UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Gordon Institute of Business Science
University of Pretoria

Impact of branding indicators on a company share price

Rofhiwa Razwiedani

439220

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Masters of Business Administration.

14 January 2015

ABSTRACT

This research focuses on the relationship between branding and company share price. This research's purpose is to investigate the impact of branding indicators on a company share price. There has been a lot of research that has evidenced a positive relationship between marketing, of which its core component is branding, and firm performance.

Even though it has been evidenced that strong branding leads to firm performance, stock analysis literature has not taken into consideration branding indicators as a key component in predicting the future performance of a company's share price. This research addresses insights on the direct relationships between branding and share price values, which has not been extensively studied.

Literature reviewed outlined three important measures of brands which offer a view of the future performance of a brand. These brand performance measurements are brand value, brand ranking and brand ratings. These are measures which are publicly available and have been measured over time. The research utilised data from Brandentity which is a brand valuing organisation which reports brand performance annually.

The research investigated the impact of the change in brand value, brand ranking and brand ratings on company share price. The investigation shows brand rating as the only brand indicator tested that significantly positively impacts a company share price. This was found to mainly be because its orientation is competitor's performance and future brand performance. Brand value and Brand rankings were found to have no significant impact on a company share price.

The research thus concludes that brand indicators have a positive impact on a company share price and therefore brand measurements should be used as part of stock analysis to predict future performance of a company share price.

Keywords Stock analysis, brand, brand position, brand equity, brand strength, shareholder value and share price.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Signature

Rofhiwa Razwiedani

15 January 2015

ACKNOWLEDGEMENTS

The success of this research was inspired by the support friends and family. I would love to thank family from my parents (Mrs VP and Mr TC Razwiedani), to all my siblings (Ntakuseni, Mulalo, Pfariso, Pfanani, Mpfunzeni, Mufhandi and Mbavhalelo Razwiedani). I would love to send a special thanks to my brother Kagiso Mothibi who has directly supported me with this research and encouraged me throughout my MBA journey. I would like to finally also thank my supervisor Clive Coder for the insights and guidance he gave me.

Table of Contents

List of Figures

List of Tables

1. Introduction to the research problem

1.1Background and context

> "A brand is a distinguishing name and/or symbol (such as logo, trademark, or package design) intended to identify the goods or services of either one seller or a group of sellers, and to differentiate those goods or services from those of competitors" (Ghodeswar, 2008, pg4)

Competition and evolving technology have created an environment where companies produce approximately identical products or services, and the only way for these companies to differentiate their products from their competitors' is through brands (Aaker, 1991). Ghodeswar(2008) also stated that a brand creates an advantage over competing brands, which results in companies achieving high sales in such competitive environments.

"Marketing decisions makers are increasingly aware of the importance of shareholders' value maximization, which calls for an evaluation of the long-run effects of their actions on product-market response as well as investor response" (Joshi & Hanssens, 2010, pg 2). There is also a growing body of empirical evidence linking branding and marketing excellence to attaining competitive advantage (Morgan & Reg, 2009). According to Srinivasanand Hanssens (2009), there is a strong relationship between future cash flow and marketing actions. Consumer-level constructs such as attitudes, awareness, image, and knowledge, or firm-level outcomes such as price, market share, revenue, or cash flow are some of the specific marketing effects that accrue to a product with its brand name (Ghodeswar, 2008). According to Aaker (2010), marketing attracts customers to a firm which subsequently leads to better firm performance. Additionally, marketing also focuses on customer retention which is linked to long term customer profitability (Dawes, 2009).

According to the above findings, the objective for brands is to increase the firm's value and profitability. Company revenues come from customers and they are attracted by marketing, whose core component is branding (Aaker, 2010).

Marketing theorists have concluded that brands are market-based assets that may enable firms not only to increase their returns, but also to lower the risks linked with these returns and thus increase their value (Fornell, Mithas, Morgenson, & Krishnan, 2006). Risk is an important component of forecasting the future performance of a company share price and Fornell et al. (2006) have shown that market-based assets such as brands have lowered the risk a of company returns.

The shareholder value principle states that a business objective should be to maximise the return on shareholders' investment, and shareholder value analysis is fast becoming a new standard for judging managerial actions (Joshi & Hanssens, 2010). Twenty to twenty-five percent of the expenditure of many firms relate to marketing, of which one of the main components is branding (Steward, 2009). The high percentage of marketing expenditure is influenced by the ever increasing competitive business environment and is based on the belief that it will increase profitability (Gök , 2009,Joshi & Hanssens, 2010).

High marketing expenditure has prompted top management and shareholders to ask marketing managers to measure and communicate the value created by the marketing actions (Srinivasan et al., 2009).

Share price analysis, for the most part, entails the analysis of financial statements or past stock price movements (Hanssens, Rust, & Srivastava, 2009). Furthermore, according to Hsieh , Hsiao and Yeh (2011), share price forecasting is generally conducted using technical analysis (analysis of price movements) or fundamental analysis (analysis of financial statements) when formulating an investment view. Rapach (2001) and Yu and Li (2012) stated that macroeconomic variables and investor psychology are other important variables for forecasting the future performance of share prices.

Little emphasis is placed on the analysis of a company's branding indicators, despite branding playing a key role in revenue generation and in ultimately increasing the value of the firm (Hanssens et al., 2009).

According to Steward (2009), valuing a firm has become a more complex process because of the realised value that branding contributes to businesses. Traditional business valuation models do not take into consideration intangible assets like brands, which modern companies that are in competitive environments derive their competitiveness from, which in turn leads to financial profitability.

Branding literature used for this study has reliably shown that branding has grown to play a very important part in a firm's financial performance and is considered an important variable for valuing a business. From this evidence, branding literature has made a case for it to be considered for share analysis.

1.2 Research Problem

This research seeks to address questions about whether branding indicators can add value to stock analysis models and impact shareholders' value.

1.3 Research aims and objectives

This paper aimed to investigate whether branding indicators can be tied to the share price performance of a company. The paper investigated the impact of change in brand value or equity, brand ranking and brand rating on a company's share price.

The research intended to offer stock analysis literature more insight into why branding should be included in stock analysis models. The research also intends to offer insight on why more studies should be made in advancing the concept of branding indicators as tools for forecasting a company's share performance. The research also provided evidence to management and shareholders of the shareholders' value that branding produces.

The research utilised statistical tools and a quantitative approach to addresses the research problem.

1.4 Research target and significance of study

The findings of this research are aimed at the broader investment community, including that of South Africa, which is made up of equity analysts, portfolio managers, and other professional investors who are all tasked with conducting rigorous stock price analysis in order to predict the future performance of a stock. The research also aimed to provide marketing practitioners with insights into how their marketing decisions ultimately impact the share price. The research further offered management and shareholders insight into the shareholder value that branding produces.

