. A definition that forms foundation to others is that of Aaker (1991) who defines Brand Equity as

‘a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by the product or services to a firm and/or to that firm’s customer.’ This definition focuses on the consumer.

Brand equity can be viewed from varying marketing perspectives. Heading *et al* (2009) presented seven schools of thought with regard to branding that show different perception of the brand. The perception includes an economic approach which views the brand as part of age traditional marketing mix. The identity approach which views the brand as linked to corporate identity. Personality approach which views the brand as a human like character. The relational approach that views the brand as a viable relationship partner. The community approach viewing the brand as the pivotal point of social interaction. The cultural approach with the brand being viewed as part of age broader cultural fabric. And finally, consumer-based approach that views the brand as linked to consumer association.

It is no surprise that the latter is the perspective that dominates many studies on brand equity (Rego *et al,* 2009; Sadek, 2015). Consumers have increasingly been viewed as the most important stakeholders Kotler (2013) having direct influence on other consumer’s perception of the brand through one of the most powerful brand awareness channels (Augusto *et al* (2018) word of mouth. This may also explain why many brand equities studies have linked consumer behaviour as a mediating factor.

2.2.2 Information Economic Perspective:

The information economic perspective of brand equity looks at consumer-based brand equity as the value of the brand signal to consumers (Erdem & Swait, 1998). This perspective considered the imperfect and asymmetrical information structure of the market. This view puts emphasis on the role of credibility that is a result of interactions of firms and consumers. It puts this as the main determinate of consumer brand equity.

Erdem & Swait (1998) suggest that, 'the content, clarity and credibility of a signal of a product or service's position may increase perceived quality and decrease information costs and risk by consumers.' They suggest that these effects increase consumer-expected utility. They then suggest that this increase in consumer expected utility is therefore the added value a brand gives to a service and it is therefore what they term, 'the value a brand signal to a consumer.' In their view, they come up with the definition of consumer-based brand equity, 'the value of a brand equity to a consumer.'

2.2.3 The rationale behind this perspective:

Erdem et al (2006) acknowledges that there are many roles that brands play in consumer decision making. These can be in multiple mechanisms including psychological, sociological or economic. Under economic mechanisms brands are seen as signals under uncertainty.

This information economic perspective is set on the foundation of imperfect and asymmetric information in the structure of the market. This perspective suggests that asymmetric information exists between the firm and consumer, with the firm having more information about the service than the consumer. There also exists imperfect information in that the consumer cannot at the instance of decision making evaluate the service experience or offer extensively. Also, the consumer cannot evaluate the reliability of the service at the time of decision making.

Signals are the indicators of the brand being worth purchasing. Erdem (1998) summarises some of the signals that firms convey to consumers. These include charging higher prices to indicate quality; provide warrantees to show firm's belief in its product or service; advertising by way of high-quality advertising that signals the firm's commitment to its brand. Erdem (1998) explains that he defines a brand as a signal because it symbolised a firm's past and present marketing strategies. This perspective also looks at brand equity from a consumer's pint of view. It measures levels of constructs based on the perspective of the consumer.

2.2.4 The role of uncertainty in brand equity:

This study makes reference to works done by Rao & Bergen (1992), Shimp & Bearden (1982) and Montgomery & Wernerfelt (1992). Uncertainty has a focal point in studies of information economic perspective approaches to brand equity (Erdem *et al*, 2006). Uncertainty affects consumers' perceptions of brand attributes, variations in their beliefs of brand attributes and their information costs. According to Erdem *et al* (2006) focus on uncertainty of literature in both economics and marketing have been on quality uncertainty. In this quality uncertainty emerges when consumers having perceived risk in brand choices and selection. In most cases, consumers are known to be risk averse.

Risk aversion, risk neutrality or level of love for risk affects a consumer's decision making in various ways (Rao and Berger, 1992). Existence of quality uncertainty will drive consumers to search for more information about the service or competing services as comparison so as to increase their chances of selecting the best quality service within their constraint.

It therefore follows that brands with lower quality or other uncertainties should be expected to have good consumer-based brand equity.

How brand equity is conceptualised has great implication on how brand equity is measured. This study uses Erdem & Swait (1998) approach in measuring consumer-based brand equity from an information economic perspective. Information economic perspective of brand equity has the following constructs: 1) Clarity, 2) Consistency, 3) Credibility, 4) Brand Investments, 5) Perceived Quality, 6) Perceived Risk, 7) Information Cost Saved and 8) Expected Utility. These measures will be carried out using a bank brand.

2.2.5 Consumer Behaviour

In this research, consumer has been classified as existing, past and potential or future customers of the brand equity study. Concept of consumer behaviour argues that 'the

sensory experiences we receive from products and services play an increasingly key role when we choose among competing options,' (Solomon, 2018). This study looks at consumer behaviour as the intervening and linking thread to a strong brand resonating into action. In marketing, Solomon (2018) describes consumer behaviour as a process and a field that is broadly defined. He describes it as, 'the study of the process involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires.'

Consumer behaviour refers to the psychological process that leads to a consumer's decision to buy a product or service offering (Rani, 2014). Generally, studies identify three factors that affect consumer behaviour. These factors are psychological, internal and external. Psychological factors include personal thinking process, motivation, personality, perception and consumer attitude. Internal factors include demographic, lifestyle, personality, motivation, information, beliefs and attitude. Whereas, external factors include reference groups, family, culture, race, social status and the marketing mix of the subject product or service.

This study, therefore, highlights and focuses on consumer behaviour as the driving force that links a positive or a negative relationship between brand equity and firm's financial performance. A brand has a positive CBBE when customers react more favourably to a product or service (Kotler & Keller, 2012). In addition, according to (Aaker, 1991), the more a customer values a brand, the more he or she will be willing to accept elements such as price increase. Conversely (Kotler & Keller, 2012) describe the existence of a negative CBBE as one with a brand that customer react less favourably to.

In the definition of Brand Equity earlier studied connote the role of Consumer Behaviour. Kotler & Keller (2012) stated three key ingredients to CBBE. That (1) Brand Equity arises from differences in customer response; (2) differences in response are a result of consumers knowledge of the brand , all the thoughts, feelings, images, experiences and beliefs associated with the brand; and (3) that

brand equity is a reflection in perceptions, preferences, and behaviour related to all aspects of marketing the brand. The model of CBBE takes a cognitive psychological approach in defining brand equity (Siddiqui *et al*, 2017).

Successful brand resonance results in customers expressing a high degree of loyalty to the brand such that customers actively seek means to interact with the brand and share their experience with others (Keller, 2001). It is the later, the sharing of experience, that has strong influence on customer's minds (Bughin et al, 2010). The study conducted by Bughin et al (2010) revealed that in mature markets moment of purchase is influenced by intent information by 65%, shopping by 20% and word of mouth by 10%. Whereas, in developing countries word of mouth takes lead as the largest factor that influences moment of purchase being at 46%. Advertising and previous usage fall next at 40% and 9%, respectively.

The study will, therefore, investigate the intervening role of consumer behaviour in influencing the relationship between band equity and bank financial performance. The elements that will represent consumer behaviour will be (1) consumer's willingness to pay for the brand and (2) consumer positively exercising word of mouth towards the brand.

2.2.6 Firm Financial Performance

Firm financial performance can be measured from an accounting perspective or a market perspective (Gentry & Shen, 2010). The earlier looks at financial ratios such as Return on Asset (ROA) and Return on Equity (ROE) whereas the later looks at market performance measures such as Tobin's Q and market return. Accounting based financial ratios ROA and ROE are among widely used indicators of investors, creditors and managers (Samiloglu, 2017).

The study has chosen to test whether brand equity affects financial performance of a firm. Theory of brand equity states that strong brand equity results in good financial performance. Each financial indicator draws to a specific aspect of firm. The most

common ratios for determining the overall effectiveness of a firm from an accounting perspective are Return on Asset (ROA) and Return on Equity (ROE) (Kangarlouei *et al* , 2012). There are other measures of financial performance.

Firm Financial performance is a measurement of results of a firm in monetary terms. There are a number of financial indicators that can be used to measure a firm's performance. The aim of many firms is to have profit and wealth maximisation (Samiloglu et al, 2017). Financial Indicators can determine whether the form has achieved this aim.

Great attention has been paid to the performance of banks. Economic literature shows studies of firm performance in terms of competition concentration, efficiency, productivity and profitability. Firm performance has been described as being a multidimensional construct. Firm performance has many aspects including corporate reputation, operational effectiveness and organisational survival (Richard *et al*, 2005). The areas that has been extensively studied is the financial component of firm performance. This study will also look at firm performance as it relates to brand equity.

Few studies have researched on the relationship between firm financial performance and brand equity. In their study, Amin *et al* (2014) used return on asset ROA and return on equity ROE. They calculated ROA by dividing profit after tax by total assets. In addition to these two indicators, this study will look at three other indicators the researcher believes are good indictors of a bank's financial performance. The other indicators are Loan Deposit Ratio (LDR), Loan Loss Provisions (LLP) and Cost Income Ratio (CIR).

ROA is a ratio that captures how well a company is using its resources to generate income whereas ROE measures how much profit a company generates as a percentage of shareholder's equity. LLP measures how much the bank has set aside an expense as an allowance for uncollected loan repayments. A high ratio means the

bank can withstand future losses better, including unexpected losses beyond the loan loss provision. LDR measures the bank's liquidity by comparing a bank's total loans to its total deposits for a particular period. It is expressed as a percentage and a high LDR indicates that the bank may not have enough liquidity to cover unforeseen fund requirements. CIR shows the banks cost in relation to its income. A low CIR shows efficiency. The formulas for ROA, ROE, LDR, LLP and CIR are:

$$\text{ROA} = \frac{\text{Net Profit After Taxes}}{\text{Total Assets}}$$

$$\text{ROE} = \frac{\text{Net Profit After Taxes}}{\text{Stockholder's Equity}}$$

$$\text{LDR} = \frac{\text{Total Loans}}{\text{Total Deposits}}$$

$$\text{LLP} = \frac{\text{Pre-tax Income + Loan Loss Position}}{\text{Net Charge Offs}}$$

$$\text{CIR} = \frac{\text{Operating Cost}}{\text{Operating Income}}$$

2.3 Empirical Review

Brand equity is a topic debated on not only in the marketing discipline but also in other fields such as economics and social disciplines (Ökten *et al*, 2019). Over the years theories of different disciplines are empirically integrated into branding research. Issues and ideas raised in brand equity and brand management theory as a whole are looked at from a macro-perspective. The different perspectives highlight how brand equity contribute to firm value and firm's performance.

Narteh (2018) examined the relationship between brand equity and firm financial performance. In his study he used brand likability as a modelling variable. His study was on the banking sector. In his study he used survey method to obtain the view of 550 retail bank customers. He used structured equation modelling to analyse the data. His findings revealed that service quality, brand association, brand loyalty and brand relevance predicted financial performance in a positive and significant way of the retail banks. His study also revealed that brand likability is a moderating variable of what he called the brand equity-finance performance linkage.

Specifically, of all the brand equity dimensions in Narteh (2018) study, brand associations, perceived quality, relevance and brand loyalty were found to have significance in the relationship between brand equity and firm financial performance. Narteh (2018)'s reported that his findings were consistent with Garcia-Osman et al (2015); Aaker and Jacobson (2001) to name a few.

Nguyen *et al* (2019) carried out a study on brand equity in Vietnam banking sector. They examined the relative effect of five variables: brand awareness, brand associations, perceived quality, brand satisfaction and brand loyalty as it relates to the overall bank brand equity. They used survey questionnaires with a three-step sequential process. Initial process was a thorough literature review, the second step involved in-depth exploratory interviews with bank customers and the final step involved a survey conducted in a qualitative method through direct interview with bank customers. They obtained 378 valid questionnaires from 17 commercial banks. They used Confirmatory Factor Analysis, Cronbach's alpha and item-total correlation in their analysis. In their findings they were able to determine which variable required attention in order to build stronger bank brands in Vietnam.

Verbeeten & Vijn (2016) investigate the association between brand equity measures and business-unit financial performance. In their study they categorise brand equity measures as non-financial performance. Their focus is on a business unit's financial performance as opposed to the entire firm's performance. They make a compelling

explanation to their approach stating that analysing the relationship between rand equity and business unit financial permanence can provide useful insights for 'forecasting earnings and cashflows, for analysing liquidity and financial flexibility, performance -measurement, valuation of business units, resource allocations; and other decisions in the firm.' In their study Verbeeten & Vijn (2016) use the Young & Rubicam (Y&R) brand equity dimensions. They find that not all brand equity measures are associated with Business-Unit financial performance. Brand equity measures they use in their study include brand relevance, brand esteem, brand knowledge and brand index of which they found have no association with business unit's future performance.

In their study, Verbeeten & Vijn (2016) find a positive association with current and future business unit performance. Differentiation stood out as a significant brand equity measure. This is no surprise given that it has been regarded that differentiation moves a product or service more towards being unique, therefore scarce and more towards monopolistic nature. Laws of demand, therefore, where there is presence of scarcity, drives demand and hence price. Verbeeten & Vijn (2016) take on an accounting perspective in their study of the relationship between brand equity and financial performance. This study's approach is in contract. It takes a marketing approach to of brand equity measures.

Durk et al (2016) carry out a study on brand equity and the firm performance indicator, firm profitability. They study the dynamics relationship between investments in brand equity and firm Their study was based on public and private firms and their results showed that there exists a significant long-run impact of brand equity on firm's financial performance. They claim that it takes, on average, eleven years before investments in brand equity have their impact on profit. Dirk et al used survey design in collecting their data.

In the commentary made by Dirk et al (2016) they quote Ailawadi et al (2003), Simon & Sullivan (1993) and Aaker (1991) can be from two actions. First, is from a

revenue side whereby it is claimed that brand equity's influence on a firm's revenue may be as a result of its influence on price and quality. From a cost side, it is claimed that brand equity can influence cost by leveraging on components such as loyalty to reach marketing objectives at relatively lower cost.

Broyle et al (2009) made an interesting summary on brand equity consequences. They quote other studies such as Guerrero et al (2000), Aaker (1996), Oliver (1980), de Chernatony & Riley (1977) and many more on the consequences of brand equity. To sum it up, they attempt to provide explanation on brand equity's influence on consumer behaviour. They state that 'brand equity leads to individuals having reduced anticipated risk concerning a brand purchase decision' Broyle et al (2009). That brand equity 'increases ones anticipated confidence in a brand purchase decision'. This aids the consumer in making a purchase decision reducing the limitation of time, information asymmetry or motivation for making objective and rational decision.

In addition, other consequences of brand equity as summarised by Broyle et al (2009) include that brand equity increases an 'individual anticipated satisfaction with the product or service.' And that brand equity reduces one's anticipated difficulty with regard to the purchase decision. And that Brand Equity positively influence purchase behaviour.

Kim & Kim (2005) examined the underlying dimensions of brand equity and how they affect firm's performance. Their study was conducted on the hospitality industry. They carried out a survey conducted on travelers. They approached 840 travelers and had a successful response rate of 602. Tools to collect data were self-administered questionnaires. They measured brand equity using four dimensions namely; brand equity, brand awareness, perceived quality and brand image. They associated results of brand loyalty with customer satisfaction. On firm's financial they looked at option of profitability measures using return on equity (ROE), return os sale (ROS) and return on asset (ROA). They report findings that reveal that ROE and ROS are more strongly related to management's ability as opposed to direct

earnings from consumers of the brand. They opted for sales as the sole financial indicator used in their study as they believe sales are a reflection of revenue directly occurred which is more directly linked to the product.

For analysis they applied factor analysis to examine validity of brand equity structure consisting of the selected brand equity dimensions. Then they applied stepwise regression analysis to examine the relationship between brand equity and firm's financial performance. Their result supported the assertion that the four dimensions selected in the study are valid underlying brand equity variables. Their results also found that the four dimensions of brand equity, namely; brand loyalty, brand awareness, perceived quality and brand image all have significant positive effect on firm's financial performance.

Kim *et al* (2003) looked at the relationship between brand equity and firm financial performance by comparing high and low performing firms. They found that in terms of brand awareness, firms with higher performance showed higher scores. Brand image, perceived quality and brand loyalty all significantly score higher for higher performing firms. Their study therefore showed a positive relationship between brand equity and firm financial performance. Kim *et al* (2003) used survey method in collecting data using questionnaires from 840 participants, with 602 responses. They were able to analyse 513 of the returned questionnaires with 59 not being completely filled out. They applied factor analysis and regression analysis to arrive at their results.

Baldauf *et al* (2003) conducted research on brand equity and firm financial performance. They select three brand equity dimensions for their study; brand awareness, brand loyalty and perceived quality. They also study elements of quality and value where they include the variables purchase intension and customer value. For firm financial performance they use profitability indicators. They collect data using standardised questionnaires via mail to 794 executives. They obtain 154 valid responses with only 19% response rate. They use single and multiple regression to

analyse the data. They found that the dimensions are significant predictors of firm financial performance.

Mizik (2014) recognises the challenge markets get when there is a need to quantify their department's contribution to the firm's bottom line. They note that among such challenges is that most marketing assets are intangible and therefore difficult to quantify. They go on to quote Kimbrough & McAllister (2009) that most construct definition and marketing metrics have little consistency. In addition, they quote Pauwels et al (2005) and note that there is scant availability of standardised marketing data collected overtime. Notably they conclude that this is more evident in branding research.

Mizik (2014) made observation that can be very close to reality. As one goes through the various literature on brand equity and its relation to other variables such as firm financial performance, there is inconsistency in brand equity construct definitions and marketing metrics applies in the studies. In order to overcome some of the shortfalls associated with marketing research specifically those that study brand equity topics Mizik (2014) introduces a different approach. The approach involves estimating total impact of marketing assets and makes an assessment of partial dynamics of this impact with short time-series data availability. The model involves stock return-response modelling. In his analyses he finds that customer mindset brand equity (which is referred to as consumer-based brand equity in other studies) has a positive effect on current (same year) financial performance. As an indicator for financial performance he used profitability ratios namely; sales, ROA, operating income, stock return, market cap and brand asset index which he obtained from Y&R's BAV surveys. His findings show that the effect of customer mindset brand equity is not immediately or fully captured in current term earnings. Rather, the full effect of brand equity can take a long time to be realised. His findings show that the effect of customer mindset brand equity is not immediately or fully captured in current terms earnings. Rather, the full effect of brand can take a long time to be realised.

Tsai et al (2010) carry out a study on the relationship between brand equity and firm financial performance. Their study is on the casino industry. They conduct an exploratory study conceptualising brand equity from the perspective of the customer. Their study was a two-stage approach. The first involved an exploratory stage that drew relevant measurement items and the second involved a survey that measured brand equity perceptions of customers. The exploratory stage revealed forty attributes that were included in the questionnaire. These included five items of brand loyalty, 21 of perceived quality, 10 of brand image and 4 of brand awareness. As indicators of firm financial performance, they used ROS and ROE. They obtained 204 questionnaires for their analysis. Their approach targeted respondents who had experience with the firms they had selected for their study. To overcome the possibility that some of the respondents may not necessarily be familiar with all brands selected Tsai et al (2010) asked respondents to respond to questionnaires by considering the casino that the respondents had most recently frequented. Questionnaire they used is a seven-point Likert scale. To analyse the data they used descriptive statistics and independent sample t-test. They used Cronbach's alpha values for the brand equity dimensions. Their study revealed that there was no causal relationship between firm financial performance and customer brand equity.

Hsu et al (2013) examine the relationship between brand value and firm financial performance by looking at the firm's historical stock performance. In their study they use data from Interbrand to obtain firebrand equity values. Interbrand is an American firm that began ranking American brands in 1984 and global brands in 1999. Interbrand is considered to be a market leader as a result of their experience in carrying out brand valuations.

Literature has also revealed that studies on brand equity nexus firm financial performance has been based on cognitive psychology view. Under a broad category, focus of previous research have concentrated on the following focal areas of conceptualising and measuring brand equity: dimensions and scaling, marketing mix elements, brand personality, service quality, country of origin, relationship

marketing, interrelationships among brand equity dimensions as well as studies on consequences of brand equity that concentrate on purchase intention and company image. Many studies have also centered their research on testing brand equity dimensions such as Irangadeh *et al*, 2012; Mohammad, 2012; Kabadayi *et al*, 2011; Akbar and Azhar 2010; He and Li, 2011; Evanschitzky and Woisetschläger, 2007; Chattopadhyay *et al*,2010). These studies have tested brand equity in mobile phone industries, automobile industries and fast-moving consumer goods (FMCGs).

And with regard to methodology, Narteh (2018), Verbeeten & Vijn (2016), Hsu *et a*l (2013), Tsai *et al* (2010), Mizik (2014), Baldauf *et al* (2003), Kim *et al* (2003), Kim & Kim (2005), Broyle *et al* (2009) and Durk *et al* (2016) used survey methodology and confirmatory factor analysis in their study. Although confirmatory factor analysis has been termed as a powerful statistical model, it has its minus points. These include that it is unable to incorporate structural relationship among common factors. It also does not accommodate qualitative data. Although these limitations can be overcome by additions to the basic model (Scoll, 2011) this research wishes to explore other tools and approaches in understanding the relationship between brand equity and firm financial performance.

Furthermore, few studies have been conducted in the African context and especially from a Tanzanian perspective. Moreover, literature reveal that most of the studies carried out involved studying similar factors over and over in their research testing for mediating, independent or dependent variables. These studies left out under-researched parts of the world such as the Middle East and Africa. This study will contribute to this research gap by adding knowledge of brand equity in an African context. Besides, studies of commercial banks in Tanzania are also relatively few (Amin *et al*, 2014) and this study will contribute to this area of knowledge.

This study, therefore, argues that having a strong brand and one that is well known does not necessarily translate to realising benefits as described in Keller and Kotler (2012). Rather there are other factors that contribute to the relationship between

brand equity and firm financial performance. These include variables such as those presented by information economic perspective of brands; that is consumers' views on the firm's credibility, content, clarity, consistency, brand investments, perceived quality, perceived risk, information cost saved and expected utility. It is how the consumer responds to the brand and how consumers behave and make an action that translates to sales that affect a firm's financial performance. The study, therefore, highlights the significance of the intervening variable consumer behaviour in the relationship between the brand and the firm's financial performance.

This study tests the theory of brand equity and explores existence of any significance brand equity plays in consumer behaviour and financial performance of banks. It specifically looks at a financial institution that has transformed its brand over the years and is now considered to be among the big financial institution giants. This FI has been selected consecutively for numerous awards and has been praised for good consistent performance over the years. This research tests the brand equity inherent in this brand and attempts to compare elements of brand equity as the financial institution went through transformation highlighting elements of brand equity changes in the perception of the customer.

In addition, with regard to methodology, literature has shown that the relationship between firm financial performance and brand equity has been researched using confirmatory factor analysis and measured variables using Cronbach's Alpha Coefficient (Narteh, 2018; Pinar *et al.* 2012). This study aims to explore the application of a survey design experiment using questionnaires with Likert scales to study the research variables.

And finally, research conducted thus far has looked at the relationship between brand equity and firm financial performance from a cognitive psychology view. This research will combine cognitive psychology view and information economic perspectives in studying the relationship between brand equity and firm financial performance.

2.4 Research gap

Leaving a solid consensus on the relationship between brand equity and firm financial performance hanging most of the research on the subject have hinted on the presence of a connection between some brand equity dimensions and firm financial performance indicators. However, there exists no clear successful attempt to explain this relationship or to establish a clear link between these two variables. Studies have also been narrowing in their approach to the subject and have left out many variables that may have influence on the relationship between brand equity and firm financial performance. Most studies bring in customer intention and willingness to pay as moderating factors in the subject. There has not been a study that has attempted to trace the relationship of brand equity from as a brand goes through transformation. There have also not been any studies that have considered using information economic perspective of brand equity as a basis for the study.