1.5 Research structure

Below is the structure that the research will follow in order to address the impact that branding indicators have on a company share price:

- Chapter 1 introduces the research topic and outlines the research problem.
- Chapter 2 presents the literature review conducted on the subject aligned to the research problem and outlines the key themes on the objectives of a brand, how the brand is developed, the value added by brands and the importance of measuring brand performance.
- Chapter 3presents the research propositions that will drive the study.
- Chapter 4 outlines the research methodology used in the research, which features the research design, the sampling plan, the research instrument, and the analysis methodology for the study.
- Chapter 5 provides a description of the results (without interpretation).
- Chapter 6 discusses the results from chapter 5 with context to the research proposition and the literature review (Chapter 2).
- Chapter 7 concludes with the findings of the research and offer recommendations to interested parties.

2. Literature review

2.1 Introduction

The objective of a literature review is to summarize the existing research by identifying patterns, themes and issues (Seuring & Müller, 2008). Seuring and Muller (2008) states that the literature review also outline the theoretical arguments and premises of the topic or study. The research problem was derived from past researches which are outlined in Table 1 and Table 2. Majority of the journals used in this research are highly rated journals and are from recent years. This illustrates the credibility of the literature used to construct this research. The arguments for these study will be constructed in this chapter.

Table 1: Past studies on stock price analysis.

Stock price analysis		
Author (s), date	Key focus	Journal
Abarbanell and Bushee (1997)	- Link between financial statement and share prices - Establishing empirically the underlying relations between rules of fundamental analysis and1) analysts' earnings forecast revisions, 2) actual future earnings changes and 3) security returns.	Journal of Accounting Research
Hossein, Nasser &Mohammadbagher (2012)	- The research studies factors which affects analysts' decisions in Tehran Stock Exchange - The research focuses on the fundamental and technical analysis stock analysis methods.	European Journal of Economics, Finance and Administrative Sciences

	- On fundamental analyses the research focused on the following 3 factors: economy/market, industry and firm - The research uses analytical approach to study the factors affecting analysts' decisions.	
Dechow, Hutton, Meulbroek and Sloan (2001)	- How Short sellers make profits - The research studies whether ratios of cash flow, earnings, book value, and total value to price and market capitalization, which are associated with stock price performance, ask whether ratios of cash flow, earnings, book value, and total value to price and market capitalization, which are associated with stock price performance	Journal of Financial Economics
Lo, Mamaysky and Wang (2000)	- Technical stock analysis - To propose a systematic and automatic approach to technical pattern recognition using nonparametric kernel regression - Compare the daily stock returns to the specific technical analysis indicators	Journal of Finance
Zhu & Zhou (2009)	- An asset allocation perspective on the use of moving average - - Analyse the usefulness of technical analysis -	Journal of Financial Economics

	- Moving average trading rule	
Menkhoff (2010)	- Use of technical analysis by Fund Managers - Comparison to fundamental analysis - Link between technical analysis with psychological influence	Journal of Banking & Finance
Rapach (2001)	- Investigates the effects of money supply, aggregate spending, and aggregate supply shocks on real US stock prices. - Structural vector auto-regression framework.	Journal of Economics and Business
Sharma and Mahendru (2010)	- The relationship between macro-economic variables and stock prices in India - Marco-economic variables of focus were change in exchange rate, foreign exchange reserve, inflation rate and gold price	Global Journal of Management and Business Research
Yu and Li (2012)	- The importance of Investor attention and psychological anchors on predicting stock return.	Journal of Financial Economic

Table 2: Past studies on branding literature.

Branding Literature		
Author (s), date	Key focus	Journal
Aaker (2010)	- Marketing challenges in the next decade. - Reasons why marketing needs to get a firmer hold on a seat at the executive table. - Energizing Brand's influence to business.	Journal of Brand Management
Bharadwaj, Tuliand Bonfrer(2011)	- Impact of change in brand quality that are unanticipated by investors on three components of shareholder wealth. - Unanticipated brand quality change.	Journal of Marketing
Blackston (2000)	- A new approach to understanding the creation of brand equity. - System for identifying, measuring and building brand relationships. - Corporate brands.	Journal of Advertising Research
Bowden (2009)	- Traditional measures of customer satisfaction. - Redirecting satisfaction research toward an approach that encompasses an understanding of the role of commitment,	Journal of marketing theory and practice

	involvement, and trust in the creation of engaged and loyal customers. - A conceptual framework for segmenting customer-brand relationships. - Engagement of brands to different customer segments.	
Chaudhuri and Holbrook (2001)	- The two aspects of brand loyalty which are purchase loyalty and attitudinal loyalty. - Link between the two aspects of brand loyalty to brand performance.	Journal of marketing
Deleersnyder, Dekimpe, Steenkamp and Leeflang (2009)	- Cyclical sensitivity of advertising expenditures in 37 countries and its impact on business-cycle. - The long-term social and managerial losses incurred when companies tie ad spending too tightly to business cycles. - Examine 26 Global companies' impact of advertising spending on stock prices.	Journal of Marketing Research
Dillon, Madden, Kirmani and Mukherjee (2001)	- Present a decompositional model for analysing brand ratings. - Limiting biasness in brand ratings.	Journal of Marketing Research

	- The impact of the brand rating biasness on brand equity. - Relationship between brand ratings and brand association.	
Farley, Keller and Lehmann (2008)	- Identify core dimensions of survey-based measures of brand performance and how they link to each other. - The wide variety of brand performance measurements.	Journal of International Marketing
Ghodeswar (2008)	- Identify the importance elements of building brands. - The framework and sequence of building competitive brands. - The importance of aligning brand building process with organisational processes.	Journal of Product & Brand Management
Gwin, C.R. and Gwin, C.F. (2003)	- Importance of brand positioning. - Perceptual map - The product attributes model - How the product attributes model helps managers understand the strategic implication of positioning decisions.	Journal of Marketing Theory and Practice
Hanssens, Rust and Srivastava (2009)	- Marketing drivers of firm value. - Understanding brand valuation.	Journal of Marketing

	- How marketing actions creates firm value.	
Haxthausen (2009)	- Types of brand valuation - Marketing ROI - Future trends on brand valuation and marketing return on investment (ROI)	Journal Of Brand Management
Hennessey, Yun, James-MacEachern and MacDonald (2010)	- The effects of advertising awareness and media form on travel intentions. - The impact of marketing campaigns on travel intentions. - Importance of tracking visiting intentions on marketing strategy.	Journal of Hospitality Marketing & Management
Hoeffler and Keller (2003)	- The importance of building strong brands. - The benefits of strong brands.	Journal of Brand Management
Joshi and Hanssens(2010)	- The direct and indirect effects of advertising spending on firm value - The long term effects of marketing activities.	Journal of Marketing
Keller (2009)	- Building strong brands in a modern marketing communications environment.	Journal of marketing communications

	- The customer-based brand equity model. - Integration of marketing communications.	
Macdonald and Sharp (2000)	- Brand awareness effects on consumer decision making for a common, repeat purchase product.	Journal of Business Research
Morgan and Rego (2009)	- Importance of brand portfolio strategy to business performance. - Analyse the five specific brand portfolio characteristics and firm's marketing effectiveness.	Journal of Marketing
M'zungu,Merrilees and Miller (2010)	- Corporate and product brands being accepted as intangible assets of organisation. - Conceptual model of corporate brand management.	Journal of Brand Management
Park, MacInnis, Priester, Eisingerich and Iacobucci (2010)	- Defining brand attachment - Valuing of brand attachment. - Components of brand attachment.	Journal of Marketing
Rego, Billett and Morgan (2009)	- Linking marketing activities and resource deployments with returns. - Relationship between consumer-based brand equity and firm risk.	Journal of Marketing

Reimann, Schilke and Thomas (2010)	- Link between customer relation management and firm performance. - Performance frameworks - Customer relation management's impact on differentiation.	Journal of the Academy of Marketing Science
Seetharaman, Nadzir and Gunalan (2001)	- Recognising brands on the company's financial statements. - Types of brand valuation.	Journal of Product & Brand Management
Srinivasan and Hanssens (2009)	- Impact of marketing activities to shareholder value. - Reviews important investor response metrics and relevant analytical models related to marketing.	Journal of Marketing Research
Thomson, MacInnis and Park (2005)	- Measuring the strength of consumers' emotional attachments to brands.	Journal of consumer psychology

2.2 Traditional stock price analysis

According to Abarbanell and Bushee (1997), to analyse stock prices, stock analysts draw from corporate financial statements in order to form their investment hypothesis on a stock. In stock price analysis theory and literature, the two most commonly referenced methods to analyse a stock are 1) fundamental analysis, and 2) technical analysis.

2.2.1 Fundamental analysis

Fundamental analysis is the evaluation of financial statements and industrial reports to determine a company's intrinsic value and to forecast future performance of stock prices (Hossein, Nasser, & Mohammadbasher, 2012). According to Hanssens et al., (2009), a stock analysis is predominantly done using fundamental analysis, which is mostly focused on reviewing financial statements.

Dechow, Hutton, Meulbroek and Sloan (2001) stated that a large body of evidence demonstrates that ratios of measures of fundamental value to market value systematically predict future stock returns. Therefore this method assumes that there is a positive relationship between financial statement data and the value of a firm (Bernard,1995). Thus the fundamentalist forecasts accounting data in order to estimate future value of the firm. Dechow et al. (2001) and Sloan (1996)further maintained that fundamental analysis can be illustrated by using financial ratios from simple ratios such as earning-to-price and book-to-market to ratios based on more sophisticated valuation models such as Ohlson's (1995). Ohlson's Model is an equity valuation model (Ohlson, 1995)

According to Lo, Mamaysky and Wang (2000), fundamental analysis receives the highest levels of academic scrutiny and is the most widely accepted form of stock price analysis.

2.2.2 Technical and other analysis

Technical analysis is another prominent method used for analysing shares, which uses past prices and historical statistics in order to predict the future performance of a stock (Zhu & Zhou, 2009). Technical analysis is also known as "charting" because it studies recurring patterns of historical prices to forecast future performance. According to Menkhoff (2010), technical analysis is the most important company share performance forecasting tool. Menkhoff (2010) further mentioned that fundamental analysis is the closest competitor but did not mention marketing indicators in any part of his research.

Rapach (2001) stated that to add on fundamental and technical analysis, general economic conditions are a key determinant of stock prices. Macro analysis is a method of analysing stock price movements using macroeconomic variables. Rapach (2001) added that macroeconomic variables such as aggregate real output, interest rates and price levels are important variables in analysing the future performance of a company stock price. Sharma & Mahendru (2010) declared that movement of stock indices is highly sensitive to changes in the economy, adding that macroeconomic variables such as exchange rates and the gold price affects stock prices.

Psychological analysis, also known as sentiment analysis, is a type of stock analysis which uses the psychology and behaviour of investors to forecast the future performance of stock prices. Li and Yu (2012) stated that there is empirical evidence that there is a relationship between investors' attention, psychological anchors and stock returns. They further claimed that some of the behaviours that affect stock returns are under- and over-reactions, which have been extensively investigated.

Table 3: Type of traditionally used stock analysis and examples of variables

Traditional Stock Analysis

Fundamental Analysis	Technical Analysis	Macro Analysis	Psychological/ Sentimental Analysis
Reference Hossein, Nasser and Mohammadbasher, 2012 **Example of variables** ➢ Earnings per share ➢ Book to market	**Reference** Zhu and Zhou, 2009 **Example of variables** ➢ Historical share prices ➢ Historical share price movements (Patterns)	**Reference** Rapach, 2001 **Example of variables** ➢ Exchange rates ➢ Interest rates ➢ Price levels	**Reference** Li and Yu, 2012 **Example of variables** ➢ Under-reactions ➢ Over-reactions ➢ Investor reactions to events

All these methodologies represent the most common approaches to analysing shares, however none rely on the evaluation of branding indicators in their attempts to gauge the future performance of a company's share price as shown in Table 3, yet branding plays a central role in an organisation's efforts to effectively position itself and attract and retain customers.

2.3Definition of a Brand

Lehmann and Keller (2006) referred to a brand as a marker for the product or service offered by a firm. Lehmann and Keller (2006) further maintained that for customers, a brand simplifies choice, promises a particular level of quality and elicits trust. Ghodeswar (2008) defined a brand as a distinguishing name and/or symbol intended to identify the products or services of a firm. Brands provide the basis upon which consumers can identify and bond with a product or service (Weilbacher, 1995).

According to Ghodeswar (2008), the main objective of a brand is to differentiate a company's products or services from their competitors'. Competition and advancing technology has created an environment where companies' produce more or less identical products or services, and the only way for these companies to differentiate their products is through their brands (Aaker, 1991).

This is why Kotler and Keller (2012) referred to branding as a process of creating a unique name and image for a product or service in the customer's mind.