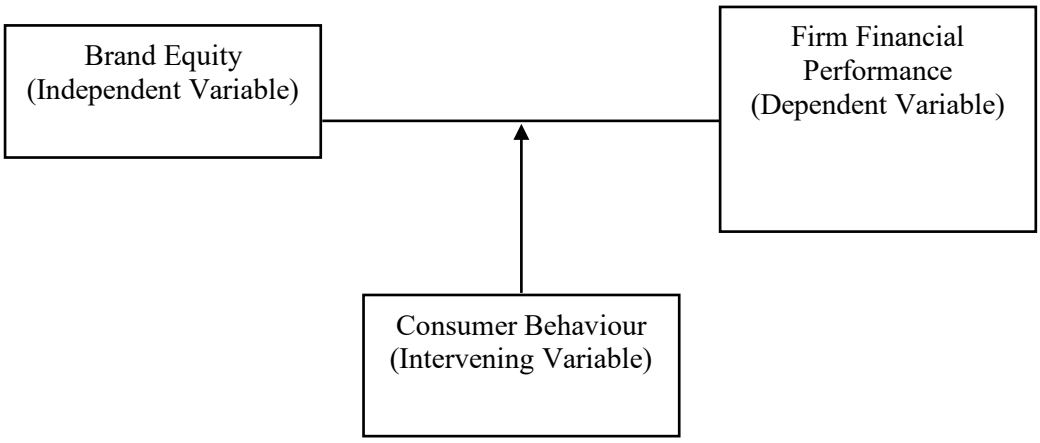
In addition, most of the research has used survey method and applied factor analysis in their studies. They used Cronbach's Alpha measure internal consistency and how closely the brand equity dimensions are related. Regression analysis has also been used in analysing the relationship between firm financial performance and brand equity. There has been no variation in the method applied.

There, therefore, exists a number of gaps. These include; there exists a gap in the focus of establishing a causal link on the relationship between brand equity and firm financial performance. There has equally been factors that have been left out in existing studies such as, specifically in banks, factors such as those inherent in the information economic perspective of brand equity. In addition, there has been little progress in developing a theory that connects brand equity and firm financial performance that is universally accepted. There is also a gap in applying different methods and design in order to study the relationship of brand equity and firm financial performance.

This study aims to fill these gaps by attempting to bring research on the subject closer to creating a theory, applying a different method and design, testing the theory inherent in brand equity theoretical and empirical literature that states that there exists a positive relationship between brand equity and firm financial performance using two different view, cognitive psychology view and information economic perspective of brand equity.

2.5 Conceptual Framework

A conceptual framework, shown in Figure 2.1, is a conceptual representation of the research. Its aim is to clarify the relationships and the need for supporting or testing



theory. Consumer behaviour is treated as the intervening variable that influences the strength of the relationship between BE and FFP.

Figure 2.1: Conceptual Framework

2.6 Research Model

In neoclassical microeconomics the theory of consumer behaviour and choice is the first step in derivation of market demand curve (Salvatore, 2008). Taking this into account it can be presented that consumer-based brand equity influences consumer behaviour and choice which influences market demand which inherently influences firm financial performance. This is depicted in Figure 2.2.

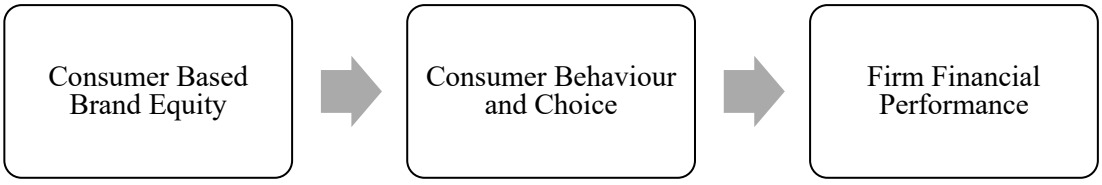


Figure 2.2: Tracing CBBE's influence on FFP, Researcher's Own Construct

Following the same trail of thought it, therefore, follows that should a brand satisfy an individual's utility function, then and only then will the consumer behaviour and choice be favourable towards the brand and hence contributed to the brand equity. Salvatore (2008) defines utility as the ability of a good to satisfy a want.

We can, therefore, assume that bank consumers are rational consumers. A rational consumer is an individual who seeks to maximise utility or satisfaction in spending his or her income. It is assumed that a rational consumer given their tastes and their indifference map will seek to maximise their utility/satisfaction in spending his or her income. In the case of banking, following the same trail of thought, a rational consumer given their tastes reflected in their indifference map will strive to minimise risk and maximise return.

The research argues that sometimes brand equity has little to do with consumer choice of product or service. This, therefore, brings about the notion that questions the prevailing theory by Aaker (1997), that strong brand equity relates to strong financial performance. Testing brand equity of the bank that has gone through transformation this study aims to prove this theory and show that strong brand equity does not necessarily equate to strong firm financial performance. That rather other factors especially consumers choice based on various individual limitations has greater significance. If we isolate brand equity from other factors maybe, we can find a direct relationship between brand equity and firm financial performance. However, if we bring in factors such as consumer behaviour and choice then the theory of may not stand the test.

The complexity of consumer behaviour and choice challenges the theory that strong brand equity translates into strong firm financial performance. In order for firms to enjoy the benefits of brand equity such a strong firm financial performance there should be not only be the existence of consumer choice and intention to pay but there should exist actual purchase. In reality even the strength of word-of-mouth (WOM) is questionable as no matter how much praise the brand gets firm financial performance can only be realised when consumers choice leads to the actual purchase.

Figure 2.3 presents the guiding research model for this research. In this research model, the exogenous variables have been selected as a control in the research. These variables are those that impact market demand for banking products.

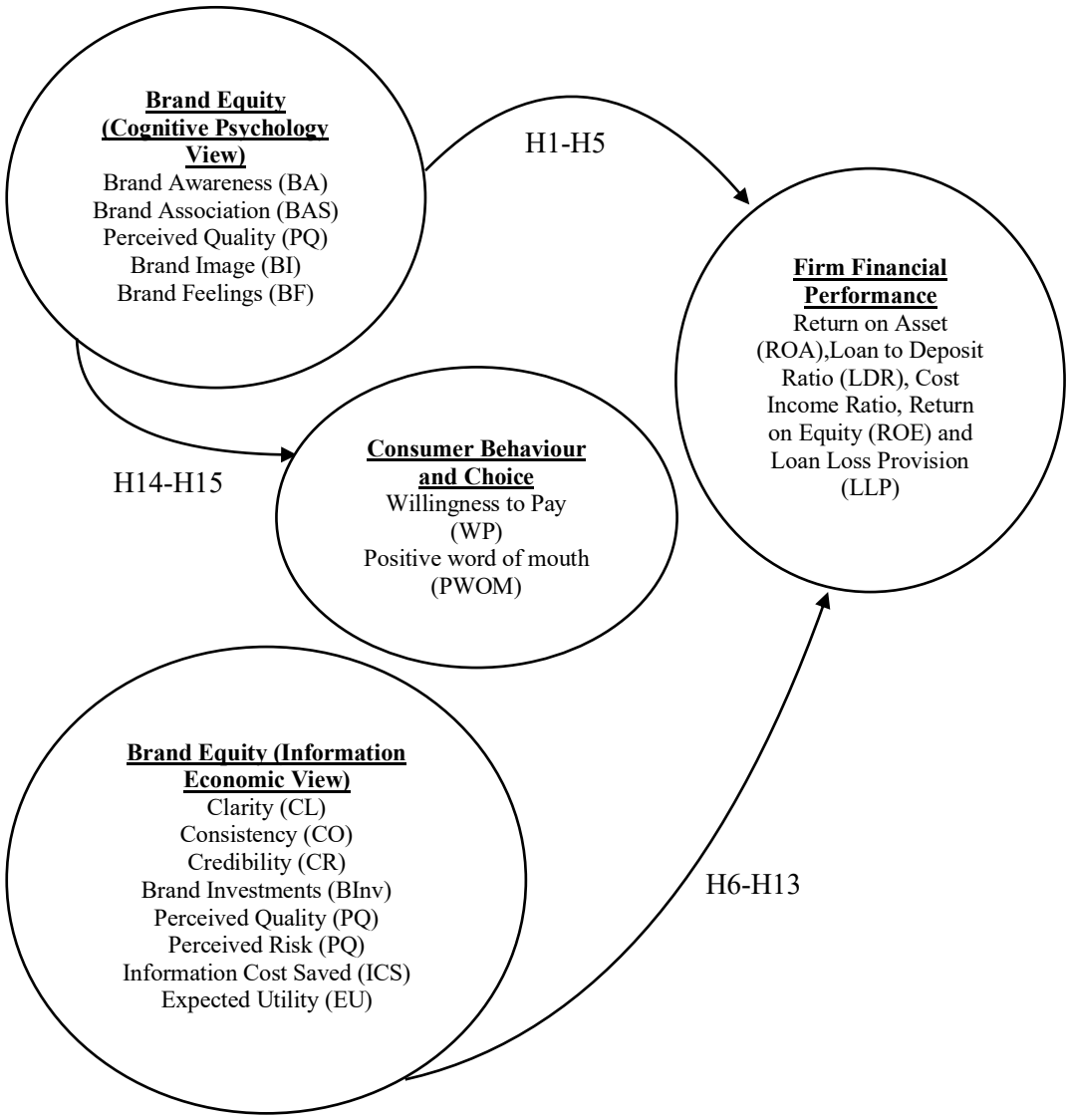
2.7 Model and Hypothesis Development

The research model appears in Figure 8. The model assumes that firm financial performance is influenced by brand equity dimensions from a cognitive psychological view and information economic perspective. Consumer behaviour and choice are also included in the study and are measured on their influence on the relationship between brand equity and firm financial performance constant.

Brand Awareness: An organisation has an advantage when the level of brand awareness in the minds of the consumer is high. This is the core construct of brand equity because without it there would exist a weakness of brand equity if existence is present at all. It therefore follows that this research will test this proposition.

H1: Ceteris paribus, brand awareness has weaker link with firm financial performance at time t+1 than time t.

Brand Associations: Organisations strive to create a favourable brand association. These are those memories that are linked to the brand. The more the consumers associate with a brand the more strength the construct adds to the brand equity.



H2: Ceteris paribus, brand association has weaker link with firm financial performance at time t+1 than time t.

Brand Quality: Perceived quality is also an important component of brand equity.A strong brand should have customers who perceive that the service is of high quality. A high performing company should have customers who regard the brand highly.

Figure 2.1: Research model

H3: Ceteris paribus, perceived quality has weaker link with firm financial performance at time t+1 than time t.

Brand Image: This is 'the general impression of a brand.' It is the image of the brand in the minds of the consumer.

H4: Ceteris paribus, brand image has weaker link with firm financial performance at time t+1 than time t.

Brand Feeling: Here we expect that if a brand experiences high financial performance, then it should have resonance inherent in its customers. It should evoke positive feelings from the customers that satisfy their needs.

H5: Ceteris paribus, brand feelings has weaker link with firm financial performance at time t+1 than time t.

The following hypothesis are based on the information economic perspective of brand equity. The definitions are built from Erdem (1998).

Clarity: signals 'absence of ambiguity in the information conveyed by the brand's past and present matching mix strategies and associated activities.

H6: Ceteris paribus, clarity has weaker link with firm financial performance at time t+1 than time t.

Consistency: represents the 'degree to which each mix component reflects the intended whole." This includes a firm having a consistent marketing message overtime. It also embodies stability of the brand attributes over time.

H6: Ceteris paribus, consistency has weaker link with firm financial performance at time t+1 than time t.

Credibility: is considered as one of the most important characteristics of brand in the information economic perception of brand equity. It represents 'a market signal

conveying information effectively.' The imperfections of asymmetrical information and imperfect information brings the need for firms to 'convey credible information to consumers.' Consumers should find the information shared by firms to be truthful and dependable to the extent that they believe that the firm will deliver their promise. This therefore represents the underlying confidence in the brand by the consumers.

H6: Ceteris paribus, credibility has weaker link with firm financial performance at time t+1 than time t.

Brand Investments: stems from resources that the firm spends on their brand. These represents the commitment of the firm to their brand. These underlie the credibility of the brand signals. Brand investment from the perception of the consumer can indicate brand strength or brand equity.

H6: Ceteris paribus, brand investments have weaker link with firm financial performance at time t+1 than time t.

Perceived Quality: stems from confidence in the brand and consumer perception of the firm that the firm is willing and able to offer the promised services.

H6: Ceteris paribus, perceived quality has weaker link with firm financial performance at time t+1 than time t.

Information Cost Saved: is when a brand influences the consumer's cost of gathering and processing information when making purchase decisions. There are numerous information gathering costs including time, money and psychological cost.

H6: Ceteris paribus, information cost saved has weaker link with firm financial performance at time t+1 than time t.

Expected Utility: when the brand signal provides the consumer with a positive expected utility associated with the brand.

H6: Ceteris paribus, expected utility has weaker link with firm financial performance at time t+1 than time t.

With regard to consumer behaviour and choice, the study makes the following assumptions:

H14: Existence of strong brand equity has negative influence on consumer's willingness to pay for the bank services at time t+1 than time t.

H15: Existence of strong brand equity has negative influence on consumer's positive word of mouth regarding bank brand at time t+1 than time t.

2.8 Chapter Summary

In this chapter the key concepts surrounding the research have been defined. Research model has also been presented. The literature review has set the perspective of this research and has laid out perceptions of other studies regarding brand equity, consumer behaviour and firm financial performance. The chapter has also set the conceptual framework for the research and the hypothesis for testing the theory.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research design and methodology that was used in the research. The chapter lays out the research design and approaches to sampling, data collection, data processing and data analysis. It also addresses ethical considerations that are observed during research and presents the rationale for the research methodology chosen based on selected literature.

Like many predominantly quantitative multimethod researches, this study takes a positivist theoretical perspective. The belief is that a theory, CBBE, and its influence on firm financial performance needs to be tested. The study starts with theory testing in the form of hypothesis and will involve statistical tests in the research process. The research is interpretive focusing on analytical generalisation to test theory.

Many studies tend to use approaches and styles that are common, familiar and comfortable. This research attempts to explore both quantitative and qualitative methods and style of doing research. This study applied survey design by administering questionnaire method incorporating Likert scales in combination with archival research to answer the research questions.

3.2 Research Design

Ragin (1991) defines research design as ‘a plan for collecting and analysing evidence that will make it possible for the investigator to answer whatever questions he or she poses.’ The study applied a multimethod research design that combines a survey design by administering questionnaire method incorporating Likert scales in combination with archival analysis. The first research design is survey design by administering questionnaire method incorporating Likert scales applying factor analysis and a quantitative data collection approach. Cross-sectional data was

collected using questionnaires. Data analysis was carried out using multi-variate regression and factor analysis variance. Software that was used for this study is SPSS. The second research design is the archival research method. Research method that applied here is document analysis and data collection approach was the use of secondary data. The data type was historical and analysis was conducted using financial ratios on Numbers.

Multimethod research strategy mostly contrasts quantitative and qualitative research. Multimethod research design is often applied in order to complement the strengths and different weaknesses in relation to a research problem Brewer & Hunter (2019). They go on to elaborate that this does not imply that a mix of qualitative and quantitative must always be employed. They point out that some research might be well suited to combine two different types of quantitative methods. The multimethod calls for a focus on the demands of the problem as opposed to the combination of a set of methods. This study has combined survey design with archival analysis.

In this study data was collected from two sources. Questionnaires were administered to consumers of bank products/services whereas archival data from secondary data was collected from Dar es Salaam Stock Exchange Audited financial report of subject bank. Questionnaires in the form of attitude scaling to gauge the level of CBBE towards firm's brand prior and after transformation. The archival data was used to establish the firm's financial performance and trail of change in brand.

3.3 Factor Analysis of Brand Components

The essence of factor analysis is to determine whether "a larger number of variables can be reduced into smaller number of factors" (Kremelberg, 2011). Kremelberg (2011) also explains that factor analysis is useful in that the factors that are obtained can be used as dependent variables in methods such as regression analysis. This is how this study has applied factor analysis. This study used the principle component analysis which is an explanatory factor analysis as opposed to previous studies that

mainly used principle factor analysis which is a confirmatory factor analysis. Factor analysis was carried out with no rotation.

Burns (2008) summarises that the use of principle component analysis in an explanatory factor analysis can assist in discovering 'the nature of the construct or factors influencing a set of responses and reduce the data set to a small number of factors.' That it can assist to identify which sets of items hang together in a questionnaire as well as to identify age nature of the constructs underlying purposes in a specific content area. That it can assist in demonstrating the dimensionality of the measurement scale as well as generate what Burn (2008) terms as 'factor scores' representing values of the underlying construct for use in other analysis. This research has applied factor analysis in this manner.

3.3.1 Multivariate Linear Model

The study has more than two variables as such the relationship will be measured using selected complex data-analytic procedure. To test CBBE theory and derive a functional relationship between sets of CBBE, consumer behaviour and choice variables and firm financial performance variables multiple regressions has been selected as an analytical analysis. The manipulating variables in this study other conditions of the brand in terms of time. Brand at time t and brand at time t+1. In general regression function is represented as follows:

$$y = b_0 + b_1x_1 + \ldots + b_nx_n + \varepsilon \qquad (3.0)$$

where y represents the dependent variables

xs represent the independent variables

ε represents an error term.

In the case of this research, the regression function for the Cognitive Psychology View CBBE and FFP relationship is as follows:

Generally:

$$FFP = b_0 + b_1CBBE+b_2CB\&C+ \varepsilon \quad (3.1)$$

expanding the equation

$$FFP = b_0 + b_1BA + b_2BAS+ b_3PQ + b_4BR+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.2)$$

Where: FFP represents firm financial performance

BA, BAS, PQ, BI and BF represent Consumer Based Brand Equity whereby

BA represents Brand Awareness

BAS represents Brand Association

PQ represents Perceived Quality

BI represents Brand Image

BF represents Brand Feelings

And WP and PWOM represent the consumer behaviour variables whereby

WP represents Willingness to Pay

PWOM represents Positive Word of Mouth

Further expansion of the equation:

$$ROA= b_0+ b_1BA + b_2BAS+ b_3PQ + b_4BI+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.3)$$

$$LDR= b_0+ b_1BA + b_2BAS+ b_3PQ + b_4BI+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.4)$$

$$CIR= b_0 + b_1BA + b_2BAS+ b_3PQ + b_4BI+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.5)$$

$$ROE= b_0 + b_1BA + b_2BAS+ b_3PQ + b_4BI+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.6)$$

$$LLP= b_0 + b_1BA + b_2BAS+ b_3PQ + b_4BI+ b_5BF+b_6WP+b_7PWOM+ \varepsilon \quad (3.7)$$

Where: the FFP ratios ROA, LDR, CIR, ROE and LLP represents firm financial performance ratios that denote strong/weak firm financial performance. These

equations will be analysed at time t and at time t+1. Multiple regression will therefore be used to test the relationship between BE and FFP hence test the theory of CBBE.

Independent variables are denoted by Xs and observations or measurement of variables are denoted by Os. The study will form the following structure, O, where O will represent all observations on all variables. Figure 10 illustrates the observations for this study. In the diagram O_B represents subject bank before transformation and O_A represents subject bank after transformation. These will be denoted by O_B at time $_t$ and O_A at time $_{t+1}$.

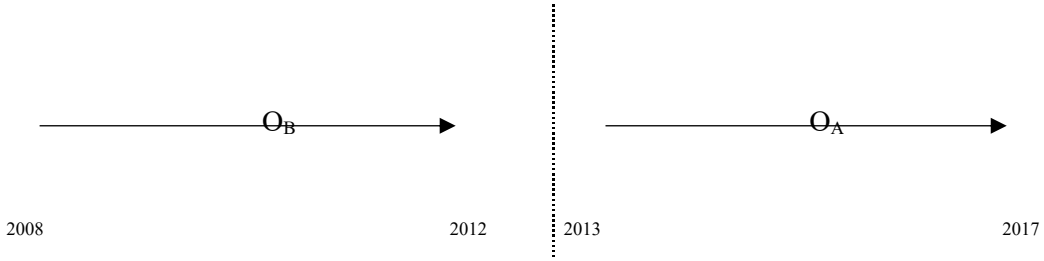


Figure 10: Observations of the Study

In the case of Information Economic Perspective of CBBE and FFP relationship is as follows:
Generally:

$$FFP = b_0 + b_1CBBE+b_6CB\&C+ \varepsilon \qquad (3.8)$$

expanding the equation

$$FFP=b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.9)$$

Where: FFP represents firm financial performance
CL, CO, CR, BInv, PQ, PR, ICS and EU represent Consumer Based Brand Equity whereby:

CL represents Clarity

CO represents Consistency

CR represents Credibility

BInv represents Brand Investment

PQ represents Perceived Quality

PR represents Perceived Risk

ICS represents Information Cost Saved

EU represents Expected Utility

And WP and PWOM represent the consumer behaviour variables whereby

WP represents Willingness to Pay

PWOM represents Positive Word of Mouth

Further expansion of the equation:

$$ROA= b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.10)$$

$$LDR=b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.11)$$

$$CIR= b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.12)$$

$$ROE= b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.13)$$

$$LLP=b_0+b_1CL+b_2CO+b_3CR+b_4BInv+b_5PQ+b_6PR+b_7ICS+b_8EU+b_9WP+b_{10}PWOM+\varepsilon \quad (3.14)$$

This study will look at the main effects factor which include how the dimensions of CBBE influence FFP independent of CB&C and how the selected components of CB&C influence FFP independent of CBBE. The study will also look at interaction effects by combining effect of CBBE and CB&C on FFP. It will also look at the

distinction in consumer-based brand equity approached and findings. The rationale behind this is that if results show a non-significant main effect then there is a possibility that the effect the two independent variables have on the dependent variables are concealed. An interaction effect can reveal how the independent variables interact in influencing FFP.

Stepwise regression was selected to describe 'the relationship between one variable (the dependent variable) and one or more other variables (the independent variables)' Stolzenberg (2011). In the case of this study regression has been used to describe the relationship between firm financial performance (the dependent variable) and brand equity component and consumer behaviour components (the independent variables). As an aspect to watch out for when using multiple regression in this manner is that the independent variables might be correlated, (Specter, 1981). If this happens then the researcher must take care when interpreting the results. In this research, in order to analyse the occurrence of correlation independent variables a stepwise addition procedure was applied based on Berger (2019).

3.3.2 Archival Research Design

Archival research includes a broad range of activities that is used to evaluate and investigate documents and textual material that is produced by an organisation. Archival research design involves study of collections of documents such as annual reports to gain an understanding of an organisation, leader or professional group. This method has primarily been applied to historical research documents. Over the years this method has evolved and is now also applied in non-historical studies (Ventresca and Mohr, 2001).

Sullivan (2009) describes archival research as research review of documents or records in archives with the goal of describing characteristics of individuals, groups or organisations. He lists advantages of archival research to include providing possibility of retrospective longitudinal designs. This part of the research looks backwards and examines performance of a firm and brand transformation through

archival research. This study will also take a backward look at the bank's performance through analysing annual bank statements.

Archival research is part of historical research methods. It involves content analytic methods that carries out examinations of accumulated documents in order to answer socio-cultural/financial research questions. The data obtained from an archival research goes through systematic examination of the past or events that happened in the past to give an account of what happened in the past, provide an understanding of the development of contemporary situations, conditions and events occurring today.