A brand offers value to the customer by providing functional benefits, emotional benefits, and self-expressive benefits (Ghodeswar, 2008). Park et al. (1986) described functional benefits as those designed to solve externally generated consumption needs. Park et al. (1986) further stated that emotional and self-expressive benefits are designed to fulfil internally generated needs for self-enhancement, role position, group membership, or ego identification. For customers to identify these benefits from a product or service they use the brand identity, which Knapp and Hart (1999) called a brand promise.

Literature identifies two types of brands - corporate brands and product/service brands. Corporate brands focus on factors internal to the organisation and pay greater attention to the role of employees in the brand building process (Harris & De Chernatony, 2001), while product/service brands focus on the offering from the organisation.

2.4 Building strong brands

From the literature it can be seen that there are three main stages of building a strong brand: brand positioning, creating brand awareness and delivering on the brand promise.

2.4.1 Brand Positioning

According to Ghodeswar (2008), brand positioning is related to creating the perception of a brand in the customer's mind and achieving differentiation so that it stands apart from competitors' brands/offerings while meeting the customer's needs and expectations. Gwin and Gwin (2003) argued that brand positioning tries to build a sustainable competitive advantage on product attributes (intangible or tangible) in the mind of the customers. This advantage is what creates or develops a positive purchasing influence from the customer which is the "bottom line" of a brand.

According to Ghodeswar (2008), the selection of a target market and segmentation has to be applied prior to the positioning of a brand. This is why Urban and Hauser (1993) referred to a brand's function as being to deliver benefits which customers need. These benefits are outlined by the positioning of a brand, which requires knowing the target market. Lehmann and Keller (2006) also maintained that positioning a brand in a complex market can be one of the most difficult and important stages of building a brand. The target market and the perceived differentiation from the competitors are core concepts of positioning (Ghodeswar, 2008)

Urban and Hauser (1993) believed that when designing a brand position for new products, the marketer must consider the following four aspects:

- The target market.
- How the product is different or better than the competitors'.
- The value of this difference to the target market.
- The ability to demonstrate or communicate this difference to the market.

Aaker(1996) view complemented that of Urban and Hauser (1993) when he described the components of a brand position as a target audience, a subset of identity/value proposition, creating advantage, and actively communicating. Ghodeswar (2008) further stated that some of the differentiation from brand positioning can be in quality (higher or lower), additional features or packaging innovation. For companies with cost advantage relative to competitors, the product or service may be positioned on value by offering a lower price.

2.4.2 Creating Brand Awareness

According to Keller (2003), brand awareness means the ability of a customer to recognise and recall a brand in different situations. Chi, Yeh and Yang (2009) asserted that brand recall means when consumers see a product category they can distinctly recall a brand name, while brand recognition means consumers have the ability to identify a brand when there is a brand cue. The differentiation created through the brand positioning process is what helps the customer recognise a specific brand.

Without communicating the brand to the target customer, the brand position or its differentiation would be created by the customer. This would lead to customers' perception of a brand being different to that intended by the company (Ghodeswar, 2008). The company thus has to find effective ways to communicate the brand promise to the customer (Ghodeswar, 2008). Ghodeswar (2008) went on to say that the company has to craft the image that they want the customer to have in their minds when they come across the company's offering. The brand positioning and target market helps to design the most effective communication strategy (communication method, communication style and type of message).

According to Hennessey, Yun, MacDonald and MacEachern (2010), branding is a key part of a marketing strategy as it plays an important role in creating awareness, attracting customers, and positively influencing purchasing decisions. One of the most utilised communication methods or component of a marketing strategy is advertising (Steward, 2009). Aaker (1991) referred to advertising as a function to differentiate a firm's products from those of its competitors, thus creating brand equity for its products. Advertising is a key instrument for building a brand and communicating the brand promise to the target market (Bharadwaj , Tuli, & Bonfrer, 2011). Keller (2009) added that strong brands generate a high level of brand awareness which enables the firm to reach a large and diverse audience.

Other methods used to create brand awareness are direct marketing, sales promotion, sponsorships, endorsements, public relations, the internet, and integrated brand communication. Brand position creates the tangible and intangible attributes of a brand, which each require a specific communication method to create effective brand awareness (Ghodeswar, 2008). In order for firms to optimally shape the image that they want customers to have about their brand, they need to effectively create brand awareness (Macdonald & Sharp, 2000).

2.4.3 Delivering on the brand promise

M'zungu, Merrilees and Miller (2010) stated that the increasing difficulty of the business environment caused by changing markets, the fragmentation of distribution and media channels, the increasing importance of networks and emphasis on collaboration between the organisation and its customers in creating value, places greater emphasis on the value and delivery of intangible resources such as brands. Keller (1993) also claimed that delivering a brand promise is tougher now because of high marketing costs, greater competition and flattening demand in many markets. This environment has made the process of delivering a brand promise difficult and key in building a strong brand.

A number of facets are needed to develop a brand promise. Keller and Lehmann (2006) stated that one of the key ingredients of delivering a strong brand promise is the integration of all the activities involved in building a brand. Keller and Lehmann (2006) then outlined the following as key factors that need to be integrated: brand marketing, brand elements, marketing channels and communications.

Brand marketing: Keller and Lehmann (2006) maintained that a lot of branding and marketing activities occur during the process of developing a brand. Keller and Lehmann (2006) added that the success and effectiveness of these activities are not only dependent on how each activity works, but also on how they work in combination. For this reason, when measuring the results of these activities there should be a variable which measures the collective performance of these activities.

Brand element: According to Keller and Lehmann (2006) there should be an integration of brand elements such as brand name, logo and symbol, and slogans to create a strong brand value or equity.

Marketing channels and communications: Naik and Raman (2003) stated that coordinating marketing channels and communications leads to beneficial results. Edell and Keller (1989) gave an example of using print and radio platforms to reinforce TV adverts, while the video and audio components of TV adverts serve as the basis for print and radio adverts. Edell and Keller (1989) further declared that this example increases the impact of TV adverts.

The next important ingredient for developing a strong brand promise, according to Keller (1993), is that marketers must be able to measure the value added by their strategic decisions. These allow marketers to continuously improve their decisions to gain more value, helping to inform decisions such as target market definition and product positioning, as well as tactical decisions such as marketing mix, which leads to developing a strong brand. This also assists marketers to integrate brand marketing, brand elements, and marketing channels and communications.

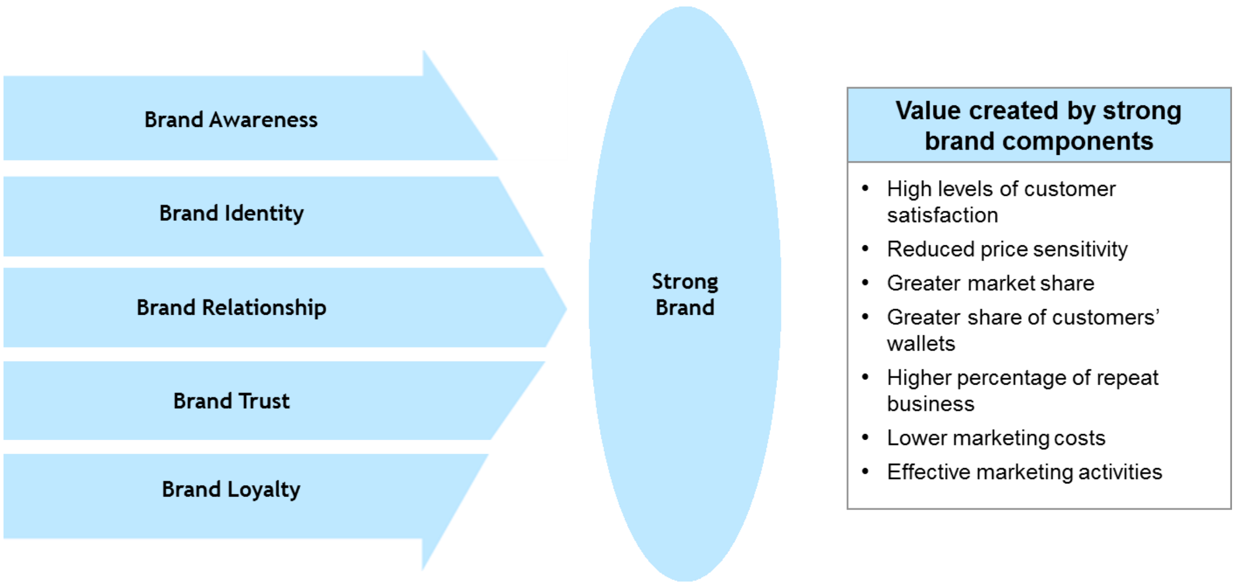
The literature has shown that if these three core stages (brand positioning, creating brand awareness and developing brand promises) are implemented effectively, these will result in a strong brand.

2.5The role of branding in creating value

The objective of a firm is to create shareholder value by selling a product or a service to customers (Joshi & Hanssens, 2010). According to Ghodeswar (2008), an important factor which influences the selection of a brand concept is the customers' needs. A brand's value proposition is a statement of the function, emotional and self-expressive benefits delivered by the brand value to customers; a brand is based on the customer and its objective is to positively influence the customer's purchasing decision or behaviour. Keller and Lehmann (2006) outlined that a brand can simplify buying choice, promise particular quality, reduce risk and/or engender trust.

Five important themes reoccur in the literature related to brands adding value, namely brand awareness, brand identity, brand relationship, and brand trust and loyalty. Figure 1 shows the five components of a strong brand outlined by Aaker (1996), Ghodeswar (2008), Keller and Lehmann (2006), Oliver (1999) and, Chaudhuri and Holbrook (2001) which results to high levels of customer satisfaction, reduced price sensitivity, greater market share, greater share of customers' wallets, higher percentage of repeat business, lower marketing costs and effective marketing activities.

Figure 1: The components and value added from a strong brand



2.5.1 Brand Awareness

Aaker (1996) stated that brand awareness is the ability of a customer to recognise and recall a brand in different situations. This means that when a customer is showered with a long queue of brands, they are able to recognise a specific brand. Competition has drastically increased and the importance of a brand being recognised has increased with it. Keller (2009) highlighted that strong brands generate a high level of brand awareness, which enables the firm to reach a large and diverse audience. This means that a high level of brand awareness provides the firm with an opportunity to influence the purchasing decisions of a larger customer base.

2.5.2 Brand Identity

Ghodeswar (2008) defined brand identity as a unique set of brand associations implying a promise to customers and including a core and extended identity. Ghodeswar (2008) went on to add that the core identity broadly focuses on product attributes, service, and user profiles, and store ambiance and product performance. Brands are facing aggressive competition in the marketplace, which makes the components of brand identity, brand personality and reputation important in helping to distinguish a brand from its competitors.

Schmitt and Simonson (1997) argue that strong brand identity creates preference in the marketplace, adds value to products and services, and may command a price premium.

2.5.3 Brand Relationship

According to Weilbacher (1995), brands provide the basis upon which consumers bond with a product or service which is derived from some form of relationship. Keller and Lehmann (2006) maintained that marketing and branding activities create a relationship between customer and brands, adding that the brand-customer relationship is viewed as being multi-faceted and consists of the following six dimensions:

(1) Self-concept connection

According to Fournier (1998), self-connection is a relationship quality which reflects the degree to which the brand delivers on important identity concerns, tasks and themes, thereby expressing a significant aspect of self. Self-connection helps relationship maintenance through the cultivation of protective feelings (Drigotas & Rusbul, 1992) and the encouragement of tolerance during challenging times for the brand.

(2) Commitment attachment

Johnson (1973) stated that customers profess brand commitment through brand pledges such as “I am very loyal to that brand” and “I would never buy any other brand besides that”. Fournier (1998) also believed that commitment leads to customers sticking to the brand during challenging times.

(3) Behavioural interdependence

When a customer has a strong behavioural interdependence they frequently get involved in brand interactions, increase the scope and diversity of brand-related activities, and increase the intensity of individual interactions (Fournier, 1998). Hinde (1979) further added that behavioural interdependence happens when the customer has made the brand part of their daily life.

(4) Love and passion

Fournier (1998) referred to the core of all strong brands as the concept of love and passion. He further expressed that when customers have not used a brand they love and are passionate about for a while, they develop a feeling of “something is missing”. Murray, Holmes and Griffin (1996) mentions that the feeling of love encourages “biasness” and a positive perception of the brand. These “biasness and positive perceptions makes it tough for consumers to compare the brand to alternative brands (Murray.et al., 1996).

(5) Intimacy

According to Blackstone (2000), brand intimacy is measured by the brand’s success in developing a personal connection with the individual customer and showing that the brand knows them. Blackstone (2000) added that intimacy is important for corporate brands, because a corporate brand which does not act as if it knows who its customers are will not earn their trust, regardless of its credibility and reliability. A great example of intimacy is the Coca Cola “share a coke” campaign, where customers were offered the opportunity to brand a coke bottle with their name, friend’s name or family member’s name (Melo & Balona, 2013)

(6) Brand-partner quality.

Brand-partner quality, according to Fournier (1998, pg365), revolves around the following six themes:

- A felt positive orientation of the brand towards the customer.
- Judgement of the brand’s overall dependability.
- Reliability and predictability in executing its partnership role.
- The judgement of the brand’s adherence to the implicit and psychological contract between the customer and the brand.
- The trust that the brand will deliver on its brand promise.
- Comfort in the brand’s accountability for its actions.