According to Ventresca and Mohr (2001), there are three distinct approaches to archival research. They cite Selznick (1949) who carried out a study on the transformation of YMCA. The first approach they state is the histographical tradition. The second is an approach that emerged in the 1970s that involved an ecological analysis. The third is the institutionalism in organisational analysis.

Smith (2003) cites that Frazier *et al* (1984), McConnell *et al* 1986, Swales (1988) and Yoon & Swales (1991) used content analysis approach 'to explore whether quantitative data found in the firm's annual report can forecast stock price performance. This shows how annual reports can be rich with information that can draw insight into the firm.

Few literatures have been written on how to conduct archival research. Borrowing knowledge from the sports and exercise research methods, it is explained that there is no single approach for conducting archival research (Atkinson, 2012). Both quantitative and qualitative techniques can be applied in archival research. Atkinson (2012) also lists steps in carrying out historical archival research. First, he lists recognition for need of a certain historical knowledge. Second, he lists the gathering of archival data that contains the information about the problem question. Third, incorporating the problem/question in the hypothesis that will tentatively explain the relationship between the topic and the historical factors. Fourth, rigorous collection

of evidence from the archival data, verifying authenticity and veracity of information and its sources. Fifth, step involves selecting, organising and analysing evidence collected and drawing conclusions. Finally, the sixth and final step involves recording conclusion in a meaningful narrative and summary of findings.

Lewis-Beck *et al* (2004) define archival research as the locating, evaluating, systematic interpreting and analysing of data from archives. Once data has been assembled they suggest that a number of traditional social science analytic approaches can be used such as: grounded theory can be used to uncover patterns and themes in the data; biographical method can be used to document lives and ideas; or content analysis can be used to determine the presence of certain words or concept that are in the data. This study upon collecting all relevant documents will apply document analysis method in analysing annual reports of the firm and presenting meaningful narrative and findings to be used in the second part of the research design and during analysis.

It can be concluded that there is no agreed method of conducting archival research. Archival research methods include content analysis, document analysis, instrumentation and multidimensional scaling. This study will apply instrumentation and document analysis in the archival research process.

3.4 Research Design Validity Issues

Smith (2003) elaborates that archival data has more external validity due to the fact that it deals with empirical data. He continues to explain that there lies a danger in instances where the empirical data used in archival research is flawed. Such instances produce results that contain an unrepresentative sample.

It is also suggested that econometric studies that use archival data are in fact experimental in nature (Libby 1981). That although archival research mostly deals with association as opposed to causation, internal validity concerns still exist within such studies Smith (2003). Smith (2003) goes on to explain that as an example there

exist internal validity problems that are associated with financial statement research especially the ones that look at history concerns or instrumentation concerns.

Instrumentation concerns are valid for this research. Wallage (1991) quoted in Smith (2003) suggested that there exist questions of what can be considered an accounting issue regarding technical details become important in the instrumentation process. Using different information sources regarding financial statement data or using different people to collect the data can threaten the validity of the outcome. In this research this validity concern has been addressed by collecting data from one source and data collection has been carried out solely by the researcher.

Wallace (1991) also insists on the importance of verifying definition of terms used during instrumentation process-and from the data sources. Terms such as bankruptcy have a wide scope of definition and the researcher should verify this during research process. In this study the researcher is aware of such validity concerns and has taken measures to minimise these concerns.

Another validity concern that relates to history effects is changes in laws, reporting requirements and accounting policy over the period of interest. This will affect the comparative findings from the archival data. This study looks at archival firm data that spans ten years. Any significant changes in laws, policies or reporting requirements will be observed and the researcher will, like many other researchers, use a matched sample that tries to control for exogenous factors.

To test for validity this study used a number of tests including Bartlett's test of sphericity, Kaiser Meyer-Oklin (KMO) Test, analysis of coefficient correlation of factors and Cronbach's Alpha to test the internal validity of the scales. Cronbach's Alpha is a widely used measure of internal consistency of a set of items (Pett et al, 2003). Internal consistency is about how well the components that make up a construct fit together. Pett et al (2003) explain that Cronbach's Alpha represents the proportion of total variance in a given scale that can be attributed to a common

source. The fact that it considers the average as opposed to a single estimate of scale's reliability makes this an attractive reliability measure. Indeed, many of the studies and literature review applied Cronbach's Coefficient Alpha as the reliability test. This study has done the same.

Cronbach's Coefficient Alpha is ideal for items that scored on a continuum such as the ones used in this study that is ordinal level of measurement on a scale of 1 to 5.

3.5 Sampling

According to Finscope (2017), 66% of the population lives in the rural areas, whereas 34% lives in Urban areas. Of the population, 51% are female whereas 49% are male. 65% of the population has formal financial inclusion. This relatively high financial inclusion statistic has mostly been driven by growth in mobile phone services. As of 2017 demand of uptake of formal financial inclusion services, specifically bank services is at 16.7%.

Tanzanian population as of 2017 is 53.37 million (World Bank, 2017). According to Finscope (2017), Tanzanian's who are 16 years and above are 27,864,302. 91% of population above 16 years of age are financially included. According to NBS (2018), total population of DSM is 5,781,557 of which 2,965,602 are female. In terms of municipality, 1,231,516 is from Kinondoni Municipality, 1,616,901 is from Ilala Municipality, 1,597,479 is from Temeke Municipality, 1,119,830 is from Ubungo Municipality and 215,830 is from Kigamboni Municipality. It, therefore, follows that Tanzanians who are above 16 years old and who use commercial bank services are 5,261,216.87. Breakdown of financial inclusion as per municipality is not known. Selection of subjects to be studied is therefore non-probability sampling using convenience sampling.

Number of participants were arrived at by looking at other similar research. Narteh (2018), Verbeeten & Vijn (2016), Hsu et al (2013), Tsai et al (2010), Mizik (2014), Baldauf et al (2003), Kim et al (2003), Kim & Kim (2005), Broyle et al (2009) and Durk et al (2016) all used samples that range between 150 and 800 participants. Due

to limitations in resources, this research will aim at fulfilling the lower range of the average and will aim at 150 sample participants.

3.6 Criteria for brand selection and their number

The brand chosen is an extreme case chosen to test a theory and broaden its application as it relates to the African context. The brand was chosen in a pre-determined manner i.e. non-probability sampling. The brand selection was done under purposive sampling selecting a case of an organisation that has experienced transformation over the years.

3.7 Data Collection Instrument

The research aims to collect data from both primary and secondary sources. Secondary sources include documents. These documents will be the annual reports to ascertain firm financial performance. The primary data will be from questionnaires with potential, existing, past and future customers of the case organisation. The researcher hopes that collecting data from various sources will provide data triangulation that will assist the researcher to collect more relevant information and also to cross-check information consistency with the goal to enhance the robustness of the findings.

The questionnaires will aim to facilitate the research participants to share their perspectives regarding brand equity and their consumer behaviour in varying states of the brand organisation's transformation. Through these questionnaires the researcher aims to unveil whether brand equity has any relevance in the face of the consumers. To accomplish this the researched designed two different sets of questionnaires. Participants provided with group 1 questionnaire answered questions using memory from how the bank used to be in the past, whereas, participants provided with group 2 questionnaire answered questions using current memory and the bank as experienced it in the present. Both sets of questionnaires included a cognitive psychology view and an information economic perspective of brand equity.

3.8 Data Process and Analysis

Upon setting the variables, relevant questionnaires, collecting relevant archival data, data processing will be conducted. The two data sets were kept separately but when analysed it was analysed concurrently. The study has more than two variables as such the relationship will be measured using selected complex data-analytic procedure. To test CBBE theory and derive a functional relationship between sets of CBBE, consumer behaviour and choice variables and firm financial performance variables multiple regression has been selected for data analytical analysis.

For the data collected coding will be carried out using a code plan represented on table 8. Table 8 shows the different components of the code plan. The first column represents the variable name. This is the name given to each of the data set so that the computer can refer to them in the analysis. Due to the size of the variable names, a shortened version will be used so as to ensure that the data complies with the computer package. Following the variable name column is the variable label column. This column provides a description of the variable. The value labels follow showing values of each variable. And the final column shows the definition of the variable.

Table 3.1: Research Measurement Summary

Variable Name	Variable Label	Value Label
Demographic Characteristics		
AGE	Age of Respondent	20-30 =1 31-40 =2 41-50 =3 51-60 =4 Above 60=5
GENDER	Gender	Female = 1 Male=2
OCC	Current Occupation	Manger = 1 Clerk = 2 Professional = 3 Academics = 4 Technicians = 5 Self-employed = 6
EDU	Level of Educations	Primary School Certificate= 1 High School Certificate = 2 Pre-University Certificate/Diploma =3 Bachelor Degree = 4 Post Graduate Degree = 5
EMPLSTAT	Employment Status	Employed=1 Self Employed=2
INCOME	Income	Below 500,000=1 500,000 to 1,000,000=2 1,000,000 to 2,000,000=3 2,000,000 to 3,000,000=4 Above 3,000,000=5
Consumer Based Brand Equity Variables		
Cognitive Psychology Perspective		
BA	Brand Awareness	I am aware of this bank = 1 When I think of banks, this bank is one of the ones that come to mind = 2 I can recognise this bank among other competing banks = 3 I know this bank very well = 4 This bank is very familiar to me = 5 I can quickly remember this bank = 6 This bank is visible = 7

BAS	Brand Association	It makes sense to transact with NMB Bank instead of other bank, even if they are the same = 1 Even if another bank has the same products as NMB Bank, I prefer to transact with NMB Bank = 2 If there is another bank as good as NMB Bank, I prefer transact with NMB Bank = 3 It seems smarter to transact with NMB Bank, even if banks are not all that different = 4 Some characteristics of this bank come to mind quickly = 5 I remember the logo of this bank = 6 I have difficulty in imagining this bank in my mind* = 7 This bank is good value for money = 8
PQ	Perceived Quality	Compared to other banks this bank is of high quality = 1 This bank is the best in Tanzanian banking sector = 2 This bank consistently performs better than all other banks = 3 I can always count on this bank for consistent high quality = 4 This bank offers services with excellent features = 5 I believe this bank offers superior services in every way = 6 The overall quality of the service provided at this bank is excellent = 7 The quality of the service provided at this bank is impressive = 8 The service provided by this bank is of high quality = 9 This bank appears to be of poor quality = 10
BI	Brand Image	This bank has a strong image = 1 This bank has a favourable image = 2 This brand has a high image = 3 This brand has better characteristics than its competitors = 4 This brand has personalities that distinguishes itself from its competitors=5 This brand is one of the best brands in the sector = 6 This brand is stable in the market = 7 My bank has an image of doing the right things = 8 I have good memories linked to my bank = 9

BF	Brand Fondness	I consider myself to be fond of this bank = 1 This bank is my first choice when I need to use banking services = 2 I will not switch to another bank if this bank is available = 3 I intend to continue to use this bank's services in the upcoming years = 4 I recommend this bank to my friends and relatives = 5 I will continue to be a customer of this bank even if it reasonably raises its fees = 6 I regularly use this banks for all my banking needs = 7 I am proud to do all my banking with this bank = 8 I prefer this bank to other banks = 9
Information Economic Perspective		
CL	Clarity	I know what this brand stands for = 1 I have trouble figuring out what image this brand is trying to create = 2
CO	Consistency	This brand's image in commercials and ads has been consistent for many years = 1 The quality of this brand has been consistent for many years = 2 This brand's ads, prices, specials, and products match its overall image = 3 Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc. = 4
CR	Credibility	This brand delivers what it promises = 1 This brand's product claims are believable = 2 You just can't believe what the ads say about this brand = 3 My experiences with this brand make me wary of their claims = 4 This brand has a name you can trust = 5 This brand reminds of someone who's competent and knows what he/she is doing = 6
CL,CO and CR	Clarity, Consistency and Credibility	This brand doesn't pretend to be something it isn't = 7
BInv, CR	Brand Investments and Credibility	This brand is at the forefront of using technology to deliver a better product = 1
BInv	Brand Investments	This brand spends lots of money on ads, commercials, promotions, event sponsorships, celebrity endorsements, etc = 1 This brand has spent a lot on the community over the years =2
PQ	Perceived Quality	The quality of this brand is very high =1 In terms of overall quality, I'd rate this brand as a,.. = 2
PR	Perceived Risk	I never know how good this brand will be before I use its services = 1 I know I can count on this brand being there in the future = 2
ICS	Information Cost Saved	I know what I'm going to get from this brand, which saves time shopping around = 1

PR/ICS	Perceived Risk/Information Costs Saved	I need lots more information about this brand before I'd buy it =1 I'd have to try it several times to figure out what this brand is like = 2 This brand gives me what I want, which saves me time and effort trying to do better = 3
EU	Expected Utility	If you were to use the banks' services, how many of the services will you use? = 1
Consumer Behaviour and Choice Variables		
WP	Willingness to Pay	I would be willing to pay a higher price for services of this brand over other similar brands = 1 I prefer to purchase from NMB Bank even if another bank advertises a lower transaction fee/interest rate = 2
PWOM	Positive Word of Mouth	I seek out word of advise of people before I choose a bank = 1 The probability of accepting advise from other people is high = 2 The probability of choosing this bank before receiving recommendations is low = 3 The probability of choosing this bank after receiving recommendation is high = 4 I have recommended this bank to lots of people = 5 I talk positively about this bank to my friends = 6
Firm Financial Performance Indicators		
ROA	Return on Asset	ROA=1
LDR	Loan Deposit Ratio	LDR = 2
CIR	Cost Income Ratio	CIR = 3
ROE	Return on Equity	ROE = 4
LLP	Loan Loss Provision	LLP = 5

The researcher acknowledges that a significant result may be that an actual interaction or relationship exists. The researcher also notes that a significant result may also be a product of error or another exogenous effect that is operating at one level of the independent variables, but not the other levels. When interpreting results, the researcher will exercise care in this regard.

3.9 Ethical considerations

This research is conducted taking into consideration ethical conduct. All participants will be requested to provide consent to participate in the research and the research objective will be communicated to all participants. Participants' private information such as those collected under demographic section will be kept private, appropriately stored and participants will be informed and reassured of this from the beginning of the questionnaire sessions. This has been said, (Gaiser & Schreiner, 2011), to increase trust between the researcher and the participants. It is also said to increase the rate of honest answers from the respondents. The chosen bank as a case will be informed of such a study and consent from the bank will be sought.

In addition to maintain a level of anonymity all participants will be referred to using a unique code and personal identities will not be used while analysing the data. The data with this information will be kept separate.

3.10 Questionnaire Design

While designing the questionnaire the researcher appreciates the observation made by Keller (2001): That the brand dimensions brand salience, performance and imagery "are typically idiosyncratic and unique to the product and service category." than the other dimensions. It is due to this fact that they require some customisation, "beyond generic version of questions." Questionnaire regarding Consumer Based Brand Equity is based on the construct designed by Edem (1998). Consumer decision making has been studied in different ways (Wason *et al*, 2002). This study has, therefore, selected Likert scales to form the questionnaires for data collection to overcome.

The study will use standardised Likert scales borrowed from previous literature. Likert scales get participants to place themselves on an attitude continuum for each statement in the questionnaire running from 'strongly agree', 'agree', 'uncertain', 'disagree' and 'strongly disagree' Oppenheim (1992). The researcher will then allocate simple weights to these positions for scoring purposes.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

This chapter presents the findings of the study.

4.1 Demographic Characteristics of Respondents

Table 4.1 Respondent's profiles

Variables	Description	Frequency	Percent
GENDER	Female	66	49.3
	Male	68	50.7
	Total	134	100.0
AGE	20 - 29	56	41.8
	30 - 39	45	33.6
	40 - 49	18	13.4
	Above 50	15	11.2
	Total	134	100.0
INCOME	1,001,000 - 1,500,000	22	16.4
	1,501,000 - 2,000,000	15	11.2
	501,000 - 1,000,000	32	23.9
	Above 2,000,000	46	34.3
	Less than 500,000	19	14.2
	Total	134	100.0
OCCUPT	Civil servant	15	11.2
	Clerical	9	6.7
	Executive	10	7.5
	Merchant/Businessman	8	6.0
	Middle manager	14	10.4
	Other (please specify)	23	17.2
	Professionals (doctor, lawyers, accountants, valuation surveyor)	45	33.6
	Student	10	7.4
	Total	134	100.0
EDU	Bachelors degree	76	56.7
	Doctorate degree	2	1.5
	High school graduate diploma or the equivalent	15	11.2
	Master's degree	34	25.4
	Other (please specify)	4	3.0
	Professional degree	3	2.2
	Total	134	100.0

4.2 Results of Factor Analysis

Initially the researcher carried out regression without considering factor analysis. Due to the large number of variables explaining brand equity components, results obtained from a directly analysing all the variables proved to be cumbersome and provided for many results that were difficult to analyse and draw a cohesive conclusion. Using factor analysis, the study was able to reduce the number of variables. Factor analysis enabled the researcher to produce a small number of factors from the large number of variables. This smaller number of variables was capable of explaining the observed variance in the larger number of variables. The reduced variables were therefore used in the regression model that aimed to analyse the relationship between firm financial performance and brand equity.

In this study each component has varying variables. Each variable is scaled from 1 to 5. Brand awareness has seven variables. Brand association has eight variables. Brand image has nine variables. Brand fondness has eight variables. Willingness to Pay has two. Word of Mouth has six. Brand consistency has four. Brand credibility has six. Brand clarity, brand consistency and brand credibility combined has one. Brand Investment and brand clarity combined has one and brand investment has two. Perceived Quality has one. Perceived risk has two. Information cost served has one. Perceived risk combined with information cost served has one. And expected utility has one.

Table 4.1 describes the descriptive statistics for all variables in the study. It shows the mean, standard deviation and number of respondents who participated in the survey. The mean show BA2 and BA6 both having the highest mean which indicated that they are the most important variables that influence customer-based brand equity.

Table 4.2 in Appendix 1 shows communalities for each variable that is accounted for.

Initial communalities represent estimates of the variance in each variable that is accounted for by all components. Extraction communalities represent the estimates of the variance in each variable accounted for by the components in the factor solution. From before transformation results, under extraction commonalities, variables BI7 and PQ2 both have small values indicating that they do not fit well into the factor solution. After transformation results, under extraction communalities, it is surprising that variable BA1 has the smallest values of all.

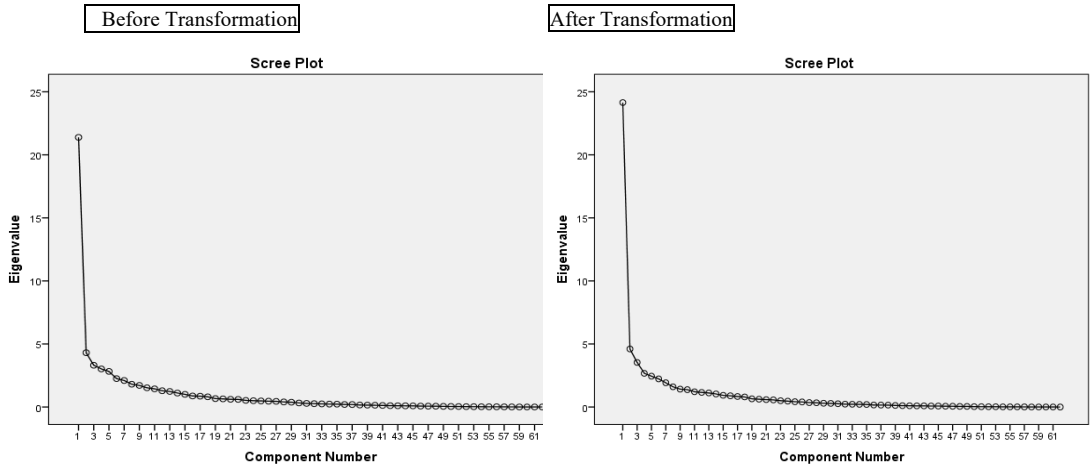


Figure 4.1 Scree Plots for Before Transformation and After Transformation

As a general rule of thumb factors with eigenvalues of 1 or higher can be kept while factors with eigenvalues less than 1 can be discarded (Kremelberg, 2011). This Kremelberg (2011) explains is called the Kaiser Criterion. This together with another method called the scree plot can help to determine which factors to keep. In the results factors with eigenvalues higher than 1 are BA1 to BA 8 and BAS 1 to BA7 for Group 1 and BA1 to BA6 for Group 2. This corresponds to the scree plot shown in Figure 4.1. These two scree results are identical showing that the first thirteen brand components are the most significant. The elbow of the curve in both figures is at around component 13. The scree plots are somewhat difficult to determine the elbow as it is a somewhat smooth curve.

The importance of these factors is also reflected in the scree plot diagram shown on Figure 4.1 shows a graph of the eigenvalues against all factors. The graph enables the researcher to determine how many factors to retain. The point of interest is where the curve starts to flatten which in this case is between factor 3 i.e. BA3 up to factor 15 i.e. BAS6. This shows that brand components BA3,

Table 3 under appendix 1 provides the total variable explained. It shows that the first fifteen variables are significant. It shows that cumulatively these variables explain 81.538 of the data for group 1. Repeating the same analysis for Group 2 shown on Table 3 under appendix 1 provides the total variable explained. It shows that the first fourteen variables are significant. It shows that cumulatively these variables explain 81.157% of the data.

Factor loadings are similar to correlation in that they range between +1.00 and -1.00 (Burns, 2008), with +1.00 being highly correlated and -1:00 being lowly correlated. The factor analysis has loaded together the variables into 14 components for Group 1: Before Transformation and 15 components for Group 2: After Transformation of which are listed on table 5b and 6b under appendix 1. Of these the researcher has only looked at factors 1 to 13, for ease of comparison.

This study follows the reference made by Pett *et al* (2003) on Comrey and Lee (1992) guidelines for evaluating factor loading items in that those that are less than 0.30 are not considered to be part of a defining factor because it would signify that less than 9% of the component's variance is shared with the factor. Pett *et al* (2003) provide a scale that 0.45 which is 20% of variance is fair; 0.55 which is 30% shared variance is good; 0.63 which is 40% shared variance is very good whereas 0.71 which is 50% shared variance is excellent.

Although a good number of the loadings on factors are greater than 0.60, most of the loadings on factors are less than 0.30 which is considered to be poor. It means that less than 9% of the component's variance is shared with the factor. As seen on tables 5a and 6a (under appendix 1) without suppressing smaller factors the factors were

difficult to interpret. Factor analysis was carries out for the second time suppressing all factors less than 0.30 following the guidelines described earlier. This produces a better metric for interpretation as presented on tables 5b and 6b (under appendix 1).

With respect to results of component matrix presented under table 5b and 6b (under appendix 1) data shows that factor 1 has 53 variables contributing to group 1. These variables have a score greater than 0.30 ranging between 0.414 to 0.838. For group 2 56 variables have a score greater than 0.30 and range between 0.309 and 0.815. Factor 1 in group 1 has variables that are higher in range than factor 1 in group 2.

For group 1, factor 2 has 20 variables contributing. Most of the factor loadings are negative showing low correlation. The variables have a score greater than 0.30 and range between 0.303 and 0.540. For group 2 factor 2 has 17 variables contributing. These variables have scores greater than 0.30 ranging from 0.303 to 0.580. Variables contributing to factor 2 in group 2 have less percentage of negative variables compared to factor 2 in group 1. For group 1, factor 3 has 11 variables contributing. Most of the factor loadings are positive showing relatively high correlation. The variables have a score greater than 0.30 and range between 0.305 and 0.598. For group 2 factor 3 also has 11 variables contributing with a significant higher number of negative variables relative to factor 3 of group 1. These variables have scores greater than 0.30 ranging from 0.315 to 0.617.