A strong brand requires a high level of these six dimensions of a customer-brand relationship.

2.5.4 Brand trust and loyalty

Brand loyalty was defined by Oliver (1999) as a deeply held commitment to repurchase a preferred product or service consistently in the future, which cause the repetition of the purchasing of the same brands, despite situational influence and marketing efforts having the potential to cause switching behaviour. A strong brand-customer relationship creates brand loyal customers. The two main concepts of brand loyalty are attitudinal and behavioural (Oliver, 1999). Chaudhuri and Holbrook (2001) asserted that the behavioural concept of brand loyalty is shown through the repeated purchasing of a brand, while the attitudinal concept is shown through a degree of dispositional commitment in terms of some unique value associated with the brand.

2.5.5 The outcomes of strong brand

Brands with strong brand awareness, brand relationship, brand identity, brand trust and brand loyalty results in high levels of customer satisfaction, reduced price sensitivity, fewer customer defections, a greater share of customers' wallets, more referrals, and higher percentage of repeat business (Knapp & Hart, 1999). Czellar (2003) declared that strong brands create a situation where it is easy to launch new products and services under that brand. Studies also have shown how strong brands can extend more successfully and into more diverse categories (Aaker & Keller, 1990; Bottomley& Doyle, 1996, Keller &Aaker, 1992; Rangaswamy et al., 1993).

According to Ghodeswar (2008), strong brands result in favourable word of mouth marketing and greater resistance among loyal customers to strategies from competitors. These benefits, together with the ease of launching new products and services, leads to lower marketing costs, which positively impacts the firm's finances. Since marketing costs have increased (Gök , 2009) and are now one of the highest costs of firms, these make the lower cost advantage significant.

Brands are also an important factor in improving the effectiveness of marketing efforts such as advertising and channel placement, i.e. marketing activities are more effective for strong brands.

2.6 Brand measuring

Brand metrics are measuring tools used to assess the performance of a brand (Lehmann, Keller, & Farley, 2008). Literature has shown that marketing departments are under pressure from management to communicate the value added by marketing activities, and brand metrics is a key tool to respond to this request (Srinivasan et al., 2008).Knowing the value of brands and marketing activities would allow management to offer the required resources to build successful brands.

According to Christodoulides and De Chernatony (2010), measuring the key factors that drive the building of strong brands would allow marketers to make improvements which positively impact these key factors. Neely, Bourne, Mills, Platts and Richards (1996) stated that performance measures can be used to improve business strategies by focusing on business processes that deliver value to customers (Bititci, Carrie, & McDevitt, 1997; Neely & Adams, 2001),ultimately having a significant positive link with performance (Fleming, Chow, & Chen, 2009).

The literature has also outlined brand equity/value and brand ratings (brand attitude) as two brand measurements that offer a valuation of the overall brand impact on the firm.

2.6.1 Brand Equity

The strength or performance of the brand is measured by Brand Equity, which according to Rego, Billett, and Morgan (2009) refers to the value added to an offering by brands. Brand equity is also defined as the marketing effects or outcomes that accrue to a product with its brand name, compared with those that would accrue if the same product did not have the brand name (Aaker, 1991; Dubin, 1998; Farquhar, 1989; Keller, 2003; Leuthesser, 1988). The impacts and effect of all marketing activities directed to brands are incorporated in the brand equity.

According to Keller (2003), brand equity can be captured by five aspects that form a hierarchy:

- Awareness – How much a customer recognises and recalls the brand
- Association – Anything linked in memory with the brand
- Attitude – The level of acceptance or attraction of the brand
- Attachment – The level of loyalty to the brand
- Activity – Frequency of the purchasing and consumption of the offerings represented by the brand.

Haxthausen (2009) expressed that there are many objectives of brand valuation, which has led to the existence of many brand valuing methods.

2.6.1.1 Methods of brand evaluation

There are several methods of determining the value of a brand, however they can generally be classified into four types of method based on existing uses (Cravens and Guilding, 1999):

1) Cost-based approaches
   Seetharaman, Nadzir and Gunalan (2001) stated that for cost-based approach, a brand is valued by considering the cost involved in developing, acquiring, building or maintaining the brand. Seetharaman et al., (2001) further stated that the cost-based approach is the most conservative method and provides little future orientation. This is a significant weakness because stack analysis is based on the future performance of a firm.

2) Market-based approaches
   Seetharaman et al., (2001) asserted that the market-based approach focuses on the external brand management approach. Seetharaman et al., (2001) added that this method determines the value of the brand and the price at which the brand can be sold. The important characteristic of this approach which is aligned to stock analysis, is that it determines the future benefits associated with owning the brand. This method also incorporates external influences such as competitors, which is core to the objective of a

brand. Haxthausen (2009) stated that there are two market-based approaches, namely:

a) Straight brand value – This method adjusts the brand value for the relative sizes of the brands' underlying business.

b) Royalty relief brand value – This method values the brand based on the estimated royalty stream that the brand could demand if it were licensed out.

3) Income-based approaches

Seetharaman et al., (2001) argue that the income-based approach focuses on the future potential of a brand, which is aligned to the objective of stock analysis. It thus avoids problems relating to a dependence on costs. To further illustrate this method's alignment with stock analysis, the authors added that the approach requires determination of the future net revenue attributed to the brand and discounting to the present value.

4) Formulary approaches

Seetharaman et al., (2001, pg250) argued that the formulary approach uses a multiplier, which has seven factors to consider. This multiplier is created from an evaluation of brand strength based on the following seven factors:"

a) Leadership–The ability of the brand to function as a market leader and hold a dominant market share.
b) Stability – The ability of the brand to retain its image and consumer loyalty over long period.
c) Market – Certain product markets are more valuable than brands in other markets due to their ability to generate greater sales volumes.
d) Support – The organisations that are able to give full support and are consistently managed are weighted higher than brands without any organisational investment.
e) Protection – Relates to the legal issues associated with the brand such as a registered trademark, which strengthens the legal right to protect the brand.
f) International image – An international brand has more potential to expand rather than a regional or domestic brand.

g) Trend – The ability of the brand to remain current in the perception of consumers and to maintain a consistent level of perception."

To use brands to add value to a stock analysis, the appropriate brand valuing method should be used.

Most marketing research companies have created brand rankings which use the brand equity/value to rank brands (Homburg, Klarmann & Schmitt, 2010). The brand rankings measure how the effects of firms' brands compare to each other.