For group 1, factor 4 has 10 variables contributing. All of the factor loadings are positive showing relatively high correlation. The variables have a score greater than 0.30 and range between 0.319 and 0.454. For group 2 factor 4 has 8 variables contributing also with all positive factor loadings. These variables have scores greater than 0.30 ranging from 0.376 to 0.628. For group 1, factor 5 has 9 variables contributing. The variables have a score greater than 0.30 and range between 0.318 and 0.661. For group 2 factor 5 has 8 variables contributing with all positive factor loadings. These variables have scores greater than 0.30 ranging from 0.303 to 0.544.

For group 1, factor 6 has 4 variables contributing. The variables have a score greater than 0.30 and range between 0.310 and 0.404. For group 2 factor 6 has 6 variables contributing with all positive factor loadings. These variables have scores greater than 0.30 ranging from 0.333 to 0.483. For group 1, factor 7 has 4 variables contributing. The variables have a score greater than 0.30 and range between 0.322 and 0.592. For group 2 factor 7 has 4 variables contributing. These variables have scores greater than 0.30 ranging from 0.310 to 0.444.

For group 1, factor 8 has 7 variables contributing. The variables have a score greater than 0.30 and range between 0.312 and 0.379. For group 2 factor 8 has 4 variables contributing. These variables have scores greater than 0.30 ranging from 0.332 to 0.493. For group 1, factor 9 has 4 variables contributing. The variables have a score greater than 0.30 and range between 0.311 and 0.429. For group 2 factor 9 has 4 variables contributing. These variables have scores greater than 0.30 ranging from 0.349 to 0.461.

For group 1, factor 10 has 4 variables contributing. The variables have a score greater than 0.30 and range between 0.302 and 0.384. For group 2 factor 10 has 5 variables contributing. These variables have scores greater than 0.30 ranging from 0.309 to 0.398. For group 1, factor 11 has 4 variables contributing. The variables have a score greater than 0.30 and range between 0.305 and 0.414. For group 2 factor 11 has 4 variables contributing. These variables have scores greater than 0.30 ranging from 0.332 to 0.401.

For group 1, factor 12 has 2 variables contributing. The variables have a score greater than 0.30 and which are 0.309 and 0.366. For group 2 factor 12 also has 2 variables contributing. These variables have scores greater than 0.30 and are 0.331 to 0.336. And finally, for group 1, factor 13 has 3 variables contributing. The variables have a score greater than 0.30 and which are 0.307 and 0.366. For group 2 factor 13 has 1 variable contributing. This variable has a score greater than 0.30. It has a score of 380.

What do all these factor loadings mean to the study? It can be observed that the factors are complex with multiple factor loadings. This makes naming of the factors complex as well. Factors are only as good as the variables that produce them (Burns, 2008). Having over fifty variables contributing to it factor1 in both groups is the most complex of all. In order to make any meaningful analysis the researcher picks at most the top three factor loadings contributing to a factor as basis for naming the factor for all 13 factors under analysis. This is in line with Burns (2008), 'in more complex conditions the naming operation is more difficult and quite subjective, but generally a factor should be named on the basis of the variable which contribute the most to that factor.' Taking this into effect, table 4.2 shows factor grouping as per the results.

Although a couple of factors have elements of simplicity in the variables that significantly contribute to factor loading as per the category of maximum of three variables, most of the remaining factors are composed of complex contributing variables. In this regard, factors in this study will retain their names as factors 1 up to factor 13.

Figure: 4.2a

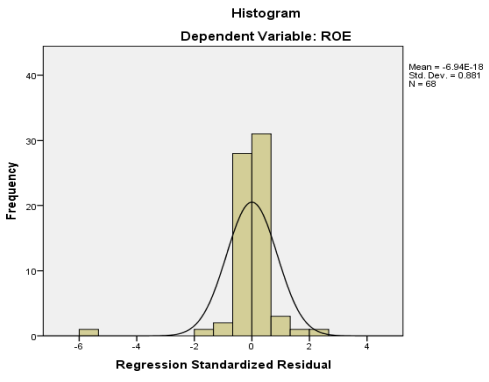
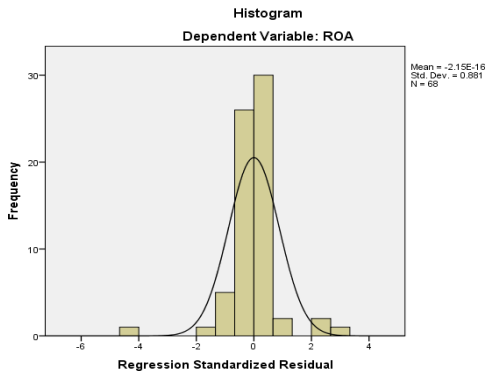
Group 1: Before Transformation	Group 2: After Transformation
	

Figure: 4.2b

Group 1: Before Transformation	Group 2: After Transformation

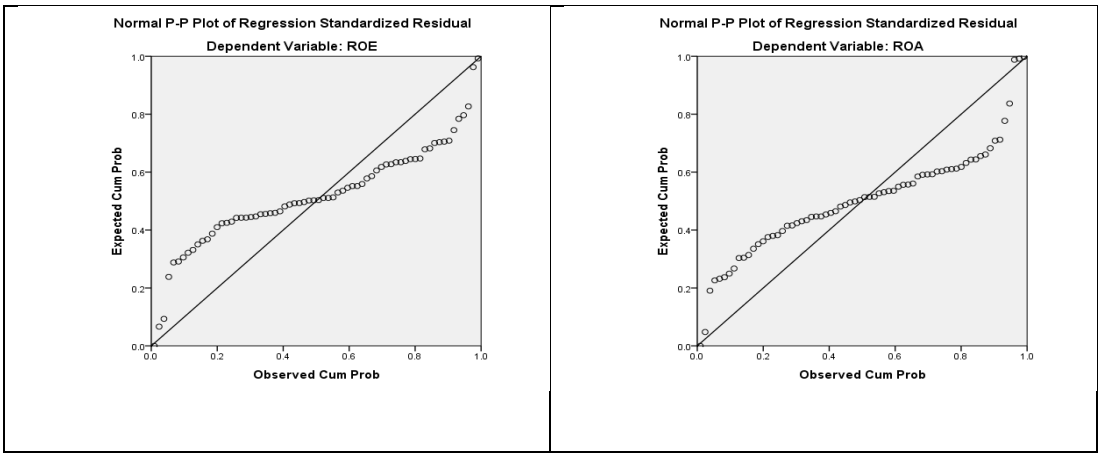
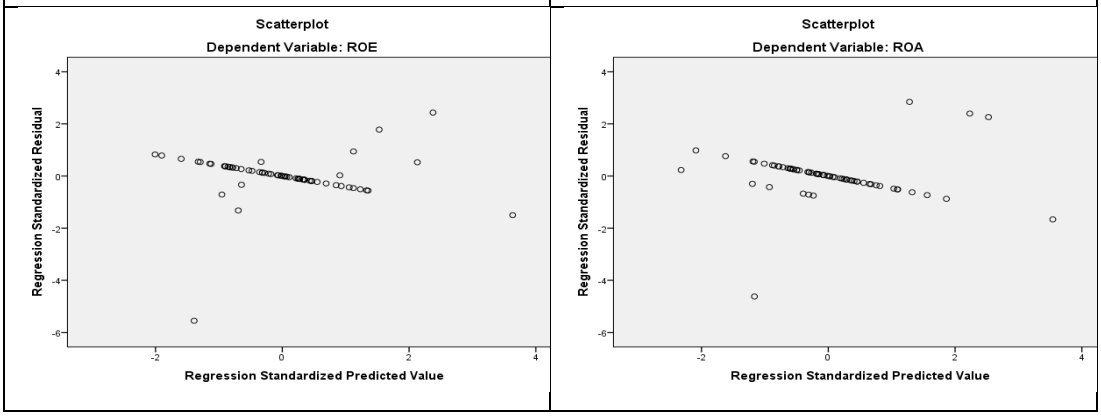


Figure: 4.2c

Group 1: Before Transformation	Group 2: After Transformation



4.3 Validity and reliability of factor analysis:

With regards to validity and reliability, factor analysis relies on some underlying assumptions. According to Massey (2019) these assumptions can be classified into three. The first assumption is that each variable is normally distributed and do not have covariances. The second assumption is that the overall factor is not explained by variables having relationships with each other and that the sample is adequate for factor analysis.

To test whether the data in this study holds for the assumptions the data was put through some tests. Testing the first assumption of whether the data is normally distributed and does not have any covariances the study used Bartlett's test of

sphericity. Results for this test can be seen under table 4.2 showing less than 0.05 for both group 1 and group 2 providing evidence that the data is normally distributed. This is collaborated with the histogram on figure 4.2a which also shows that the data is normally distributed.

The second assumption was tested by examining the correlation coefficient to ensure that the validity do not have relationship with each other. Data shows that there are no variables that are highly correlated with one another. The data therefore fulfilled the second assumption.

The third assumption was examined using Kaiser Meyer-Oklin (KMO) Test. The KMO which indicates whether the sample is adequate for factor analysis has values that range from 0 to 1. It means that the proportion of the variance is within variables that may have the same variance. A lower proportion means that the more one can interpret the data to be suitable for factor analysis. Stephanie (2016) references Kaiser (1974) and Cerny & Kaiser (1977) in analysing KMO test. That a KMO test result of 0.00 to 0.49 is considered acceptable, 0.50 and 0.59 is considered miserable, 0.60 to 0.69 is considered mediocre, 0.70 to 0.79 is considered fiddling, 0.080 to 0.89 is meritorious and finally 0.90 to 1 is considered marvelous.

Table 4.2 KMO and Bartlett's Test

		Group 1: Before Transformation	**Group 2: After Transformation**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.563	.411
Bartlett's Test of Sphericity	Approx. Chi-Square	4259.917	4585.708
	df	1891	1891
	Sig.	.000	.000

Table 4.3 KMO and Bartlett's Test for the whole sample

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.860
Bartlett's Test of Sphericity	Approx. Chi-Square	6570.472
	df	1953
	Sig.	0.000

Results of the study for KMO test as seen under table 4.2 were concerning. This research accounts these somewhat poor results to the splitting of the sample size into two groups. As is recalled, the total sample size of the study 134. This sample was split into two groups of 68 for group 1 which represents data before transformation and 66 which represents data after transformation. For group 1 the KMO results equal 0.563 which is between 0.50 and 0.59 which according to Kaiser (1974) is mediocre. Although the test is low this is the better of the two groups. Group 2 which has the smaller split sample 66 has a KMO test result of 0.411 which is between 0.00 to 0.4. This result is considered unacceptable according to Kaiser (1974). The researcher then resolved to carry out KMO test for the whole sample. This gave results presented on Table 4.3 showing a KMO result of 0.860 which is in the 0.080 to 0.89 range that represent that the data is meritorious.

It was surprising that the factor results were not significantly different between the split sample and the full sample factor analysis. Although the KMO result for group 2 in the split sample was of an unacceptable level, the results were not that much significantly different to the other samples that is group 1 and all sample of 134. Taking this into consideration and that the Bartlett's test and coefficient covariance results were at acceptable levels for both group 1 and 2 factor analysis, the researcher decided to proceed with the regression of factors against financial indicators.

According to Massey (2019) another important assumption is that all wording in each statement of the component should be measuring the same concept and are consistent in their wording. Looking at the wording of the statements of the components this assumption has been fulfilled.

In addition to the above assumptions inherent in the factor analysis, a separate reliability test was carried out using Cronbach's Alpha for each split sample. The results are presented on tables 4.4 and 4.5 the constructs Cronbach's Alpha where above the recommended level of 0.70 (Hair *et al*, 2010). This is demonstrated internal validity and convergent validity of the components within each brand equity dimension.

Table 4.4: Reliability Statistics for Group 1		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.920	.910	67

Table 4.5: Reliability Statistics for Group 2		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.962	63

4.4 Results of Relationship Between Firm Financial Performance and Brand Equity

Having analysed and put together a set of factors from the factor analysis, these factors where then put through regression against dependent variables ROA, ROE, LDR and CIR. Using the simplified factors, the study was able to derive data that will enable hypothesis testing in gauging the relationship between brand equity dimensions and firm financial performance indicators. The results from factor analysis produced insignificant regression results. Researcher suspected that this may be due to presence of weak or redundant variables within the brand equity dimensions.

To carry out regression and to ensure that only valuable variables are included, a stepwise regression was used to study the relationship between firm financial permanence and customer-based brand equity dimensions. In this study the customer-based brand equity constructs contain several potential discriminating variables. It is not possible to determine which of these variables are valuable and necessary for this study. Seeing that there are no theoretical reasons to keep all variables in the regression, the use of stepwise regression has been selected to eliminate weak or redundant variables. Stepwise regression includes only useful discriminating variables. ‘Stepwise procedures produce an optimal set of discriminating variables,’ (Klecka, 1980). The results are presented on the following tables.

4.4.1 ROA and Group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.6: Model Summary for ROA and Group 1 Brand Equity Variables				
Model		R Square	Adjusted R Square	Std. Error of the Estimate
1	.768[a]	.590	.539	.004294
2	.951[b]	.905	.877	.002214
a. Predictors: (Constant), BF6				
b. Predictors: (Constant), BF6, BA3				
c. Dependent Variable: ROA				

Table 4.6 shows the model summary of the regression of ROA against group 1 brand equity variables. The results showed that model 1 included BF6. Model 2 added BA3 to BF6. All the other variables were removed.

R represent the multiple correlation of one dependent variable with a combination of multiple predictor or independent variables (Burns, 2008). In this case R represents the correlation of ROA with a combination of group 1 brand equity variables. R enables determination of statistical significance of both overall multiple correlation coefficient R as well as each beta (b) separately. For Model 1, the results show an R value of +0.768. +0.539 is the adjusted R^2 which indicates that 53.9% of the variations in ROA is explained by the variations in BF6.

When BA3 was added on the next step results show an R value of + 0.951. +0.905 is the adjusted R^2 which indicates that 90.5% of the variations in ROA is explained by the variations in BF6 and BA3. This means that BA3 accounts for an extra 36.6% i.e. 90.5% - 53.9% = 36.6% of the variations. 'The R^2 is often interpreted as a measure of the quality of a multiple regression analysis or the theory that motivates it,' (Stolzenberg, 2011). In both models values of R^2 and adjusted R^2 are very close. For both models there is a small dip between R^2 and adjusted R^2 showing that if the

sample was derived from the population instead of the sample there would be a 0.051 and 0.028 less for model 1 and 2, respectively.

Table 4.7: ANOVA[a] for ROA and Group 1 Brand Equity Variables						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	11.520	.009[b]
	Residual	.000	8	.000		
	Total	.000	9			
2	Regression	.000	2	.000	33.232	.000[c]
	Residual	.000	7	.000		
	Total	.000	9			
a. Dependent Variable: ROA						
b. Predictors: (Constant), BF6						
c. Predictors: (Constant), BF6, BA3						

Table 4.7 show ANOVA results for ROA and group 1 brand equity variables. ANOVA tests the statistical significance of the model. p values indicate whether there is a relationship between an independent variable and a dependent variable (Spiegier & Smith, 2019). According to Burns (2008) should a regression result show F with a p value greater than 0.05 meaning that F is not significant. If F is not significant then the regression as a whole has failed and no more interpretation is necessary. Using alpha=0.05 ANOVA results on table 4.7 show that model 1 is not significant with an $F(1,8) = 11.520$, $p > .001$, $R^2 = 0.590$ and model 2 is significant $F(2,7) = 33.232$, $p < .001$, $R^2 = 0.905$ With only model 2 being significant we can proceed with its interpretation and discard model 1.

Table 4.8 Coefficients for ROA and Group 1 Brand Equity Variables								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.051	.006		8.730	.000	.038	.065
	BF6	-.006	.002	-.768	-3.394	.009	-.010	-.002
2	(Constant)	.024	.006		3.802	.007	.009	.040
	BF6	-.005	.001	-.674	-5.693	.001	-.007	-.003
	BA3	.006	.001	.569	4.807	.002	.003	.009
a. Dependent Variable: ROA								

Table 4.8 shows the Coefficients for ROA and Group 1 Brand Equity Variables which are the model parameters. It displays the values for constant and beta that can be used to derive the regression equation. For model 2 the constant b_0 is 0.024 and b_1 for BF6 is -0.005 whereas b_1 for BA3 is +0.006. The b_1 value being -0.005 and +0.006 shows us that the relationship between ROA and BF6 is negative whereas the relationship between ROA and BA3 is positive. The standard error shows what extent the b value will vary across different samples. The standard error can also reveal whether the b value is significantly different from zero. The t-test can establish this. The b value is significant if it is less than the significant value in the column marked Sig. is less than the 0.05. If it is significant it means that the independent variable is making a significant contribution to the model. The smaller the value of Sig. combined with a larger value of *t* the greater the contribution of the independent variable. In the case of model 2 BF6 , t (2.365)= -5.693, $p < 0.05$ and BA3 , t (2.365) = 4.807, $p < 0.05$. We can say that BF6 has more impact on than BA3. This can then provide us with a model ROA=.024 + -0.673BF6 + ε eliminating all other independent variables from the equation.

4.4.2 ROA and Group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.9: Model Summary[e] for ROA and Group 2 Brand Equity Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710[a]	.504	.442	.004724
2	.950[b]	.903	.875	.002237
3	.979[c]	.959	.939	.001564
4	.997[d]	.993	.988	.000706

a. Predictors: (Constant), WP1

b. Predictors: (Constant), WP1, BA2

c. Predictors: (Constant), WP1, BA2, BI2

d. Predictors: (Constant), WP1, BA2, BI2, WOM4

e. Dependent Variable: ROA

The results for model summary of regression of ROA against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables show four models derived from the stepwise regression. The R value for model 1,2,3 and 4 are +0.710, +0.950, +0.979 and +0.997, respectively. Consequently, the adjusted R^2 are +0.442, +0.875, +0.939, and +988, respectively. Model 4 has included the best variables that contribute to the model representing the relationship between ROA against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice and these variables are WPI, BA2, BI2 and WOM4. In terms of p value model 4 is significant compared to others as it has a p value less than the critical value 0.05.

Table 4.10: ANOVA for ROA and Group 2 Brand Equity Variables						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	8.132	.021[b]
	Residual	.000	8	.000		
	Total	.000	9			
2	Regression	.000	2	.000	32.458	.000[c]
	Residual	.000	7	.000		
	Total	.000	9			
3	Regression	.000	3	.000	47.056	.000[d]
	Residual	.000	6	.000		
	Total	.000	9			
4	Regression	.000	4	.000	179.215	.000[e]
	Residual	.000	5	.000		
	Total	.000	9			
a. Dependent Variable: ROA						
b. Predictors: (Constant), WP1						
c. Predictors: (Constant), WP1, BA2						
d. Predictors: (Constant), WP1, BA2, BI2						
e. Predictors: (Constant), WP1, BA2, BI2, WOM4						

Using alpha=0.05 ANOVA results on table 4.10 show that model 4 is significant with an $F(4,5) = 179.215$, $p < .05$, $R^2 = 0.993$.

Table 4.11: Coefficients for ROA and Group 2 Brand Equity Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.022	.004		5.682	.000	.013	.031
	WP1	.003	.001	.710	2.852	.021	.001	.006
2	(Constant)	.047	.005		9.356	.000	.035	.059
	WP1	.004	.001	.909	7.351	.000	.003	.006
	BA2	-.007	.001	-.662	-5.354	.001	-.010	-.004
3	(Constant)	.055	.005		12.183	.000	.044	.066
	WP1	.004	.000	.803	8.551	.000	.003	.005
	BA2	-.007	.001	-.734	-8.158	.000	-.010	-.005
	BI2	-.002	.001	-.278	-2.885	.028	-.003	-.000
4	(Constant)	.061	.002		25.593	.000	.055	.067
	WP1	.004	.000	.761	17.617	.000	.003	.004
	BA2	-.007	.000	-.746	-18.327	.000	-.009	-.006
	BI2	-.002	.000	-.325	-7.290	.001	-.003	-.001
	WOM4	-.001	.000	-.190	-4.943	.004	-.002	-.001

a. Dependent Variable: ROA

From table 4.11 we can say that WP1 has less impact on than other three predictors. This can then provide us with a model ROA=.061 + 0.04WP1+ -0.007BA2 + -0.002BI2 + -0.001WOM4 + ε eliminating all other independent variables from the equation.

4.2.3 ROE and Group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.12: Model Summary for ROE and Group 1 Brand Equity Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792[a]	.627	.580	.034256
2	.891[b]	.793	.734	.027255
3	.960[c]	.922	.884	.018039
a. Predictors: (Constant), BF8				
b. Predictors: (Constant), BF8, BAS2				
c. Predictors: (Constant), BF8, BAS2, WOM2				
d. Dependent Variable: ROE				

The results for model summary of regression of ROE against group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables show three models derived from the stepwise regression. Model 3 has included the best variables that contribute to the model representing the relationship between ROE against group 1 Customer Based Brand Equity and Consumer Behaviour and Choice and these variables are BF8, BAS2 and WOM2. In terms of p value model 4 is significant as it has a p value less than the critical value 0.05.

Using alpha=0.05 ANOVA results on table 4.13 show that model 4 is significant with an $F(3,6) = 23.774$, $p < .05$, $R^2 = 0.922$.

For model 3 on table 4.14 we can say that all the predictor variables in this model have impact. This can then provide us with a model ROE=0.700 + -0.049BF8+ -0.046BAS2 +-0.049WOM2 + ε eliminating all other independent variables from the equation.

Table 4.13: ANOVA [for] ROE and Group 1 Brand Equity Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.016	1	.016	13.441	.006[b]
	Residual	.009	8	.001		
	Total	.025	9			
2	Regression	.020	2	.010	13.435	.004[c]
	Residual	.005	7	.001		
	Total	.025	9			
3	Regression	.023	3	.008	23.774	.001[d]
	Residual	.002	6	.000		
	Total	.025	9			

a. Dependent Variable: ROE

b. Predictors: (Constant), BF8

c. Predictors: (Constant), BF8, BAS2

d. Predictors: (Constant), BF8, BAS2, WOM2

Table 4.14: Coefficients[a] for ROA and Group 1 Brand Equity Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.407	.046		8.806	.000	.300	.513
	BF8	-.057	.015	-.792	-3.666	.006	-.092	-.021
2	(Constant)	.480	.048		9.994	.000	.366	.594
	BF8	-.050	.013	-.698	-3.957	.005	-.080	-.020
	BAS2	-.030	.013	-.419	-2.374	.049	-.060	-.000
3	(Constant)	.700	.076		9.150	.000	.513	.887
	BF8	-.049	.008	-.686	-5.879	.001	-.070	-.029
	BAS2	-.046	.010	-.646	-4.712	.003	-.070	-.022
	WOM2	-.046	.015	-.424	-3.159	.020	-.082	-.010

a. Dependent Variable: ROE

4.4.4 ROE and Group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.15: Model Summary for ROE and Group 2 Brand Equity Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848[a]	.718	.683	.029762
a. Predictors: (Constant), BAS6				
b. Dependent Variable: ROE				

The results for model summary of regression of ROE against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables on Table 4.15 show one predictor variable, BAS6. This predictor has an R Value of +0.848. +683 is the adjusted R^2 which indicates that 68.3% of the variations in ROE is explained by the variations in the predictor variable BAS6.