2.6.2 Brand ratings

Dillon, Madden, Kirmani and Mukherjee (2001) defined brand ratings as a measurement of the favourability of a brand association. Dillon et al., (2001) further expressed that brand ratings consist of two main components overall brand information and detailed attribute information. According to Mehta (1994), and Dillon et al., (2001), brand ratings are a measure of brand attitude, which Park, MacInnis, Priester, Eisingerich and Iacobucci (2010) called brand attitude strength. According to Keller (2003),brand attitude is the level of acceptance or attraction to the brand, while MacInnisand Park (2005) mentioned that favourable brand attitude is positively correlated to brand attachment (the level at which customers are emotionally attached to a brand).

Petty, Haugtvedt and Smith (1995) averred that attitude strength predicts purchase behaviour, with the direction of behaviour varying as a function of whether the attitude is strongly positive or strongly negative.

2.7 Conclusion

The literature clearly shows that branding activities as measured by branding indicators are important drivers of a company's value and performance. The literature also shows that these brand value measurements are often overlooked in traditional stock price analysis. There is thus a gap in the financial literature about the role branding metrics have to play in influencing investment decisions. As such, this research seeks to assess the extent to which branding value measurements influence a company's share price.

3. Research Propositions

Given that the purpose of the study is to investigate the impact of branding indicators on a company's share price, the following research propositions guide this study:

3.1 Research Proposition 1

The share value of a company is positively influenced by the change in company brand value or equity.

Fornell et al., (2006) stated that there is a positive relationship between brand activities and company future profit which is the main driver of company share value. Furthermore Morgan and Rego (2009) stated that marketing activities such as branding have a strong impact on a company's revenue.

3.2 Research Proposition 2

The share value of a company is positively influenced by the change in company brand rating.

Brand ranking compares global brands and offer insight on the performance of one brand to another. Ghodeswar (2008) stated that brands create competitive advantage over competing brands which leads to high sales levels. This illustrates the importance of ranking brands because their objective is to differentiate products and the value the produce.

3.3 Research Proposition 3

The share value of a company is positively influenced by the change in company brand rating.

According to Luo et al., (2013) brand rating is a measurement that groups brands into groups segmented by the strength of the brand.

Brand rating is derived from the Brand Strength Index which benchmarks the strength, risk and future potential of a brand relative to its competitors on a scale ranging from D to AAA (Brandirectory, 2014). Luo et al., (2013) stated that brand rating offers information of the future performance of a brand which is linked to profits.

4. Research methodology

In this chapter, the details of the methodology chosen to answer the research questions and justification for the chosen methodology will be provided. This chapter gives details of the following sections: the research approach, the sampling process and size, a definition of the population and the unit of analysis, the data collection process, the data analysis approach, data integrity and the research limitations.

4.1 The research approach

Bloomberg and Volpe (2012, pg97) explained that the “Choice of research approach is directly tied to the research problem and purpose.” According to Kothari (2009) the purpose of a research is to discover answers to questions through the application of scientific procedures. He further states that each research has its own objective, and different objectives require different research approaches. According to Saunders and Lewis (2012) there are three research designs, including:

- **Exploratory design** is used in situations where the problem is unknown and requires exploration. Kothari (2009) states that the objective of exploratory design is to gain familiarity with a phenomena or to achieve new insights.
- **Descriptive design** is used to accurately describe the characteristics of a relevant phenomenon and usually answers a “what?” question. Kothari

(2009) also adds that descriptive design's objective is to portray accurately the characteristics of a particular individual, situation or a group.

- **Explanatory design**, which is sometimes called **causal design**, is used to identify cause and effect relationships between variables and usually answers a "why?" question. Kothari (2009) outlines the objective of explanatory design as to determine the frequency with which something occurs or it's associated with something else.

This research's objective is to identify the cause and effect relationship between brand indicators and a company's share price, therefore an explanatory or causal design was used to answer the research questions and to identify this relationship. According to Cooper and Schindler (2014), the causal research approach is used when the researcher seeks to establish whether "a change in one variable causes or leads to a change in other variables".

According to Creswell and Clark (2007) there are three research methods, namely the quantitative, qualitative and mixed (both qualitative and quantitative) methods. Karami, Rowley and Analoui (2006) stated that qualitative research is used to extract insights and to gain an understanding of the problem. Kothari (2009) then defined qualitative method as one which is more concerned with phenomena relating to or involving quality and kind. Kothari (2009) explains quantitative method as a method which is based on the measurements of quantity. He further adds that it is applicable in phenomenon that can be expressed in terms of quantity. Rowley and Analoui (2006) stated that quantitative method is more widely accepted approach to establish reliability and validity.

According to Saunders and Lewis (2012) the quantitative method is the most appropriate method to use for a causal or explanatory design. This research's objective is to quantify the impact that branding activities has on a company share price. From the above literature on research methods the quantitative method is the best method used to answer the research questions because their focus is to quantify the impact of one variable to another.

Given that the research design was chosen to fit the type of problem was causal or explanatory, the quantitative method was judged to be the best research method to find a solution for this problem (Saunders & Lewis, 2012). Additionally, according to Bloomberg and Volpe (2012), quantitative research is effective at investigating relationships and “unpacking” cause-effect phenomena. The type and volume of the data underlying the topic also required a quantitative method.

The quantitative research methodology was also selected because it enables the use of advanced techniques to “unpack” precise relationships underlying very large datasets. According to Cooper and Schindler (2014) the quantitative research methodology allows a researcher to establish precisely ‘how much’, ‘how often’, ‘how many’, ‘when’, and ‘who’. Furthermore, Silverman (2011) states that the quantitative method can be applied to much larger samples than qualitative interviews, which enables inferences to be made on much greater populations.

4.2 Defining the population

Wegner (2013) defines population as a collection of all possible data values that exists for the random variable under study. The population of this study is the all branded company which are traded on a stock exchange.

4.3 Unit of analysis

In the literature, unit of analysis refers to a great variety of objects of study, for example, a person, a program, an organisation, a classroom or clinic, a community, state or nation (Graneheim & Lundman, 2004). The units of analysis in this study are brand value (equity), brand ranking, brand ratings and share returns.

4.4 Census

The objective of this research was to make a reliable conclusion from a census of company brands and infer the conclusion to a global population of company brands which includes company brands which are not part of the census. Lohr (2012) defines census as a procedure of systematically acquiring and recording information about the members of a given population. The census description used for the research was the top 500 company brands which are traded on a stock exchange and were in the top 500 between the years 2008 and 2014. This census will be used to infer to all company brands that are traded on stock exchanges.