Table 4.16: ANOVA for ROE and Group 2 Brand Equity Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	20.404	.002[b]
	Residual	.007	8	.001		
	Total	.025	9			
a. Dependent Variable: ROE						
b. Predictors: (Constant), BAS6						

Using alpha=0.05 ANOVA results on table 4.16 show that model 1 is significant with an $F(1,8) = 20.404$, $p < .05$, $R^2 = 0.718$.

Table 4.17: Coefficients for ROA and Group 1 Brand Equity Variables								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.024	.049		.490	.637	-.089	.137
	BAS6	.064	.014	.848	4.517	.002	.031	.097
a. Dependent Variable: ROE								

For model 1 on table 4.17 the constant b_0 is 0.024 and b_1 for BF8 is +0.64. For model 1 BAS6, t (12.706) = 4.517, $p < 0.05$ therefore it can be said that all the predictor variables in this model have impact. This can then provide us with a model ROE=0.024 + 0.064BAS6 + ε eliminating all other independent variables from the equation.

4.4.5 LDR and Group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.18: Model Summary for LDR and Group 1 Brand Equity Variables				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722[a]	.521	.461	.051213
2	.881[b]	.776	.712	.037458
a. Predictors: (Constant), BAS3				
b. Predictors: (Constant), BAS3, BA3				
c. Dependent Variable: LDR				

The results for model summary of regression of LDR against group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables on table 4.18 show two models derived from the stepwise regression. The R value for model 1 and 2 + 0.792, +0.722 and +0.881, respectively. Consequently, the adjusted R^2 are +0.461 and +712, respectively. Model 2 has included the best variables that contribute to the model representing the relationship between LDR against group 1 Customer Based Brand Equity and Consumer Behaviour and Choice and these

variables are BAS3 and BA3. In terms of p value model 2 is significant as it has a p value less than the critical value 0.05.

Table 4.19: ANOVA for LDR and Group 1 Brand Equity Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.023	1	.023	8.700	.018[b]
	Residual	.021	8	.003		
	Total	.044	9			
2	Regression	.034	2	.017	12.108	.005[c]
	Residual	.010	7	.001		
	Total	.044	9			

a. Dependent Variable: LDR

b. Predictors: (Constant), BAS3

c. Predictors: (Constant), BAS3, BA3

Using alpha=0.05 ANOVA results on table 4.19 show that model 2 is significant with an $F(2,7) = 12.108$, $p < .05$, $R^2 = 0.718$.

Table 4.20: Coefficients for LDR and Group 1 Brand Equity Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.448	.065		6.916	.000	.299	.597
	BAS3	.062	.021	.722	2.949	.018	.013	.110
2	(Constant)	.167	.110		1.512	.174	-.094	.428
	BAS3	.072	.016	.846	4.591	.003	.035	.110
	BA3	.064	.023	.520	2.820	.026	.010	.117

a. Dependent Variable: LDR

For model 2 on table 4.20 the constant b_0 is 0.167 and b_1 for BAS3 is +0.072 and for BA3 b_2 is +0.064. For model 2 BAS3, t (2.365) = 4.591, $p < 0.05$ and BA3, t (2.365) = 2.820, $p < 0.05$. This can then provide us with a model LDR=0.167 + 0.072BAS3 +0.064BA3 + ε eliminating all other independent variables from the equation.

4.4.6 LDR and Group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

The results for model summary of regression of LDR against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables on Table 4.21 presents 9 models. Of all the model model 8 includes the most relevant predictor variables. This means that LDR is significantly explained by group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables.

Although model 8 showed more significance under model summary, ANOVA revealed that model 8 does not have any p-values to affirm its significance. In that regard model 7 has been selected as the model with the most relevant variables. Using alpha=0.05 ANOVA results on table 4.22 show that model 7 is significant with an $F(7,2) = 2089987.081$, $p < .05$, $R^2 = 1.000$.

Table 4.21: Model Summary[d] for LDR and Group 2 Brand Equity Variables				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.647[a]	.419	.346	.056409
2	.876[b]	.767	.701	.038150
3	.970[c]	.941	.911	.020795
4	.995[d]	.991	.983	.009010
5	1.000[e]	.999	.998	.002758
6	1.000[f]	1.000	1.000	.000677
7	1.000[g]	1.000	1.000	.000055
8	1.000[h]	1.000	1.000	.000000
9	1.000[i]	1.000		
a. Predictors: (Constant), BF4				
b. Predictors: (Constant), BF4, CL1				
c. Predictors: (Constant), BF4, CL1, WOM1				
d. Predictors: (Constant), BF4, CL1, WOM1, BA6				
e. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1				
f. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4				
g. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1				
h. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1, BF7				
i. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1, BF7, ICS3				
j. Dependent Variable: LDR				

Table 4.22: ANOVA for LDR and Group 2 Brand Equity Variables						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	5.765	.043[b]
	Residual	.025	8	.003		
	Total	.044	9			
2	Regression	.034	2	.017	11.547	.006[c]
	Residual	.010	7	.001		
	Total	.044	9			
3	Regression	.041	3	.014	31.762	.000[d]
	Residual	.003	6	.000		
	Total	.044	9			
4	Regression	.043	4	.011	133.630	.000[e]
	Residual	.000	5	.000		
	Total	.044	9			
5	Regression	.044	5	.009	1150.858	.000[f]
	Residual	.000	4	.000		
	Total	.044	9			
6	Regression	.044	6	.007	15912.388	.000[g]
	Residual	.000	3	.000		
	Total	.044	9			
7	Regression	.044	7	.006	2089987.081	.000[h]
	Residual	.000	2	.000		
	Total	.044	9			
8	Regression	.044	8	.005		.[i]
	Residual	.000	1	.000		
	Total	.044	9			
9	Regression	.044	9	.005		.[j]
	Residual	.000	0			
	Total	.044	9			
a. Dependent Variable: LDR						
b. Predictors: (Constant), BF4						
c. Predictors: (Constant), BF4, CL1						
d. Predictors: (Constant), BF4, CL1, WOM1						
e. Predictors: (Constant), BF4, CL1, WOM1, BA6						

f. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1
g. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4
h. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1
i. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1, BF7
j. Predictors: (Constant), BF4, CL1, WOM1, BA6, CO1, BA4, WP1, BF7, ICS3

Table 4.23: Coefficients[a] for LDR and Group 2 Brand Equity Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.531	.046		11.554	.000	.425	.637
	BF4	.035	.015	.647	2.401	.043	.001	.069
2	(Constant)	.527	.031		16.922	.000	.453	.600
	BF4	.091	.020	1.670	4.580	.003	.044	.137
	CL1	-.056	.017	-1.181	-3.239	.014	-.097	-.015
3	(Constant)	.463	.023		20.322	.000	.407	.519
	BF4	.100	.011	1.846	9.089	.000	.073	.127
	CL1	-.073	.010	-1.551	-7.132	.000	-.098	-.048
	WOM1	.031	.008	.478	4.190	.006	.013	.050
4	(Constant)	.568	.022		25.269	.000	.510	.626
	BF4	.098	.005	1.810	20.498	.000	.086	.110
	CL1	-.065	.005	-1.369	-13.605	.000	-.077	-.052
	WOM1	.029	.003	.443	8.874	.000	.021	.038
	BA6	-.027	.005	-.263	-5.192	.003	-.041	-.014
5	(Constant)	.572	.007		82.851	.000	.553	.591
	BF4	.096	.001	1.774	64.448	.000	.092	.100
	CL1	-.063	.001	-1.324	-42.147	.000	-.067	-.058
	WOM1	.027	.001	.406	25.207	.000	.024	.030
	BA6	-.032	.002	-.312	-18.353	.000	-.037	-.027
	CO1	.007	.001	.109	7.026	.002	.004	.010
6	(Constant)	.563	.002		279.768	.000	.557	.570
	BF4	.094	.000	1.732	203.349	.000	.092	.095
	CL1	-.062	.000	-1.309	-164.245	.000	-.063	-.061

	WOM1	.027	.000	.417	99.970	.000	.027	.028
	BA6	-.036	.001	-.344	-59.514	.000	-.037	-.034
	CO1	.009	.000	.138	26.317	.000	.008	.010
	BA4	.005	.001	.053	7.958	.004	.003	.007
7	(Constant)	.567	.000		2387.670	.000	.566	.568
	BF4	.093	.000	1.719	1825.765	.000	.093	.093
	CL1	-.062	.000	-1.304	-1935.694	.000	-.062	-.062
	WOM1	.027	.000	.412	1017.461	.000	.027	.027
	BA6	-.037	.000	-.359	-417.978	.000	-.038	-.037
		Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**	**95.0% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
	CO1	.009	.000	.141	312.828	.000	.009	.009
	BA4	.006	.000	.058	98.787	.000	.006	.006
	WP1	.001	.000	.019	21.394	.002	.001	.001
8	(Constant)	.567	.000		16212789.074	.000	.567	.567
	BF4	.093	.000	1.719	17664792.335	.000	.093	.093
	CL1	-.062	.000	-1.303	-11634133.446	.000	-.062	-.062
	WOM1	.027	.000	.412	8558003.897	.000	.027	.027
	BA6	-.037	.000	-.360	-3961572.842	.000	-.037	-.037
	CO1	.009	.000	.140	215051	.000	.009	.009

					4.449			
	BA4	.006	.000	.058	995066.684	.000	.006	.006
	WP1	.001	.000	.020	188000.992	.000	.001	.001
	BF7	-.000	.000	-.002	-14247.871	.000	-.000	-.000
9	(Constant)	.567	0.000				.567	.567
	BF4	.093	0.000	1.719			.093	.093
	CL1	-.062	0.000	-1.303			-.062	-.062
	WOM1	.027	0.000	.412			.027	.027
	BA6	-.037	0.000	-.360			-.037	-.037
	CO1	.009	0.000	.140			.009	.009
	BA4	.006	0.000	.058			.006	.006
	WP1	.001	0.000	.020			.001	.001
	BF7	-.000	0.000	-.002			-.000	-.000
	ICS3	2.241E-13	0.000	.000			.000	.000
a. Dependent Variable: LDR								

From model summary and ANOVA on tables 4.21 model 7 is the model of interest. For model 7 on table 4.23 the constant b_0 is 0.567 and b_1 for BF4 is +0.093, b_2 for CL1 is +0.062, b_3 for WOM1 is +0.027, b_4 for BA6 is -0.37, b_5 for CO1 is +0.009, b_6 for BA4 is +0.006 and for WP1 b_7 is +0.001. For model 7 BF4, t (2.365) = 1825.765, $p < 0.05$; CL1, t (2.365) =-1935.694, $p < 0.05$; WOM1, t (2.365) =1017.461, $p < 0.05$; BA6, t (2.365) = -417.978, $p < 0.05$; CO1, t (2.365) = 312.828, $p < 0.05$; BA4, t (2.365) = 98.787, $p < 0.05$; and WP1, t (2.365) = 21.394, $p < 0.05$. This can then provide us with a model LDR= 0.567 + 0.093BF4 + -0.063CL1 + 0.027WOM1 + -0.37BA6 + 0.009CO1 + 0.006BA4 + 0.001WP1 + ε eliminating all other independent variables from the equation.

4.4.7 CIR and Group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.24: Model Summary for CIR and Group 1 Brand Equity Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767[a]	.588	.537	.038658
2	.937[b]	.878	.843	.022474
3	.980[c]	.961	.942	.013716
4	.993[d]	.986	.974	.009082
5	.999[e]	.997	.993	.004638
6	1.000[f]	1.000	.999	.002081
7	1.000[g]	1.000	1.000	0.000000

a. Predictors: (Constant), BAS6

b. Predictors: (Constant), BAS6, WOM2

c. Predictors: (Constant), BAS6, WOM2, BA1

d. Predictors: (Constant), BAS6, WOM2, BA1, BF7

e. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4

f. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4, CO1

g. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4, CO1, BAS2

h. Dependent Variable: CIR

The results for model summary of regression of CIR against group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables show seven models derived from the stepwise regression. Model 7 has included the best variables that contribute to the model representing the relationship between CIR against group 1 group 1 Customer Based Brand Equity and Consumer Behaviour and Choice Variables are BAS6, WOM2, BA1, BF7, WOM4, CO1 and BAS2. In terms of p value model 7 is significant as it has a p value less than the critical value 0.05.

Table 4.25: ANOVA for CIR and Group 1 Brand Equity Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.017	1	.017	11.432	.010[b]
	Residual	.012	8	.001		
	Total	.029	9			
2	Regression	.026	2	.013	25.247	.001[c]
	Residual	.004	7	.001		
	Total	.029	9			
3	Regression	.028	3	.009	49.452	.000[d]
	Residual	.001	6	.000		
	Total	.029	9			
4	Regression	.029	4	.007	86.772	.000[e]
	Residual	.000	5	.000		
	Total	.029	9			
5	Regression	.029	5	.006	269.183	.000[f]
	Residual	.000	4	.000		
	Total	.029	9			
6	Regression	.029	6	.005	1116.836	.000[g]
	Residual	.000	3	.000		
	Total	.029	9			
7	Regression	.029	7	.004		.000[h]
	Residual	0.000	2	0.000		
	Total	.029	9			

a. Dependent Variable: CIR

b. Predictors: (Constant), BAS6

c. Predictors: (Constant), BAS6, WOM2

d. Predictors: (Constant), BAS6, WOM2, BA1

e. Predictors: (Constant), BAS6, WOM2, BA1, BF7

f. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4

g. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4, CO1

h. Predictors: (Constant), BAS6, WOM2, BA1, BF7, WOM4, CO1, BAS2

Although model 7 showed more significance under model summary, ANOVA revealed that model 7 does not have any p values to affirm its significance. In that regard model 6 has been selected as the next best model with the most relevant

variables. Using α=0.05 ANOVA results on table 4.25 show that model 6 is significant with an F(6,3) =1116.835, $p < .05$, $R^2 = 0.999$.

Table 4.26: Coefficients for CIR and Group 1 Brand Equity Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.346	.066		5.209	.001	.193	.499
	BAS6	.069	.020	.767	3.381	.010	.022	.116
2	(Constant)	-.018	.097		-.188	.857	-.248	.211
	BAS6	.098	.014	1.086	7.084	.000	.065	.130
	WOM2	.074	.018	.626	4.083	.005	.031	.116
3	(Constant)	-.246	.087		-2.829	.030	-.459	-.033
	BAS6	.115	.010	1.285	11.801	.000	.091	.139
	WOM2	.096	.013	.814	7.584	.000	.065	.127
	BA1	.024	.007	.346	3.577	.012	.008	.040
4	(Constant)	-.242	.058		-4.198	.009	-.390	-.094
	BAS6	.105	.007	1.171	14.321	.000	.086	.124
	WOM2	.097	.008	.821	11.545	.000	.075	.118
	BA1	.023	.004	.329	5.115	.004	.011	.034
	BF7	.011	.004	.194	2.947	.032	.001	.020
5	(Constant)	-.317	.035		-9.010	.001	-.415	-.219
	BAS6	.111	.004	1.237	27.443	.000	.100	.122
	WOM2	.103	.005	.877	22.452	.000	.090	.116
	BA1	.026	.002	.370	10.724	.000	.019	.032
	BF7	.011	.002	.199	5.905	.004	.006	.016
	WOM4	.007	.002	.118	3.895	.018	.002	.011
6	(Constant)	-.306	.016		-19.104	.000	-.357	-.255
	BAS6	.108	.002	1.205	55.518	.000	.102	.114
	WOM2	.106	.002	.898	49.219	.000	.099	.112
	BA1	.024	.001	.343	20.491	.000	.020	.027
	BF7	.013	.001	.237	13.365	.001	.010	.016
	WOM4	.006	.001	.111	8.041	.004	.004	.009
	CO1	-.004	.001	-.069	-4.107	.026	-.008	-.001
7	(Constant)	-.293	0.000				-.293	-.293
	BAS6	.090	0.000	1.002			.090	.090
	WOM2	.110	0.000	.935			.110	.110
	BA1	.020	0.000	.290			.020	.020
	BF7	.017	0.000	.303			.017	.017
	WOM4	.007	0.000	.121			.007	.007
	CO1	-.010	0.000	-.154			-.010	-.010
	BAS2	.013	0.000	.173			.013	.013

a. Dependent Variable: CIR

From model summary and ANOVA on tables 4.26 model 6 is the model of interest. For model 6 on table 4.26 the constant b_0 is -0.304 and b_1 for BAS6 is +0.108, b_2 for WOM2 is +0.106, b_3 for BA1 is +0.024, b_4 for BF7 is +0.013, b_5 for WOM4 is +0.006, and b_6 for CO1 is -0.004. For model 6 BAS6, *t* (2.447) = 55.518, $p < 0.05$; WOM1, *t* (2.447) = 49.219, $p < 0.05$; BA1, *t* (2.447) = 20.491, $p < 0.05$; BF7, *t* (2.447) = 13.365, $p < 0.05$; WOM4, *t* (2.447) = 8.041, $p < 0.05$; and CO1, *t* (2.447) = -4.107, $p < 0.05$. This can then provide us with a model CIR = -0.306 + 0.108BAS6 +0.1064WOM2 + 0.024BA1 + BF70.013 + 0.006WOM4 + -0.004CO1 + ε eliminating all other independent variables from the equation.

4.4.8 CIR and Group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables

Table 4.27: Model Summary for CIR and Group 2 Brand Equity Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793[a]	.628	.582	.036732
2	.903[b]	.815	.762	.027737
3	.958[c]	.918	.878	.019865

a. Predictors: (Constant), CL2

b. Predictors: (Constant), CL2, BF1

c. Predictors: (Constant), CL2, BF1, WOM4

d. Dependent Variable: CIR

The results for model summary of regression of CIR against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice Variables on table 4.27 show two models derived from the stepwise regression. The R value for model 1, 2 and 3 are +0.793, +0.903 and +0.958, respectively. Consequently, the adjusted R^2 are +0.582, +762 and +878, respectively. Model 3 has included the best variables that contribute to the model representing the relationship between CIR against group 2 Customer Based Brand Equity and Consumer Behaviour and Choice and these variables are CL2, BF1 and WOM4. In terms of *p* value model 3 is significant as it has a *p* value less than the critical value 0.05.

Table 4.28: ANOVA for CIR and Group 2 Brand Equity Variables						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	13.523	.006[b]
	Residual	.011	8	.001		
	Total	.029	9			
2	Regression	.024	2	.012	15.373	.003[c]
	Residual	.005	7	.001		
	Total	.029	9			
3	Regression	.027	3	.009	22.530	.001[d]
	Residual	.002	6	.000		
	Total	.029	9			
a. Dependent Variable: CIR						
b. Predictors: (Constant), CL2						
c. Predictors: (Constant), CL2, BF1						
d. Predictors: (Constant), CL2, BF1, WOM4						

Using alpha=0.05 ANOVA results on table 4.28 show that model 3 is significant with an $F(3,6) = 22.530$, $p < .05$, $R^2 = 0.918$.

Table 4.29: Coefficients[a] for CIR and Group 2 Brand Equity Variables								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.691	.036		19.285	.000	.608	.773
	CL2	-.034	.009	-.793	-3.677	.006	-.055	-.013
2	(Constant)	.605	.042		14.366	.000	.505	.705
	CL2	-.041	.007	-.955	-5.492	.001	-.058	-.023
	BF1	.028	.010	.461	2.651	.033	.003	.053
3	(Constant)	.540	.038		14.120	.000	.446	.634
	CL2	-.043	.005	-1.013	-8.020	.000	-.056	-.030
	BF1	.029	.008	.482	3.859	.008	.011	.047
	WOM4	.019	.007	.327	2.765	.033	.002	.036
a. Dependent Variable: CIR								

For model 3 on table 4.8 the constant b_0 is 0.540 and b_1 for CL1 is -0.043, for BF1 b_2 is +0.029 and for WOM4 b_3 is +0.019. For model 3 CL2, t (2.447) = -8.020, $p < 0.05$, BF1, t (2.447) = 3.859, $p < 0.05$ and WOM4, t (2.447) = 2.765, $p < 0.05$. This can then provide us with a model CIR=0.540 + -0.043CL2 +0.029BF1 + 0.019WOM4 + ε eliminating all other independent variables from the equation.

4.5 Ratios at time t +1 and time t

Table 4.30: Firm financial performance time t and time t+1

	Time t					Time t+1				
Ratios	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ROA	4%	3%	3%	3%	3%	4%	4%	3%	3%	2%
ROE	35%	27%	23%	25%	27%	29%	27%	23%	20%	12%
LDR	61%	53%	55%	71%	57%	62%	66%	69%	74%	65%
CIR	50%	55%	60%	57%	55%	57%	53%	57%	59%	58%

4.6 Evaluation of Hypothesis Relationships

Table 4.31 enabled the researcher to carry out hypothesis testing. Hypothesis testing have been carried out as per the hypothesis set under Chapter II of this study.

Table 4.31: Summary of Model Results

Group 1: Before Transformation	**Group 2: After Transformation**
ROA=.024 + -0.673BF6 + ε ... (1a)	ROA=.061 + 0.04WP1+ -0.007BA2 + -0.002BI2 + -0.001WOM4 + ε …(1b)
ROE=0.700 + -0.049BF8+ -0.046BAS2 +-0.049WOM2 + ε …. (2a)	ROE=0.024 + 0.064BAS6 + ε …(2b)
LDR=0.167 + 0.072BAS3 +0.064BA3 + ε …(3a)	LDR= 0.567 + 0.093BF4 + 0.063CL1 + 0.027WOM1 + 0.37BA6 + 0.009CO1 + 0.006BA4 + 0.001WP1 + ε …(3b)
CIR=-0.306+0.108BAS6 +0.1064WOM2 + 0.024BA1 + 0.013BF7 + 0.006WOM4 + -0.004CO1 + ε …(4a)	CIR=0.540 + -0.043CL2 +0.029BF1 + 0.019WOM4 + ε …(4b)

H1: Ceteris paribus, brand awareness has weaker link with firm financial performance at time t+1 than time t.

As we have already mentioned, brand association is about how organisations strive to create favourable memories that are linked to the brand. The more the consumers associate with a brand the more strength the construct adds to the brand equity. On

Table 4.31 equation 3a and 4a show that brand awareness has significance for group 1: before transformation. Equation 3a shows that 6.4 percent of ROA is explains by BA3. Equation 4a shows that 2% of CIR is explained by BA1. On the other hand, for group 2, brand awareness also has some significance as shown on equation 1b and 3b. Equation 1b shows that 0.70% of ROA is explained by BA. Equation 3b shows that 37% of a reduction in LDR is explained by BA6. Equation 3b also shows that 0.6% variation of LDR is explained by BA4.

The findings have shown that there is higher significance of the effect of brand awareness component of brand equity for group 2: after transformation than for group 1: before transformation. This means that, ceteris paribus, brand awareness has stronger link with firm financial performance at time t+1 than time t. We, therefore, reject the null hypothesis and accept the alternative hypothesis that, ceteris paribus, brand awareness has stronger link with firm financial performance at time t+1 than time t.

H2: Ceteris paribus, brand association has weaker link with firm financial performance at time t+1 than time t.

We recall that perceived quality is also an important component of brand equity. A strong brand should have customers who perceive that the service is of high quality. A high performing company should have customers who regard the brand highly. For group 1: before transformation, Equation 2a and 3a on Table 4.31 show us that brand association has significance in the bank's ROE and LDR. Equation 2a on Table 4.31 shows us that BAS2 accounts for 4.6% of the fall in ROE. Equation 3a on Table 4.31 shows that BAS3 accounts for 7.2% of an increase in ROE. For group 2: after transformation 0.64% of an increase in ROE can be explained by BAS6.

The findings have shown that there is higher significance of the effect of brand association component of brand equity for group 1: before transformation than for group 2: after transformation. This means that ceteris paribus, brand association has weaker link with firm financial performance at time t+1 than time t. We, therefore,

cannot reject the null hypothesis. This means that findings show that ceteris paribus, brand association has weaker link with firm financial performance at time t+1 than time t.

H3: Ceteris paribus, perceived quality has weaker link with firm financial performance at time t+1 than time t.

Perceived quality is the general impression of the quality of a brand. It is the quality of the brand in the minds of the consumer. For group 1: before transformation and group 2: after transformation brand image component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.

The hypothesis can therefore not be tested.

H4: Ceteris paribus, brand image has weaker link with firm financial performance at time t+1 than time t.

Brand Image is the general impression of a brand. It is the image of the brand in the minds of the consumer. For group 1: before transformation brand image component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance. For group 2: after transformation brand equity has some significance. Equation 1b on table 4.31 shows that BI2 has a 0.2% significant in the fall of ROA.

The findings have shown that there is higher significance of the effect of brand image component of brand equity for group 2: after transformation than for group 1: before transformation. This means that, ceteris paribus, brand image has stronger link with firm financial performance at time t+1 than time t. We, therefore, reject the null hypothesis. This means that we accept the alternative hypothesis that ceteris paribus, brand image has stronger link with firm financial performance at time t+1 than time t.

H5: Ceteris paribus, brand fondness has weaker link with firm financial performance at time t+1 than time t.

Brand fondness is the attachment that the customer has to the brand. For group 1: before transformation brand fondness component of brand equity has significance to firm financial performance in the models for brand equity relationship to firm financial performance. Under table 4.31 equation 1a shows BF6 causes 67.3% negative variation in ROA. For equation 2a 4.9% of a reduction in ROE are explained by variations in BF8. For equation 4a 1.3% of an increase in CIR is explained by variations in BF7.

For group 2: after transformation brand fondness component of brand equity also has significance to firm financial performance in the models for brand equity relationship to firm financial performance. Table 4.31 shows that in equation 3a 9.3% of BF4 explains variations in LDR. And equation 4a shows that 2.9% of changes in CIR are explained by variations in BF1.

The findings have shown that there is higher significance of the effect of brand fondness component of brand equity for group 1: before transformation than for group 2: after transformation. This means that ceteris paribus, brand fondness has weaker link with firm financial performance at time t+1 than time t. We, therefore, accept the null hypothesis, that ceteris paribus, brand fondness has weaker link with firm financial performance at time t+1 than time t.

H6: Ceteris paribus, clarity has weaker link with firm financial performance at time t+1 than time t.

Brand clarity signals absence of ambiguity in the information conveyed by the brand's past and present matching mixed strategies and associated activities. For group 1: before transformation brand clarity component of brand equity have no significance to firm financial performance in the models for brand equity relationship

to firm financial performance. For group 2: after transformation brand clarity component of brand equity has significance to firm financial performance in the models for brand equity relationship to firm financial performance. Under table 4.31 equation 3b shows CL1explains 6.3% of variations in the bank's LDR. And in equation 4a it shows that of a fall in the banks CIR is explained by 4.3%.

The findings have shown that there is lower significance of the effect of brand clarity on component of brand equity for group 1: before transformation than for group 2: after transformation. This means that ceteris paribus, brand clarity has stronger link with firm financial performance at time t+1 than time t. We therefore reject the null hypothesis and accept the alternative hypothesis, that ceteris paribus, brand clarity has stronger link with firm financial performance at time t+1 than time t.

H7: Ceteris paribus, consistency has weaker link with firm financial performance at time t+1 than time t.

Brand consistency represents the degree to which each mix component reflects the intended whole. This includes a firm having a consistent marketing message overtime. It also embodies stability of the brand attributes over time. For group 1: before transformation brand consistency component of brand equity has less significance to firm financial performance in the models for brand equity relationship to firm financial performance compared to group 2: after transformation. Under table 4.31 equation 4a shows CO1 explains 0.04% of a fall in CIR. And that 0.09% of CO1 explains an increase in CIR in group 2: after transformation.

The findings have shown that there is lower significance of the effect of brand consistency on component of brand equity for group 1: before transformation compared to group 2: after transformation. This means that ceteris paribus, brand consistency has stronger link with firm financial performance at time t+1 than time t. We, therefore, reject the null hypothesis and accept the alternative hypothesis, that

ceteris paribus, brand consistency has stronger link with firm financial performance at time t+1 than time t.

H8: Ceteris paribus, credibility has weaker link with firm financial performance at time t+1 than time t.

Brand credibility represents a market signal conveying information effectively. It represents the underlying confidence in the brand by the consumers. For group 1: before transformation and group 2: after transformation brand credibility component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.
We therefore cannot test the hypothesis.

H9: Ceteris paribus, brand investment has weaker link with firm financial performance at time t+1 than time t.
Brand investments: stems from resources that the firm spends on their brand. Brand investment from the perception of the consumer can indicate brand strength or brand equity. For group 1: before transformation and group 2: after transformation brand investment component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.

We therefore cannot test the hypothesis.

H10: Ceteris paribus, perceived quality has weaker link with firm financial performance at time t+1 than time t.

Perceived quality stems from confidence in the brand and consumer perception of the firm that the firm is willing and able to offer the promised services. For group 1: before transformation and group 2: after transformation perceived quality component

of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.

We therefore cannot test the hypothesis.

H11: Ceteris paribus, information cost saved has weaker link with firm financial performance at time t+1 than time t.

Information cost saved: is when a brand influences the consumer's cost of gathering and processing information when making purchase decisions. There are numerous information gathering costs including time, money and psychological cost. For group 1: before transformation and group 2: after transformation brand information cost saved component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.

We therefore cannot test the hypothesis.

H12: Ceteris paribus, expected utility has weaker link with firm financial performance at time t+1 than time t.

Expected Utility is when the brand signal provides the consumer with a positive expected utility associated with the brand. For group 1: before transformation and group 2: after transformation brand expected utility component of brand equity has no significance to firm financial performance in the models for brand equity relationship to firm financial performance.

We therefore cannot test the hypothesis.

H13: Existence of strong brand equity has negative influence on consumer's willingness to pay for the bank services at time t+1 than time t.

For group 1: before transformation and group 2: after transformation willingness to pay component of consumer behaviour and choice have significance to firm financial performance in the models for brand equity relationship to firm financial performance. Table 4.31 shows that equation 1b shows that 4% of the bank's ROA is explained by variations in WP1. And that equation 3b shows that 0.1% of the bank's ROA is explained by variations in WP1.

The findings have shown that there is lower significance of the effect of willingness to pay on consumer behaviour and choice for group 1: before transformation compared to group 2: after transformation. This means that ceteris paribus, willingness to pay has stronger influence on firm financial performance at time t+1 than time t. We, therefore, reject the null hypothesis and accept the alternative hypothesis, that ceteris paribus, existence of strong brand equity has negative influence on consumer's willingness to pay for the bank services at time t+1 than time t.

H14: Existence of strong brand equity has negative influence on consumer's positive word of mouth regarding bank brand at time t+1 than time t.

For group 1: before transformation and group 2: after transformation word of mouth component of consumer behaviour and choice have significance to firm financial performance in the models for brand equity relationship to firm financial performance. For group 1: before transformation, table 4.31 shows that equation 2b shows that 4.9% of decrease in ROE are explained by variations in WOM2. Equation 4a on table 4.31 shows that 10.64% of increase in CIR are explained by variations in WOM2. And that equation 4a also shows that 0.6% of increase in CIR is also explained by variations in WOM4.

For group 2: after transformation, table 4.31 shows that equation 1b shows that 0.01% of decrease in ROA are explained by variations in WOM4. Equation 3b shows that 2.7% of increase in LDR are explained by variations in WOM1. And that equation 4b also shows that 1.9% of increase in CIR is also explained by variations in WOM4.

The findings have shown that there is higher significance of the effect of word of mouth on consumer behaviour and choice for group 1: before transformation compared to group 2: after transformation. This means that, ceteris paribus, word of mouth has weaker influence on firm financial performance at time t+1 than time t. We, therefore, fail to reject the null hypothesis that ceteris paribus, existence of strong brand equity has negative influence on consumer's positive word of mouth regarding bank brand at time t+1 than time t.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter carries discussions and interpretations of the findings from Chapter IV in light of previous literature. The main objective of the study was to test whether existence of strong brand equity connotes presence of good firm financial performance. It is also to explore the relevance of brand equity in influencing consumer behavior and choice towards a brand. This chapter is structures around the research questions. The brand dimensions will be discussed and interpreted in comparison with different time periods time t+1 and time t, in light of previous literature.

5.2 Discussion of findings

There are two primary research questions in this study. The first is, does strong brand equity mean presence of good firm financial performance? And the second one is, does brand equity have any relevance in influencing consumer behaviour and choice toward a brand? This study has attempted to answer these questions by setting hypotheses as listed in chapter II and as analysed in chapter V.

Table: 5.1: Summary of findings

	Group 1: Before Transformation	**Group 1: After Transformation**
Brand Awareness		Yes
Brand Association	Yes	
Perceived Quality	-	-
Brand Image		Yes
Brand Fondness	Yes	
Clarity		Yes
Consistency		Yes
Credibility	-	-
Brand Investment	-	-
Perceived Quality2	-	-
Information Cost Savings	-	-
Expected Utility	-	-
Willingness to Pay		Yes
Word of Mouth	Yes	

Findings show that brand equity dimensions in time t + 1 have more significance than in time t. From table4.30 of the findings, firm financial performance it can be seen that there is an overall decline in both ROA and ROE over the years. The bank has retained its average of ROA at time t and at time t+1 with both periods being 3.2%. This shows us that on average the bank earns 3.2% profit on the resources it owns. Average ROE at time t is 27.4% and at t +1 is 22.2%. A healthy ROE is at least 15%, so both periods have healthy ROE. ROE I, however, way above ROA indicating that the bank has taken debt.

The LDR has been steady over the years. An LDR of up to 90% is considered ideal. The bank's LDR is on an average of 59.4% at time t and 67.2% at time t + 1. LDR has therefore increased over the period, however, it remains below the ideal limit. Average CIR at time t is 55.4% and 56.8 at time t+1. This indicates that at time t the bank is spending an average of TZS0.554 to generate TZS 1. And at time t+1 the bank is spending TZS0.568 to generate TZS1. This shows a steady management of cost over the two periods.

So, what do the financial performance results mean for this study? The study has expected to find bank performance for time t to be worse off than time t+1. This has not been the case. In fact, there is a steady financial performance of the bank over the years. Although the average ROA is the same between period t and period t+1, actual figures over the ten yeas report a steady decline of ROA with 2017 being a record low of 2%. This, therefore, means that although the period with time t+1 recorded most significance of consumer-based brand equity, the firm's financial performance did not significantly surpass that of the previous period time t.

In the study the brand equity dimensions that showed most significance come from the cognitive behavioural perspective. These dimensions are brand association and brand fondness. These dimensions showed equal weight in significance. Others from this perspective include brand awareness and brand image. From the information economic perspective brand clarity and brand consistency showed significance in the relationship between consumer-based brand equity and firm financial performance.

So, how different were the findings compared to other studies. Narter (2018) found that brand equity does influence performance of retail banks. His findings showed that the model that had brand relevance, perceived quality, brand loyalty and brand association were all significant in projecting performance of retail banks. Brand likeability and firm financial performance relationship explored in his study also produced results showing a significance in their relationship. In fact, his results showed that brand likeability was a moderating variable in the relationship between

brand loyalty, perceived quality and brand reliance and how they relate to firm financial performance.

When comparing Narteh (2018) results to results of this study, indeed there is some similarity in that this study has also noted the significance of brand equity and firm financial performance relationships. The similarities is in that both studies found brand association to have significant relationship with firm financial performance. This study also found brand fondness, which Narter (2018) refers to as likeability to have significance in the relationship between brand equity and firm financial performance.

This is where the similarity ends. This study, unlike Narter (2018), found no significance in brand equity dimension perceived quality. In fact, both from cognitive psychology perspective and information economic perspective, this study found no significance in the relationship between perceived quality and firm financial performance.

Shmitz and Villasenor-Roman (2018) also found perceived quality to be of the most significant brand dimension in the relationship between brand equity and firm financial performance. In this study of the most significant in the relationship between brand equity and firm financial performance is brand association and brand fondness. They conclude that those firms that invest more in brand equity have string firm financial performance.

Rego (2015) results also found great significance in perceived value as a dimension of brand equity. Alavijehet *et al* (2018) found that where there is customer loyalty, (similar to brand fondness in this study) there is a positive word of mouth effect. This has also been true in this study for most of the models that contain word of mouth as a significant dimension. Equation 2a, 3b, 4a and 4b on table 4.31 all have both word of mouth and brand fondness. Equation 1a is the only variable where brand fondness exists without significance of the variable word of mouth.

Cobb-Walgren *et al* (2013) found that brands with higher brand equity had more significant wiliness to purchase results. This study shares this result in this result in that brand equity at time t+1 is the only one with a model that contains word of mouth. This can be a reflection of strength of brand equity at time t + 1.

Although their study focused on the telecoms industry, Buzdar *et al* (2016) found that the higher the brand equity the stronger the firm's financial performance of the firm. This conincides with Kim & Kim (2005). Buzdar *et al* (2016) also found perceived quality to be most important of the brand equity dimension that has an effect on a firm's financial performance. They also found brand loyalty and brand awareness to be significant in the relationship between brand and firm financial peformance. In this study brand awareness was also one of the most significant brand equity dimensions that was present in four of the result models. Brand loyalty was not among the brand equity components included in this study.

Augusto and Torres (2018) found that positive word of mouth has a positive effect on brand equity and consumer behavior. This was not so evident in this study. Word of mouth had some influence on willingness to pay, however, it showed significance at time t+1 and on one model out of the 8 models.

Subramaniam *et al* (2014) also found brand loyalty to have significance. They also found brand image to be of significance. Significance was also measured by the level of p value of which those brand equity dimensions that had a p value of less than 5%. This is also the case for this study.

Igbudu *et al* (2018) found both loyalty and image to have significance especially in sustainability of the bank. This goes hand in hand with the model of brand equity. That creating loyal customers and protecting brand image is good for a brand. Mizik (2014) using the brand asset index found that effect of benefits of brand investment take long to be realized. This implies that brand equity investments to reflect in the

firm's financial perfomance may take longer. It is no wonder that there is a difference between brand equity at time t + 1 and time t.

Nguyen *et al* (2019) found that dimensions that have impact on commercial banks include ntand association, perceived quality, brand loyalty and brand awareness.

CHAPTER SIX

SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

6.1 Introduction

This dissertation set out to understand the relationship between brand equity and firm financial performance, consumer behaviour and choice. The findings of the study have been presented in the previous chapter. This chapter discusses these findings and proposes direction for future research.

6.2 Summary

Overall the analysed findings in chapter VI and V have shown that brand equity components brand awareness, brand image, brand clarity, brand consistency of time t+1 has greater significance on bank's firm financial performance than those at time t. Willingness to pay has more influence on brand equity for period t+1. Overall consumer-based brand equity dimensions that showed most significance are brand association and brand fondness. Although findings have shown that consumer-brand equity dimensions were more significant in time t+1 than time t, firm financial performance has shown a steady performance over time t+1 and time t.

6.3 Conclusion

The reason d'être for many firms is to make profit. Brand equity studies provide an avenue for firms to achieve this. This study has found that brand equity components brand awareness, brand image, brand fondness, brand association, brand clarity and brand consistency are all significant in the relationship between brand equity and firm financial performance.

The results in this study have shown low levels of β values in the brand equity and firm financial relationship for most of the brand equity and consumer behaviour & choice components. The low β values have shown that the level of strength of brand equity's influence on firm financial performance in this study is low. This could

suggest that brand equity components have less importance in the study area. It could also imply that for the brand selected brand equity is less significant of an influence on firm financial performance.

Of all the brand equity components in the result models, brand fondness and brand awareness seem to have relatively higher influence on firm financial performance. And all the consumer behaviour and choice, that is word of mouth and willingness to pay, have some significant influence on the relationship between brand equity and firm financial performance.

From an information economic perspective of brand equity, of all the brand equity dimensionss, brand clarity and brand consistency are the most significant. It is no surprise that brand clarity and brand consistency have stood out in this study. In order to consistently attract customers, the brand message should be clear. The message should also be consistent overtime.

It is also no wonder that results have shown that word of mouth is the most repeated and significant consumer behaviour and choice component influencing firm financial performance in the result models. Word of mouth is an important element in advertising in marketing. Word of mouth can have positive or negative influence in how customers react to a brand. It has also gained strengths over the years as social media has increased its presence in the market.

This study has, therefore, shown that both cognitive psychological perspective of brand equity and information economic perspective of brand equity have significant influence on firm financial performance. Of all the components brand awareness which is from the cognitive psychological perspective of brand equity has relatively larger influence on a firm financial performance ratio. This implies that overall cognitive psychological perspective of brand equity has more influence on firm financial permanence in this study.

Again, this discovery is no surprise. Cognitive psychological perspective is all about how consumers connect to the brand on a more personal level. It is tied to consumer's feelings, memories and status associated with consuming a brand. Information economic perspective, however, appeals to the brain's ability to process information regarding the brand.

The findings have shown that as the brand equity improved over the years so too has the significance of brand equity on the first financial performance.

6.4 Policy Implications

This study has important practical and theoretical implications that can benefit brand equity and firm financial performance research. This can be shown in several ways. This study has summarised the most significant brand equity components in a bank brand. It can help managers of firms to establish how they can carry out a study to understand what elements of brand equity they should concentrate on. This study has also shown that the components of brand equity can lead directly to bank performance, albeit the small levels found in this study.

The result supports the extensive literature that argues for the brand equity-performance connection (Keller, 2013; Narteh (2018); Verbeeten & Vijn (2016); Hsu et al (2013); Tsai et al (2010); Mizik (2014); Baldauf et al (2003); Kim et al (2003); Kim & Kim (2005); Broyle et al (2009) and Durk et al (2016). In addition, however, by moderating the relationship with information economic perspective of brand equity, the study has provided a contrast between the different perspectives of brand equity. The study has, however, found that the often-assumed direct relationship between brand equity and financial performance can be complicated by emotional constructs like brand fondness. Over and above all, most of the prior studies were conducted from the Western world. To date, no study has addressed these issues from the Tanzanian context.

6.5 Limitation to the study

A few limitations of this study should be noted. Firstly, the respondents completed the questionnaires based on their knowledge of the brand and not their experience of the brand. In this regard, their responses did not reflect evaluation of the brand offering rather it reflects the opinion of the brand in the eyes of existing and potential customers. Secondly, due to time limitation, the sample size (although within statistical limits) may need to be increased for future studies to capture a larger number of participants. This may be able to produce results that are of higher levels within the models and therefore distinctively show the relationship between brand equity, firm financial performance and consumer behaviour and choice.

There are many avenues for future research. Future research can explore both cognitive and psychological approaches together. They can also explore further the relationship between brand equity and consumer behaviour and choice theories as they relate to firm financial performance. A comparison between different types of bank brands and the relationship between brand equity and firm financial performance can also be studied.

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APPENDICES

Appendix 1: Tables of Results

Table 1 Variable communalities

		Communalities			
		Before Transformation		After Transformation	
Item	Question	Initial	Extractions	Initial	Extractions
BA1	I am aware of NMB Bank	1.00	.85	1.00	.63
BA2	When I think of banks, this bank is one of the ones that come to mind	1.00	.88	1.00	.78
BA3	I can recognise this bank among other competing banks	1.00	.80	1.00	.85
BA4	I know this bank very well	1.00	.92	1.00	.92
BA5	This bank is very familiar to me	1.00	.87	1.00	.86
BA6	I can quickly remember this bank	1.00	.83	1.00	.84
BA7	This bank is visible	1.00	.87	1.00	.87
BA8	Compared to other banks this bank is of high quality	1.00	.86	1.00	.82
BAS1	This bank is the best in Tanzanian banking sector	1.00	.80	1.00	.70
BAS2	This bank consistently performs better than all other banks	1.00	.83	1.00	.82
BAS3	I can always count on this bank for consistent high quality	1.00	.78	1.00	.80
BAS4	This bank offers services with excellent features	1.00	.77	1.00	.81
BAS5	I believe this bank offers superior services in every way	1.00	.77	1.00	.83
BAS6	The overall quality of the service provided at this bank is excellent	1.00	.77	1.00	.88
BAS7	The quality of the service provided at this bank is impressive	1.00	.88	1.00	.91

BI1	The service provided by this bank is of high quality	1.00	.77	1.00	.76
BI2	This bank appears to be of poor quality	1.00	.78	1.00	.84
BI3	This bank has a strong image	1.00	.78	1.00	.82
BI4	This bank has a favourable image	1.00	.80	1.00	.74
BI5	This brand has a high image	1.00	.84	1.00	.85
BI6	This brand has better characteristics than its competitors	1.00	.77	1.00	.82
BI7	This brand has personalities that distinguishes itself from its competitors	1.00	.64	1.00	.73
BI8	This brand is one of the best brands in the sector	1.00	.81	1.00	.76
BI9	This brand is stable in the market	1.00	.79	1.00	.76
BF1	This bank has an image of doing the right things	1.00	.82	1.00	.85
BF2	I have good memories linked to my bank	1.00	.79	1.00	.86
BF3	I consider myself to be fond of this bank	1.00	.84	1.00	.89
BF4	This bank is my first choice when I need to use banking services	1.00	.89	1.00	.86
BF5	I will not switch to another bank if this bank is available	1.00	.78	1.00	.89
BF6	I intend to continue to use this bank's services in the upcoming years	1.00	.87	1.00	.90
BF7	I recommend this bank to my friends and relatives	1.00	.84	1.00	.92
BF8	I regularly use this bank for all my banking needs	1.00	.82	1.00	.88
WP1	I would be willing to pay a higher price for services of this brand over other similar brands	1.00	.83	1.00	.86
WP2	I prefer to purchase from NMB Bank even if another bank advertises a lower transaction fee/interest rate	1.00	.71	1.00	.79

WOM 1	I seek out word of advice of people before I choose a bank	1.00	.87	1.00	.83
WOM 2	The probability of accepting advise from other people is high	1.00	.85	1.00	.79
WOM 3	The probability of choosing this bank before receiving recommendations is low	1.00	.81	1.00	.85
WOM 4	The probability of choosing this bank after receiving recommendation is high	1.00	.79	1.00	.79
WOM 5	I have recommended this bank to lots of people	1.00	.74	1.00	.89
WOM 6	I seek out word of advise of people before I choose a bank	1.00	.82	1.00	.82
CL1	I know what this brand stands for	1.00	.83	1.00	.83
CL2	I have trouble figuring out what image this brand is trying to create	1.00	.86	1.00	.77
CO1	This brand's image in commercials and ads has been consistent for many years	1.00	.86	1.00	.75
CO2	The quality of this brand has been consistent for many years	1.00	.77	1.00	.77
CO3	This brand's ads, prices, specials, and products match its overall image	1.00	.81	1.00	.70
CO4	Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc.	1.00	.83	1.00	.83
CR1	This brand delivers what it promises	1.00	.86	1.00	.70
CR2	This brand's product claims are believable	1.00	.81	1.00	.83
CR3	You just can't believe what the ads say about this brand	1.00	.82	1.00	.75
CR4	My experiences with this brand make me wary of their claims	1.00	.88	1.00	.85
CR5	This brand has a name you can trust	1.00	.65	1.00	.82
CR6	This brand reminds of someone who's competent and knows what he/she is doing	1.00	.72	1.00	.83

CR7	This brand doesn't pretend to be something it isn't	1.00	.67	1.00	.76
PQ1	The quality of this brand is very high	1.00	.79	1.00	.73
PQ2	In terms of overall quality, I'd rate this brand as a 10/10	1.00	.64	1.00	.80
PR1	I never know how good this brand will be before I use its services	1.00	.70	1.00	.85
PR2	I know I can count on this brand being there in the future	1.00	.67	1.00	.84
ICS1	I know what I'm going to get from this brand, which saves time shopping around	1.00	.73	1.00	.78
ICS2	I know I can count on this brand being there in the future	1.00	.75	1.00	.79
ICS3	I know what I'm going to get from this brand, which saves time shopping around	1.00	.93	1.00	.81
ICS4	I need lots more information about this brand before I'd buy it	1.00	.71	1.00	.83
ICS5	I'd have to try it several times to figure out what this brand is like	1.00	.73	1.00	.76
EU1	If you were to use the banks' services, how many of the services will you use?	1.00	.77	1.00	.77

Source: Researcher's summary from SPSS results

Table 4.3: Factor Analysis Descriptive Statistics

	Before Transformation			**After Transformation**		
Component	**Mean**	**Std. Dev**	**Analysis N**	**Mean**	**Std. Dev**	**Analysis N**
I am aware of NMB Bank	4.09	1.018	68	3.970	1.067	66
When I think of banks, this bank is one of the ones that come to mind	4.44	.92	68	4.303	0.784	66
I can recognise this bank among other competing banks	4.03	.75	68	3.788	0.920	66
I know this bank very well	4.10	.90	68	4.030	0.944	66
This bank is very familiar to me	4.34	.91	68	4.212	0.869	66
I can quickly remember this bank	4.46	.84	68	4.303	0.744	66

This bank is visible	3.71	.88	68	3.818	0.821	66
Compared to other banks this bank is of high quality	3.56	.98	68	3.682	0.844	66
This bank is the best in Tanzanian banking sector	3.51	.89	68	3.455	0.980	66
This bank consistently performs better than all other banks	3.59	.87	68	3.500	0.899	66
I can always count on this bank for consistent high quality	3.60	.83	68	3.697	0.803	66
This bank offers services with excellent features	3.47	.92	68	3.303	0.822	66
I believe this bank offers superior services in every way	3.57	.89	68	3.485	0.789	66
The overall quality of the service provided at this bank is excellent	3.59	.87	68	3.561	0.806	66
The quality of the service provided at this bank is impressive	3.53	0.922	68	3.515	0.808	66
The service provided by this bank is of high quality	2.25	1.16	68	2.076	1.100	66
This bank appears to be of poor quality	4.28	.69	68	4.182	0.783	66
This bank has a strong image	3.99	.95	68	4.061	0.782	66
This bank has a favourable image	3.94	.98	68	3.909	0.972	66
This brand has a high image	3.63	.94	68	3.348	0.886	66
This brand has better characteristics than its competitors	3.91	.79	68	3.697	0.911	66
This brand has personalities that distinguishes itself from its competitors	3.81	.93	68	3.727	0.937	66
This brand is one of the best brands in the sector	4.18	.67	68	3.985	0.920	66
This brand is stable in the market	3.88	.68	68	3.818	0.742	66
This bank has an image of doing the right things	3.81	.89	68	3.697	0.859	66
I have good memories linked to my bank	3.49	0.985	68	3.348	0.936	66
I consider myself to be fond of this bank	3.19	1.273	68	3.136	1.175	66
This bank is my first choice when I need to use banking services	2.90	1.053	68	2.985	1.102	66
I will not switch to another bank if this bank is available	3.38	1.079	68	3.424	1.110	66
I intend to continue to use this bank's services in the upcoming years	3.53	1.085	68	3.576	1.009	66
I recommend this bank to my friends and relatives	3.03	1.159	68	2.894	1.217	66
I regularly use this bank for all my banking needs	3.18	1.132	68	2.939	1.201	66
I would be willing to pay a higher price for services of this brand over other similar brands	3.22	1.195	68	3.076	1.086	66

I prefer to purchase from NMB Bank even if another bank advertises a lower transaction fee/interest rate	2.87	1.105	68	2.652	1.030	66
I seek out word of advice of people before I choose a bank	2.69	1.225	68	2.545	1.010	66
The probability of accepting advise from other people is high	3.65	1.10	68	3.697	1.037	66
The probability of choosing this bank before receiving recommendations is low	3.43	0.982	68	3.485	0.949	66
The probability of choosing this bank after receiving recommendation is high	3.03	1.32	68	3.061	1.080	66
I have recommended this bank to lots of people	3.56	0.952	68	3.561	0.879	66
I seek out word of advice of people before I choose a bank	3.24	1.198	68	3.000	1.228	66
I know what this brand stands for	3.62	1.051	68	3.621	1.078	66
I have trouble figuring out what image this brand is trying to create	3.69	1.083	68	3.621	1.034	66
This brand's image in commercials and ads has been consistent for many years	2.63	1.11	68	2.712	1.092	66
The quality of this brand has been consistent for many years	3.97	.90	68	3.924	0.686	66
This brand's ads, prices, specials, and products match its overall image	3.78	.90	68	3.833	0.714	66
Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc.	3.74	.87	68	3.652	0.712	66
This brand delivers what it promises	3.63	.88	68	3.591	0.723	66
This brand's product claims are believable	3.56	.95	68	3.621	0.718	66
You just can't believe what the ads say about this brand	3.66	.80	68	3.530	0.706	66
My experiences with this brand make me wary of their claims	2.93	.97	68	3.045	0.919	66
This brand has a name you can trust	2.87	1.02	68	2.939	0.875	66
This brand reminds of someone who's competent and knows what he/she is doing	3.96	.84	68	3.697	0.877	66
This brand doesn't pretend to be something it isn’t	3.81	.92	68	3.636	0.777	66
The quality of this brand is very high	3.78	.84	68	3.667	0.829	66
In terms of overall quality, I'd rate this brand as a 10/10	3.68	.85	68	3.652	0.868	66
I never know how good this brand will be before I use its services	3.37	.98	68	3.258	0.966	66
I know I can count on this brand being there in the future	3.62	.86	68	3.606	0.802	66

I know what I'm going to get from this brand, which saves time shopping around	3.99	.74	68	3.909	0.779	66
I know I can count on this brand being there in the future	3.68	0.818	68	3.636	0.797	66
I know what I'm going to get from this brand, which saves time shopping around	3.29	1.094	68	3.061	1.122	66

Source: Data from SPSS Results

Table 4.4 Total variance explained for Group 1: Before Transformation.

Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
BA1	21.387	34.495	34.495	21.387	34.495	34.495
BA2	4.308	6.948	41.443	4.308	6.948	41.443
BA3	3.311	5.340	46.783	3.311	5.340	46.783
BA4	3.019	4.869	51.652	3.019	4.869	51.652
BA5	2.822	4.552	56.203	2.822	4.552	56.203
BA6	2.252	3.632	59.836	2.252	3.632	59.836
BA7	2.102	3.390	63.225	2.102	3.390	63.225
BA8	1.807	2.914	66.140	1.807	2.914	66.140
BAS1	1.711	2.759	68.899	1.711	2.759	68.899
BAS2	1.524	2.458	71.357	1.524	2.458	71.357
BAS3	1.441	2.325	73.681	1.441	2.325	73.681
BAS4	1.291	2.082	75.763	1.291	2.082	75.763
BAS5	1.233	1.989	77.752	1.233	1.989	77.752
BAS6	1.108	1.788	79.539	1.108	1.788	79.539
BAS7	1.00	1.618	81.157	1.003	1.618	81.157
BI1	.87	1.410	82.567			
BI2	.86	1.385	83.953			
BI3	.81	1.303	85.255			
BI4	.67	1.077	86.333			
BI5	.65	1.040	87.373			
BI6	.61	0.986	88.359			

BI7	.60	0.972	89.331			
BI8	.52	.84	90.174			
BI9	.50	.81	90.980			
BF1	.48	.78	91.760			
BF2	.46	.74	92.503			
BF3	.45	.72	93.223			
BF4	.40	.65	93.873			
BF5	.38	.61	94.486			
BF6	.32	.52	95.007			
BF7	.28	.46	95.465			
BF8	.26	.43	95.891			
WP1	.25	.40	96.289			
WP2	.23	.37	96.661			
WOM1	.23	.37	97.030			
WOM2	.20	.33	97.357			
WOM3	.20	.32	97.673			
WOM4	.16	.25	97.926			
WOM5	.15	.24	98.170			
WOM6	.14	.23	98.395			
CL1	.12	.20	98.594			
CL2	.11	.17	98.765			
CO1	.10	.16	98.926			
CO2	.09	.15	99.075			
CO3	.09	.14	99.217			
CO4	.07	.12	99.338			
CR1	.07	.11	99.450			
CR2	.06	.10	99.555			
CR3	.05	.08	99.637			
CR4	.04	.07	99.707			
CR5	.04	.06	99.766			
CR6	.03	.05	99.813			
CR7	.03	.04	99.857			
PQ1	.02	.04	99.895			
PQ2	.02	.03	99.922			
PR1	.02	.03	99.948			
PR2	.01	.02	99.968			

ICS1	.01	.01	99.980			
ICS2	.00	.01	99.988			
ICS3	.00	.01	99.993			
ICS4	2.654E-03	4.281E-03	99.997			
ICS4	1.694E-03	2.733E-03	100.000			
Extraction Method: Principal Component Analysis.						

Table 4: Total variance explained for Group 2: After Transformation.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
BA1	24.146	38.946	38.946	24.146	38.946	38.946
BA2	4.603	7.424	46.370	4.603	7.424	46.370
BA3	3.535	5.702	52.072	3.535	5.702	52.072
BA4	2.670	4.307	56.379	2.670	4.307	56.379
BA5	2.443	3.940	60.319	2.443	3.940	60.319
BA6	2.230	3.596	63.915	2.230	3.596	63.915
BA7	1.921	3.099	67.014	1.921	3.099	67.014
BA8	1.603	2.586	69.599	1.603	2.586	69.599
BAS1	1.417	2.286	71.885	1.417	2.286	71.885
BAS2	1.376	2.220	74.105	1.376	2.220	74.105
BAS3	1.210	1.952	76.057	1.210	1.952	76.057
BAS4	1.157	1.867	77.923	1.157	1.867	77.923
BAS5	1.116	1.799	79.723	1.116	1.799	79.723
BAS6	1.034	1.667	81.390	1.034	1.667	81.390
BAS7	.92	1.491	82.881			
BI1	.89	1.434	84.314			
BI2	.83	1.341	85.656			
BI3	.80	1.285	86.940			
BI4	.65	1.047	87.987			
BI5	.62	0.995	88.982			
BI6	.58	0.943	89.926			
BI7	.57	0.912	90.837			

BI8	.50	.80	91.642			
BI9	.47	.75	92.395			
BF1	.42	.68	93.071			
BF2	.40	.65	93.720			
BF3	.35	.57	94.287			
BF4	.34	.55	94.833			
BF5	.30	.48	95.314			
BF6	.29	.46	95.776			
BF7	.26	.42	96.198			
BF8	.23	.37	96.565			
WP1	.22	.36	96.921			
WP2	.21	.34	97.259			
WOM1	.20	.32	97.583			
WOM2	.16	.26	97.839			
WOM3	.15	.25	98.087			
WOM4	.15	.24	98.326			
WOM5	.12	.20	98.527			
WOM6	.11	.18	98.703			
CL1	.10	.16	98.858			
CL2	.09	.15	99.004			
CO1	.09	.14	99.148			
CO2	.08	.12	99.272			
CO3	.08	.12	99.394			
CO4	.07	.11	99.501			
CR1	.06	.10	99.599			
CR2	.05	.08	99.675			
CR3	.05	.07	99.748			
CR4	.03	.05	99.798			
CR5	.03	.04	99.839			
CR6	.02	.03	99.874			
CR7	.02	.03	99.904			
PQ1	.02	.02	99.929			
PQ2	.01	.02	99.948			
PR1	.01	.02	99.966			
PR2	.01	.01	99.978			
ICS1	.01	.01	99.987			

ICS2	.00	.01	99.993			
ICS3	.00	.00	99.997			
ICS4	1.718E-03	2.771E-03	100.000			
ICS4	2.245E-04	3.622E-04	100.000			
Extraction Method: Principal Component Analysis.						

Table 5a: Component Matrix[a] for Group 1: Before Transformation

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
BA1	.53	-.09	.30	-.04	-.11	-.31	-.03	.01	-.14	-.09	.43	-.21	.10
BA2	.35	.27	.53	-.29	.07	-.25	-.16	.10	.18	-.07	.20	.28	-.00
BA3	.42	.46	.22	-.08	.05	.03	.21	.12	-.19	-.10	-.06	-.16	.29
BA4	.42	.39	.59	-.22	.32	-.03	-.17	.08	-.03	-.13	-.05	-.04	.17
BA5	.38	.38	.63	-.25	.10	.07	-.18	-.16	-.13	-.10	-.10	-.01	.06
BA6	.34	.31	.65	-.20	.08	.04	-.17	-.23	-.14	.09	-.10	-.01	-.00
BA7	.61	.33	.07	.02	-.17	.14	.07	.28	.03	.19	.10	.33	-.20
BAS1	.72	-.04	.27	.13	-.21	.00	-.20	-.02	-.03	.06	.02	.32	-.07
BAS2	.61	-.06	.29	.43	-.08	-.01	-.08	-.16	-.28	.00	.13	-.05	.05
BAS3	.75	-.21	.06	.10	-.29	.09	.15	.24	.01	-.03	.03	.16	.03
BAS4	.55	.30	.19	-.17	-.16	.23	.18	.30	-.07	.13	.21	-.06	-.23

BAS5	.73	-.08	.16	.30	-.26	.01	.11	.14	.05	.02	-.05	-.04	-.02
BAS6	.71	-.00	.14	.29	-.20	-.01	.14	.03	-.17	.11	-.16	-.13	.10
BAS7	.75	-.17	.03	.14	-.20	.03	.24	.15	-.10	-.11	.08	.05	.00
BI1	.80	-.13	.04	-.04	-.33	-.03	.19	.22	-.01	.05	-.02	-.05	.08
BI2	-.51	-.07	-.01	.01	.20	.10	.12	-.02	.52	.03	.01	.02	.37
BI3	.47	.28	-.13	.35	.25	.16	-.27	.16	.03	.11	-.04	-.07	-.16
BI4	.58	.36	-.16	.32	-.02	.25	.03	-.05	-.11	-.02	-.22	.18	.02
BI5	.71	-.06	-.10	.30	-.12	.10	-.29	-.11	-.06	.04	.01	-.12	-.10
BI6	.66	-.10	-.14	.35	-.27	.11	-.03	-.15	-.15	-.14	.28	-.07	.04
BI7	.48	.29	-.08	.13	-.12	.10	.14	.18	.33	-.32	.22	.25	.06
BI8	.59	-.03	-.13	.30	-.21	.07	-.24	-.14	-.08	-.03	-.08	.13	.12
BI9	.36	.36	-.33	.27	.12	.07	-.29	-.35	.06	.01	.31	-.17	.00
BF1	.50	.42	-.14	.24	.15	.24	-.12	.01	.05	.04	.05	.03	.25
BF2	.56	.34	-.03	.28	.00	.37	.05	-.02	.09	-.21	-.21	.02	.20
BF3	.6	.2	.11	-	.13	.25	-.01	-.10	.07	-.20	-	-	-.16

	7	7		.15							.19	.01	
BF4	.80	-.12	-.07	-.26	-.00	.14	.01	.08	.13	-.06	-.06	-.05	.09
BF5	.81	-.17	-.14	-.16	.01	.06	.05	-.13	.22	.18	.01	-.12	.09
BF6	.61	.25	-.11	-.22	-.01	.27	.28	-.29	.12	-.02	.01	-.12	-.07
BF7	.84	-.07	-.08	-.21	-.12	.08	.06	.05	-.04	-.00	-.13	.06	-.09
BF8	.66	-.22	-.16	-.38	-.00	.18	.02	.06	.16	-.01	.10	-.03	.27
WP1	.75	-.19	-.11	-.19	.05	.22	-.00	-.12	-.02	-.08	-.21	-.15	.10
WP2	.78	-.19	-.11	-.34	-.00	.19	-.02	.01	.02	.05	-.07	-.05	.09
WOM1	.63	-.24	.03	-.28	.05	.20	.05	-.02	-.06	.31	.05	-.16	.01
WOM2	.68	-.19	.05	-.27	.07	.18	-.13	-.17	.04	.42	.12	-.08	-.03
WOM3	.01	.12	-.31	.13	.66	.13	-.13	.13	-.35	.05	.25	.19	.07
WOM4	.06	.08	-.25	-.11	.60	.12	.31	.08	-.37	-.10	.04	.21	.13
WOM5	-.16	-.12	.32	.45	.06	-.27	.09	.13	-.26	.43	-.22	.00	.22
WOM6	.20	.12	-.17	.04	.49	-.13	.56	.02	-.17	.22	-.06	-.05	.03
CL1	.6	-	-	-	.09	.14	-.15	.25	-.14	.07	.08	.16	-.15

	8	.12	.27	.24									
CL2	.81	-.07	-.13	-.17	.04	-.20	.05	.19	-.08	-.09	.03	-.05	.12
CO1	.54	-.07	-.18	.02	.22	-.38	-.30	.36	.04	.09	.20	-.02	.23
CO2	.05	-.44	.28	.08	.37	.27	.20	-.12	-.15	-.23	.06	.08	-.30
CO3	.40	.26	-.18	.23	.39	-.23	-.22	.20	.26	-.10	-.13	-.15	-.21
CO4	.41	.38	-.02	.39	.11	-.25	.21	-.05	.26	.01	-.31	-.04	-.10
CR1	.61	.35	.01	.03	.19	-.21	.06	-.03	.23	.35	.10	.00	-.23
CR2	.60	.41	.10	-.05	.03	-.32	.29	-.06	.25	.17	.03	-.01	-.11
CR3	.66	-.10	-.11	-.13	.13	-.43	.10	-.12	.02	-.24	-.18	.10	.04
CR4	.68	-.13	-.07	.06	-.17	-.33	.35	.03	-.10	-.14	-.01	-.05	-.01
CR5	.16	-.50	.36	.25	.25	.17	-.06	.06	.35	.13	.06	.18	.14
CR6	.06	-.40	.30	.37	.14	.08	.23	-.39	.20	.14	.16	.22	.18
CR7	.70	-.20	-.00	-.04	.08	-.23	-.08	-.16	-.10	.02	-.17	-.03	-.04
PQ1	.78	-.19	.03	-.04	.18	-.04	-.16	.07	-.04	.09	-.21	.08	.08

PQ2	.65	-.25	.01	.04	.15	-.24	-.10	-.20	.05	-.16	.09	-.00	.09
PR1	.73	-.19	-.20	.10	.03	-.09	-.21	.23	.12	-.00	-.14	-.04	.00
PR2	.69	-.02	-.03	.11	.04	.01	-.16	-.01	.01	.04	.04	-.25	-.09
ICS1	.72	-.16	-.16	-.09	.11	-.27	-.12	-.13	-.06	-.30	.01	-.05	-.05
ICS2	.56	.34	-.13	.02	.05	-.12	.34	-.31	.02	.02	.37	-.05	-.04
ICS3	.66	-.20	-.03	-.08	.05	-.28	-.10	-.25	-.03	-.11	-.04	.36	-.11
ICS4	.11	-.54	.36	.16	.37	.12	-.03	.25	.16	-.13	-.00	-.25	-.17
Extraction Method: Principal Component Analysis.													
a. 15 components extracted.													

Table 5b: Component Matrix[a] for Group 1: Before Transformation (Above 0.3)

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BA1	.527		.305								.414			-.309	
BA2	.350		.538												
BA3	.423	-.456											.313		.350
BA4	.415	-	.598		.31										

		.378			8										
BA5	.377	-.374	.637												
BA6	.340	-.309	.652												
BA7	.608	-.338													
BA8	.718														
BAS1	.613			.433											
BAS2	.754														
BAS3	.549	-.303													
BAS4	.726														
BAS5	.714														
BAS6	.749														
BAS7	.802				-.326										
BI1	-.508							.319	.317				.366		
BI2	.468			.350											.327
BI3	.584	-.372		.324											
BI4	.708														
BI5	.660			.347											
BI6	.482								.429			.309			
BI7	.593														

BI8	.360	-.351	-.323				-.395				.309				
BI9	.496	-.415												.341	
BF1	.560	-.338				.346									
BF2	.668														
BF3	.803														
BF4	.810														
BF5	.614							.370							
BF6	.838														
BF7	.654			-.378											
BF8	.754														
WP1	.780			-.337											
WP2	.629														
WOM1	.680									.384					
WOM2			-.316		.661			-.312							
WOM3					.611		.322								
WOM4			.312	.454				-.325							
WOM5					.499		.592								
WOM6	.681														
CL1	.814														
CL2	.538					-		-							

						.401		.379							
CO1		.441			.374					-.302			-.307		.350
CO2	.399				.370				.312						
CO3	.414	-.370		.385							-.305				
CO4	.610	-.352								.398					
CR1	.598	-.410													
CR2	.662					-.404									
CR3	.681						.396								
CR4		.492	.345							.322					
CR5		.399		.381				.375							
CR6	.700														
CR7	.781														
PQ1	.646														
PQ2	.731														
PR1	.693														
PR2	.716					-.310									
ICS1	.560	-.34						.341			.3				

		3									64				
ICS2	.665											.366			
ICS3		.540	.357		.369				.311						
ICS4		.466	.333	.319	.357										
ICS5	.587	.368													
Extraction Method: Principal Component Analysis.															
a. 15 components extracted.															

Table 6a: Component Matrix[a] for Group 2: After Transformation

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
BA1	.46	-.29	-.34	.12	.15	-.07	-.02	.06	.08	.31	.18	.07	-.14
BA2	.37	-.37	.06	.38	.22	-.07	-.06	-.24	-.17	.10	-.36	.22	.10
BA3	.43	-.30	-.52	.01	.41	.16	.10	-.05	.07	-.07	.29	.07	-.01
BA4	.34	-.37	-.27	.46	.54	.08	-.13	.06	-.04	-.04	.14	.08	.15
BA5	.39	-.43	-.08	.53	.36	.05	-.10	-.01	-.11	-.27	-.01	-.03	-.08
BA6	.37	-.42	.20	.54	.17	.21	-.12	.14	.08	-.07	-.13	.19	.08
BA7	.8	.0	.04	.08	-.05	-.04	-.18	-.24	-.07	-.07	-	-	.27

	0	4									.06	.18	
BAS1	.78	.14	.16	-.11	-.03	-.19	-.23	.03	.03	-.14	.07	-.15	.12
BAS2	.72	.20	.16	.07	-.14	-.18	-.08	.04	.14	-.04	-.07	-.11	.05
BAS3	.78	.14	.22	.10	.01	-.24	-.11	-.09	.01	-.17	.08	-.04	-.01
BAS4	.78	.22	-.01	.05	-.17	.03	-.27	-.06	.06	.02	.09	.10	.07
BAS5	.59	.39	.12	.03	-.04	-.18	-.29	.13	.01	-.08	.33	.08	-.02
BAS6	.76	.31	.02	.12	-.20	.06	-.22	.03	-.13	-.06	.08	.09	.11
BAS7	.75	.25	-.02	.17	-.27	.21	-.14	-.09	-.15	-.12	-.05	.11	.14
BI1	.81	.28	-.02	.08	-.19	.11	-.19	-.06	-.18	-.05	-.05	.14	.13
BI2	-.51	.14	.23	-.10	.09	.01	.07	.40	.12	.26	.06	.05	.38
BI3	.76	-.28	.05	-.14	.23	-.06	-.14	-.10	.12	.16	-.04	-.17	.02
BI4	.71	-.23	.04	.01	.02	-.06	-.18	-.16	.04	.25	-.01	-.34	-.06
BI5	.63	-.33	.06	-.12	.16	-.21	-.14	-.03	-.03	.16	.05	-.28	.09
BI6	.75	-.15	.24	-.07	-.12	-.27	.14	.14	-.07	.06	.21	.05	-.14
BI7	.62	-.28	.28	-.16	.04	-.17	.24	-.02	-.12	-.08	.22	-.01	-.25
BI8	.72	-.1	.28	-.01	-.08	-.15	-.03	-.03	.07	.14	.07	.13	.07

		8											
BI9	.69	.02	.26	-.03	.11	-.18	-.15	-.14	.24	-.07	.08	.18	-.13
BF1	.64	-.18	-.01	.01	-.15	.21	-.09	-.01	.11	.08	.17	-.17	.21
BF2	.71	.05	.19	-.12	.04	-.20	-.37	.09	.07	.17	-.12	.21	-.03
BF3	.81	.18	-.19	.08	-.21	.03	-.06	.08	.08	-.09	-.05	-.10	-.07
BF4	.77	.19	-.32	-.07	.15	-.19	-.02	-.04	.09	.08	.01	.05	-.23
BF5	.70	.46	-.18	-.13	.04	-.02	.26	-.07	-.12	.10	-.02	.07	-.07
BF6	.75	.29	-.32	-.06	-.11	.27	-.08	.04	.04	.02	.06	.01	-.19
BF7	.80	.18	-.26	.22	-.04	-.07	-.07	.12	-.04	.13	-.08	.07	-.16
BF8	.67	.41	-.40	-.17	.24	.02	.05	-.05	.12	-.06	-.09	.13	-.00
WP1	.67	.41	-.35	-.19	.23	.06	.03	-.01	.06	-.07	-.08	.05	.01
WP2	.74	.28	-.14	-.04	.30	.03	.10	.12	.03	-.10	-.22	-.03	-.10
WOM1	.52	.30	-.00	-.04	.23	-.11	.28	-.37	.15	-.18	-.01	-.11	.27
WOM2	.55	.30	-.16	-.08	.25	-.13	.44	-.06	.13	-.07	.13	-.08	.21
WOM3	.23	.27	.40	.48	-.03	.09	.25	-.18	-.10	.25	-.05	.00	-.27
WOM4	.09	.26	.40	.63	-.06	.02	.29	-.22	.08	.14	.16	-.14	-.05
WOM5	-.29	.02	-.04	-.10	-.03	.43	-.20	-.49	.37	.24	.08	.06	.00
WOM6	.52	.10	.44	.24	.21	-.26	.19	.13	.35	.03	-.19	-.17	.05

CL1	.72	.12	-.22	.01	.14	-.21	.20	.11	.07	.31	-.08	.01	-.01
CL2	.81	.03	-.24	.16	-.08	.06	.07	.05	.02	.04	.18	-.06	.00
CO1	.31	-.28	.29	-.39	.39	.39	-.01	-.09	.11	-.11	.00	.11	-.12
CO2	-.23	.58	.28	.04	.05	.33	.10	-.16	.05	.30	.09	.09	.08
CO3	.46	-.51	.17	-.26	-.03	.13	-.18	.15	.09	.16	-.07	-.16	-.08
CO4	.56	-.32	.24	-.43	.04	.16	.01	-.08	-.02	.03	-.09	.06	-.03
CR1	.62	-.35	.17	-.24	-.06	.09	.19	-.26	-.26	.08	.07	.07	.19
CR2	.62	-.27	.12	-.20	-.02	.13	.13	-.33	-.19	-.14	.02	-.06	-.06
CR3	.77	-.13	.06	-.08	-.10	.04	.18	.01	-.14	.08	.03	.33	.19
CR4	.62	-.29	.10	-.06	-.10	.05	.37	.27	-.06	.18	.07	.24	.11
CR5	-.11	.44	.10	-.00	.49	.27	-.18	.18	-.37	.31	-.01	-.07	.02
CR6	-.01	.44	.23	-.11	.36	.27	-.04	.02	-.46	.04	-.00	-.26	-.08
CR7	.54	.03	.16	-.00	-.17	.20	.14	-.02	.22	-.15	-.35	.16	-.16
PQ1	.7	-	.26	.01	-.12	.00	.10	.03	-.24	-.17	-	-	-.14

	6	.14									.04	.04	
PQ2	.71	-.20	-.10	.14	-.22	.15	.31	.09	-.09	-.10	.17	-.07	.09
PR1	.84	.00	.15	-.16	.05	.06	-.17	.08	-.07	.03	-.01	.05	.14
PR2	.73	.13	.28	-.20	.08	-.09	.02	.08	-.12	-.02	.04	.09	-.15
ICS1	.62	.01	-.10	.13	-.17	.41	-.05	.29	.02	-.10	.03	-.28	-.08
ICS2	.63	-.07	.08	.08	-.22	.48	.04	.06	.24	.15	-.03	-.06	-.13
ICS3	.67	-.21	-.14	.02	-.15	.36	.22	.27	.12	-.05	-.03	-.10	.10
ICS4	-.24	.21	.48	-.09	.32	.27	-.07	.14	.21	-.35	.20	.09	-.04
Extraction Method: Principal Component Analysis.													
a. 14 components extracted.													

Table 6b: Component Matrix[a] for Group 2: After Transformation (Above 0.3)

	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
BA1	.460		-.342							.307				
BA2	.375	-.372		.376							-.363			
BA3	.428		-.516		.411									

BA4	.344	-.374		.455	.544									
BA5	.392	-.428		.531	.364									
BA6	.373	-.418		.542										
BA7	.804													
BA8	.775													
BAS1	.721													
BAS2	.780													
BAS3	.782													
BAS4	.595	.390									.332			
BAS6	.762	.309												
BAS7	.753													
BI1	.815													
BI2	-.515							.402					.380	
BI3	.758													
BI4	.714											-.336		
BI5	.631	-.329												
BI6	.749													
BI7	.618													
BI8	.725													
BI9	.693													
BF1	.643													.335
BF2	.710						-.372							
BF3	.807													
BF4	.767		-.318											

BF5	.700	.455												
BF6	.753		-.321											
BF7	.799													
BF8	.670	.406	-.399											
WP1	.674	.409	-.352											
WP2	.740				.303									
WOM1	.520	.303						-.367						
WOM2	.545						.440							
WOM3			.404	.482										
WOM4			.402	.628										
WOM5						.434		-.493	.370					
WOM6	.519		.444						.349					
CL1	.721									.308				
CL2	.810													
CO1	.309			-.388	.389	.389								
CO2		.580				.333								
CO3	.462	-.507												
CO4	.558	-.321		-.431										
CR1	.617	-.354												
CR2	.624							-.332						
CR3	.772											.331		
CR4	.618						.371							
CR5		.444			.486				-.366	.315				
CR6		.441			.363				-.461					

CR7	.540										-.350			
PQ1	.761													
PQ2	.705						.310							
PR1	.843													
PR2	.733													
ICS1	.618					.409								
ICS2	.631					.483								
ICS3	.675					.359								
ICS4			.483		.320					-.355				
ICS5	-.341		.617											
ICS6	.653										-.401			
Extraction Method: Principal Component Analysis.														
a. 14 components extracted.														

Table 4.2: Factors

Group 1	Group 2
Factor 1: **BF6:** 'I intend to continue to use this bank's services in the upcoming years', **CL1:** 'I know what this brand stands for' **BF4:** 'this bank is my first choice when I need to use banking services'	**PR1:** 'I never know how good this brand will be before I use its services,' **BI1:** 'the service provided by this bank is of high quality' **CL2:** 'I have trouble figuring out what image this brand is trying to create '.
Factor 2: **ICS3:** 'I know what I'm going to get from this brand, which saves time shopping around', **CR4:** 'my experiences with this brand make me wary of their claims' **ICS4:** 'I'd have to try it several times to figure out what this brand is like'	**CO2:** 'the quality of this brand has been consistent for many years,' **CO3:** 'this brand's ads, prices, specials, and products match its overall image' **BF5:** 'this bank is my first choice when I need to use banking services.'

Factor 3 **BA6:** 'this brand has better characteristics than its competitors,' **BA5:** 'this brand has a high image,' **BA4:** 'this bank has a favourable image'	**ICS5:** 'I'd have to try it several times to figure out what this brand is like,' **BA3:** 'I can always count on this bank for consistent high quality' **ICS4:** 'I need lots more information about this brand before I would buy it'.
Factor 4 **WOM4:** 'the probability of choosing this bank after receiving recommendation is high,' **BAS1:** 'this bank is the best in Tanzanian banking sector' **CO3:** 'this brand's ads, prices, specials, and products match its overall image'	**WOM4:** 'the probability of choosing this bank after receiving recommendation is high,' **BA6:** 'I can quickly remember this bank,' and **BAS5:** 'I believe this bank offers superior services in every way.'
Factor 5 **WOM2:** 'the probability of accepting advise from other people is high,' **WOM3:** 'the probability of choosing this bank before receiving recommendations is low,' **WOM 5:** 'I have recommended this bank to lots of people.'	**BA4:** 'I know this bank very well', **CR5:** 'this brand has a name you can trust,' **BA3:** 'I can recognise this bank among other competing banks.'
Factor 6 **CR2:** 'this brand's product claims are believable,' **CL2:** 'I have trouble figuring out what image this brand is trying to create,' **BF1**: 'this bank has an image of doing the right things.'	**IC2:** 'I know I can count on this brand being there in the future,' **WOM5:** 'I have recommended this bank to lots of people,' **ICS1:** 'I know what I'm going to get from this brand, which saves time shopping around.'
Factor 7 **WOM5:** 'I have recommended this bank to lots of people,' **CR3:** 'You just can't believe what the ads say about this brand' a **BI8:** 'this brand is one of the best brands in the sector.'	**WOM2:** 'the probability of accepting advise from other people is high', **BF2:** 'I have good memories linked to my bank' **CR4:** 'my experiences with this brand make me wary of their claims.'
Factor 8 **CL2:** 'I have trouble figuring out what image this brand is trying to create,' **CR5:** 'this brand has a name you can trust,' **BF5:** 'I will not switch to another bank if this bank is available.'	**WOM5:** 'I have recommended this bank to lots of people,' **BI2:** 'this bank appears to be of poor quality,' **WOM1:** 'I seek out word of advise of people before I choose a bank.'
Factor 9 **BI6:** 'this brand has better characteristics than its competitors,' **BI1:** 'the service provided by this bank is of high quality,' **CO2:** 'the quality of this brand has been consistent for many years.'	**CR6:** 'this brand reminds of someone who's competent and knows what he/she is doing', **WOM5:** 'I have recommended this bank to lots of people' **CR5:** 'this brand has a name you can trust.'
Factor 10 **CO4:** 'Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc.,' **WOM1:** 'I seek out word of advise of people before I choose a bank' **CR4:** 'My experiences with this brand make me	**ICS4:** 'I need lots more information about this brand before I'd buy it,' **CR5:** 'This brand has a name you can trust' and **CL1:** 'I have trouble figuring out what image this brand is trying to create.'

wary of their claims.'	
Factor 11 **BA1:** 'I am aware of this bank,' **ICS1:** 'I know what I'm going to get from this brand, which saves time shopping around' **BI8:** 'This brand is one of the best brands in the sector.'	**BA1:** 'Compared to other banks this bank is of high quality,' **ICS1:** 'I know what I'm going to get from this brand, which saves time shopping around,' **BI8:** 'I regularly use this banks for all my banking needs.'
Factor 12 **ICS2:** 'I know I can count on this brand being there in the future' **BI6:** 'this brand has better characteristics than its competitors.'	**BI4:** 'this bank has a favourable image,' and **CR3:** 'you just can't believe what the ads say about this brand.'
Factor 13 **BI1:** 'the service provided by this bank is of high quality,' **BA3:** 'this bank has a strong image.'	**BI2.** This factor is also relatively less complex to name as it contains only one variable contributing to the factor.

Appendix 2: Questionnaire Design

This study is being conducted by a Mzumbe University student for the purpose of writing a dissertation in fulfilment of a Masters in Applied Economics and Business. This questionnaire survey is about consumer-based brand equity (CBBE) and Consumer Behaviour and Choice. The questions on CBBE explore whether CBBE has changed towards a bank that has gone through transformation over the past decade. The bank selected is NMB Bank Plc. This research will help marketing and bank managers as the findings will be used to further understand the relationship between CBBE and firm financial performance.

This questionnaire is intended for educational purposes only, and it is not for commercial purposes.

PART A: Social Demographic Questions

1. Name: _____

2. Sex: Male
   Female

3. Age: Below 20
   20 - 29
   30 - 39
   40 - 49
   Above 50

4. Income:
   Less than 500,000
   501,000 - 1,000,000
   1,001,000 - 1,500,000
   1,501,000 - 2,000,000

Above 2,000,000

5. Occupation:

Professionals (doctor, lawyers, accountants, valuation surveyor)

Executive

Middle manager

Civil servant

Clerical

Merchant/Businessman

Student

Other (please specify)

6. What is your highest educational qualifications:

High school graduate diploma or the equivalent

Bachelors degree

Master's degree

Professional degree

Doctorate degree

None of the above

GROUP 1: BEFORE TRANSFORMATION

In the past there was a notion that the bank was unpopular and was considered to be more preferred by civil servants. Others thought it to be a bank that had a reputation for long queues and a bank that was popular with public school students and teachers. Based on how you remember this bank in the past, how would you respond to the following brand equity questions:

Questions based on Cognitive Psychology View

1. I am aware of NMB Bank

Yes

No

PART B: Brand Awareness Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. When I think of banks, this bank is one of the ones that come to mind					
2. I can recognise this bank among other competing banks					
3. I know this bank very well					
4. This bank is very familiar to me					
5. I can quickly remember this bank					
6. This bank is visible					

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. It makes sense to transact with NMB Bank instead of other bank, even if they are the same					
2. Even if another bank has the same products as NMB Bank, I prefer to transact with NMB Bank					
3. If there is another bank as good as NMB Bank, I prefer transact with NMB Bank					
4. It seems smarter to transact with NMB Bank, even if banks are not all that different					
5. Some characteristics of this bank come to mind quickly					
6. I remember the logo of this bank					
7. I have difficulty in imagining this bank in my mind					
8. This bank is good value for money					

PART C: Brand Association Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. Compared to other banks this bank is of high quality					
2. This bank is the best in Tanzanian banking sector					
3. This bank consistently performs better better than all other banks					
4. I can always count on this bank for consistent high quality					
5. This bank offers services with excellent features					
6. I believe this bank offers superior services in every way					
7. The overall quality of the service provided at this bank is excellent					
8. The quality of the service provided at this bank is impressive					
9. The service provided by this bank is of high quality					
10. This bank appears to be of poor quality					
	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This bank has a strong image					
2. This bank has a favourable image					
3. This brand has a high image					
4. This brand has better characteristics than its competitors					
5. This brand has personalities that distinguishes itself from its competitors					
6. This brand is one of the best brands in the sector					

7. This brand is stable in the market					
8. My bank has an image of doing the right things					
9. I have good memories linked to my bank					

PART D: Perceived Quality QuestionsPART E: Brand Image Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I consider myself to be fond of this bank					
2. This bank is my first choice when I need to use banking services					
3. I will not switch to another bank if this bank is available					
4. I intend to continue to use this bank's services in the upcoming years					
5. I recommend this bank to my friends and relatives					
6. I will continue to be a customer of this bank even if it reasonably raises its fees					
7. I regularly use this banks for all my banking needs					
8. I am proud to do all my banking with this bank					
9. I prefer this bank to other banks					

PART F: Brand Fondness Questions

PART G: Willingness to Pay Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I would be willing to pay a higher price for services of this brand over other similar brands					

2. I prefer to purchase from NMB Bank even if another bank advertises a lower transaction fee/interest rate					

PART H: Word of Mouth Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I seek out word of advise of people before I choose a bank					
2. The probability of accepting advise from other people is high					
3. The probability of choosing this bank before receiving recommendations is low					
4. The probability of choosing this bank after receiving recommendation is high					
5. I have recommended this bank to lots of people					
6. I talk positively about this bank to my friends					

Questions based on Information Economic Perspective

PART I: Brand Clarity Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I know what this brand stands for					
2. I have trouble figuring out what image this brand is trying to create					

PART J: Brand Consistency Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand's image in commercials and ads has been consistent for many years = 1					
2. The quality of this brand has been consistent for many years = 2					
3. This brand's ads, prices, specials, and products match its overall image = 3					
4. Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc. = 4					

PART K: Brand Credibility Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand delivers what it promises					
2. This brand's product claims are believable					
3. You just can't believe what the ads say about this brand					
4. My experiences with this brand make me wary of their claims					
5. This brand has a name you can trust					
6. This brand reminds of someone who's competent and knows what he/she is doing					
7. This brand delivers what it promises					
8. This brand's product claims are believable					
On Brand Clarity,Consistency and Credibility:					

9. This brand doesn't pretend to be something it isn't					

PART L: Brand Investment Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand spends lots of money on ads, commercials, promotions, event sponsorships, celebrity endorsements, etc					
2. This brand has spent a lot on the community over the years					
On Brand Investment and Credibility:					
3. This brand is at the forefront of using technology to deliver a better product = 1					

PART M: Perceived Quality Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. The quality of this brand is very high					
2. In terms of overall quality, I'd rate this brand as a,..					

PART N: Perceived Risk Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I never know how good this brand will be before I use its services = 1					
2. I know I can count on this brand being there in the future = 2					

PART O: Information Cost Saved Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I know what I'm going to get from this brand, which saves time shopping around					
On Brand Perceived Risk and Information Cost Saved Questions:					
2. I need lots more information about this brand before I'd buy it					
3. I'd have to try it several times to figure out what this brand is like					
4.This brand gives me what I want, which saves me time and effort trying to do better					

PART P: Expected Utility Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. If you were to use the banks' services, how many of the services will you use?					

GROUP 2: AFTER TRANSFORMATION

Based on how you view this bank, your opinion of this bank and your attitude towards this bank over the past six years, how would you respond to the following brand equity questions:

Questions based on Cognitive Psychology View

1. I am aware of NMB Bank

Yes

No

PART B: Brand Awareness Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. When I think of banks, this bank is one of the ones that come to mind					
2. I can recognise this bank among other competing banks					
3. I know this bank very well					
4. This bank is very familiar to me					
5. I can quickly remember this bank					
6. This bank is visible					

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. It makes sense to transact with NMB Bank instead of other bank, even if they are the same					
2. Even if another bank has the same products as NMB Bank, I prefer to transact with NMB Bank					
3. If there is another bank as good as NMB Bank, I prefer transact with NMB					

Bank					
4. It seems smarter to transact with NMB Bank, even if banks are not all that different					
5. Some characteristics of this bank come to mind quickly					
6. I remember the logo of this bank					
7. I have difficulty in imagining this bank in my mind					
8. This bank is good value for money					

PART C: Brand Association Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. Compared to other banks this bank is of high quality					
2. This bank is the best in Tanzanian banking sector					
3. This bank consistently performs better better than all other banks					
4. I can always count on this bank for consistent high quality					
5. This bank offers services with excellent features					
6. I believe this bank offers superior services in every way					
7. The overall quality of the service provided at this bank is excellent					
8. The quality of the service provided at this bank is impressive					
9. The service provided by this bank is of high quality					
10. This bank appears to be of poor quality					

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This bank has a strong image					
2. This bank has a favourable image					
3. This brand has a high image					
4. This brand has better characteristics than its competitors					
5. This brand has personalities that distinguishes itself from its competitors					
6. This brand is one of the best brands in the sector					
7. This brand is stable in the market					
8. My bank has an image of doing the right things					
9. I have good memories linked to my bank					

PART D: Perceived Quality QuestionsPART E: Brand Image Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I consider myself to be fond of this bank					
2. This bank is my first choice when I need to use banking services					
3. I will not switch to another bank if this bank is available					
4. I intend to continue to use this bank's services in the upcoming years					
5. I recommend this bank to my friends and relatives					
6. I will continue to be a customer of this bank even if it reasonably raises its fees					
7. I regularly use this banks for all my banking needs					

8. I am proud to do all my banking with this bank					
9. I prefer this bank to other banks					

PART F: Brand Fondness Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I consider myself to be fond of this bank					
2. This bank is my first choice when I need to use banking services					
3. I will not switch to another bank if this bank is available					
4. I intend to continue to use this bank's services in the upcoming years					
5. I recommend this bank to my friends and relatives					
6. I will continue to be a customer of this bank even if it reasonably raises its fees					
7. I regularly use this banks for all my banking needs					
8. I am proud to do all my banking with this bank					
9. I prefer this bank to other banks					

PART G: Willingness to Pay Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I would be willing to pay a higher price for services of this brand over other similar brands					
2. I prefer to purchase from NMB Bank even if another bank advertises a lower transaction fee/interest rate					

PART H: Word of Mouth Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I seek out word of advise of people					

before I choose a bank					
2. The probability of accepting advise from other people is high					
3. The probability of choosing this bank before receiving recommendations is low					
4. The probability of choosing this bank after receiving recommendation is high					
5. I have recommended this bank to lots of people					
6. I talk positively about this bank to my friends					

Questions based on Information Economic Perspective

PART I: Brand Clarity Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I know what this brand stands for					
2. I have trouble figuring out what image this brand is trying to create					

PART J: Brand Consistency Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand's image in commercials and ads has been consistent for many years = 1					
2. The quality of this brand has been consistent for many years = 2					
3. This brand's ads, prices, specials, and products match its overall image = 3					

4. Everything is consistent about this brand: fit, quality, price, ads, variety, specials, etc. = 4					

PART K: Brand Credibility Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand delivers what it promises					
2. This brand's product claims are believable					
3. You just can't believe what the ads say about this brand					
4. My experiences with this brand make me wary of their claims					
5. This brand has a name you can trust					
6. This brand reminds of someone who's competent and knows what he/she is doing					
7. This brand delivers what it promises					
8. This brand's product claims are believable					
On Brand Clarity,Consistency and Credibility:					
9. This brand doesn't pretend to be something it isn't					

PART L: Brand Investment Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. This brand spends lots of money on ads, commercials, promotions, event sponsorships, celebrity endorsements, etc					
2. This brand has spent a lot on the community over the years					
On Brand Investment and Credibility:					
3. This brand is at the forefront of using technology to deliver a better product = 1					

PART M: Perceived Quality Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. The quality of this brand is very high					
2. In terms of overall quality, I'd rate this brand as a,..					

PART N: Perceived Risk Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I never know how good this brand will be before I use its services = 1					
2. I know I can count on this brand being there in the future = 2					

PART O: Information Cost Saved Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. I know what I'm going to get from this brand, which saves time shopping around					
On Brand Perceived Risk and Information Cost Saved Questions:					
2. I need lots more information about this brand before I'd buy it					
3. I'd have to try it several times to figure out what this brand is like					
4.This brand gives me what I want, which saves me time and effort trying to do better					

PART P: Expected Utility Questions

	Disagree Strongly	Disagree a little	Neither agree nor Disagree	Agree a little	Agree Strongly
1. If you were to use the banks' services, how many of the services will you use?					