This approach is similar to a non-probability sampling methods which Wegner (2014) defines as a method where the sample is not selected randomly. The process of acquiring data for a research is important because it determines the level of accuracy of the inference of the sample results (Cooper & Schindler, 2014). Accuracy is explained by Cooper and Schindler (2014) as the degree to which bias is absent from the sample. According to Lachin (1981), sample size is very important for the accuracy and precision of the result. Wegner (2013) stated that a statistical reliable minimum sample size should be 30, however this research census contained over 120 companies with eight years of brand and share price data. This large census size minimised the effect of the non-probability sampling approach.

4.5 Data collection

Secondary data was used to conduct the research from the following accredited databases: BFA Macgregor for NYSE share prices, company financial statements, and BRANDIRECTORY. The main advantage of using secondary data, particularly with the quantitative method, is that you can use a large sample size, which allows for more accurate results than primary data. The main disadvantage of secondary data is that the researcher does not have control of the selection, reliability and quality of the data (Sorensen, Sarroe, & Olsen, 1996).

4.6 Data analysis

To formulate a conclusion from the sample the following processes were conducted;

1) Preparation of data

Data preparation process was used to detect and remove errors and inconsistencies from the data in order to improve its quality (Rahm & Do, 2000). Weiss (1990) refers to outliers as observed values that do not appear to follow the characteristics distribution of the rest of the data. Grubbs (1969) refers to an outlier as observations that appears to deviate markedly from other members of the sample in which it occurs. Weiss then states that outliers are influential observations which may distort statistics and analysis of the norm, and should be removed before analysis. Outliers and missing data was evidenced in the sample and was removed because it distort the analysis of the data.

Schafer and Olsen (1998) states that missing values hampers analysis process. Schafer and Olsen (1998) then states that the utilised solutions for missing value is by removing the missing data, either by ignoring subjects with incomplete information or by substituting plausible value for the missing value. Missing values were removed from data used to analyse the propositions.

2) Descriptive statistics

According to Weiss (1990) descriptive statistics is the branch of statistics that involves organising, displaying and describing data. Weiss further states that descriptive statistics includes the construction of graphs, charts, and tables, and the calculation of various descriptive measures such as averages, measures of variation, and percentiles. This process will offered insight on the characteristics of the companies branding indicators and share returns.

3) Two sample test

A two sample t test was used to investigate the propositions. According to (Wegner, 2013) two sample t test is a test used to test if two sets of data are significantly different from each other. In this study the two sample t test tested weather a group of companies with positive change in branding indicators has higher share returns than companies with a negative change in branding indicators.

Wegner (2013) also then states that the two sample t test assumes that the variables being tested are normally distributed. The normality of the data determines the reliability of the results of the two sample t test. Park (2002) states that there are two ways of testing for normality, which are graphical and numerical methods. This research used both methods to test for normality.

Under the graphical method the research used histogram and Q-Q Plot to test for normality. Wegner (2013) defines a histogram as a graphical representation of the distribution of data and Q-Q (quantile-quantile) plot as a graphical technique for determining if two data sets come from populations with a common distribution. Under the numerical method the research used the Anderson-Darling test. Scholz and Stephens (1987) defines the Anderson-Darling test as a test used for testing the homogeneity of samples. They furthers state that Anderson-Darling test is used for testing whether several batches of data come from a common normal population.

Wegner (2013) states a variance from two population can be either equal or unequal, depending on this status the two sample tests used different formulas. The researcher conducted a test for equality of variance in order to choose the two sample test formula used.

4.7 Research ethics

Research ethics is an important component of conducting a research. The ethical clearance process protects the rights and interests of human participants. This process is particularly important where information gathered has the potential to invade the privacy and dignity of participants. This research process passed the ethical clearance process.

4.8 Data integrity

Reliability and validity is an important characteristic of the strength of the results (Cooper & Schindler, 2014). According to the authors, reliability is the degree to which the data collection method would yield consistent results, while validity refers to the extent to which the data collection methods accurately measure what they were intended to measure. Wegner (2013) states that a sample greater than 30 is a reliable sample to infer the population variables. This research's sample is greater than 100, which makes it a strong and reliable sample for the research.

4.9 Research limitations

Stock exchanges from different countries have different characteristics which impacts the share price movements (Paganoa, Randl, & Zechner, 2001). Pagano et al. (2001) states that characteristic such as trading costs, trading systems, the size of the stock exchange, availability of information and exchange rate affects the share price movements. This research uses share prices from different stock exchanges which marginally negatively impacts the research.

5. Research results

5.1 Introduction

This chapter presents and explains the research results. Three processes had to be completed to generate the results, which were: preparation of the data, results of the descriptive statistics of the data, and conduct a normality test of the variables and then use the two sample tests to test the significance of brand value, brand rankings and brand ratings on company share returns. Minitab 17 Statistical Software was used to run the above statistics and tests. All these processes were executed to test the three research propositions defined in chapter 3.

5.2 Preparation of the data

The aim of this process was to create a dataset which met the criteria of the research. The process was also used to detect and remove errors and inconsistencies from the data in order to improve its quality (Rahm & Do, 2000).

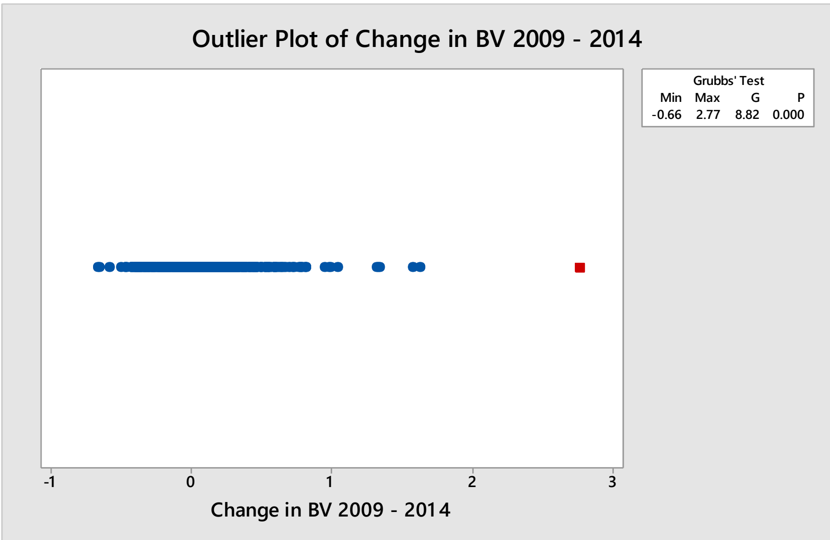
From the top 500 branded companies the following companies were excluded: companies which were not publicly traded, companies which were not consistently in the top 500 branded companies from 2008 to 2014, and the outliers which would distort the results.

<u>Outlier Test</u>

An outlier plot was used to test for outliers. This plot uses Grubbs' test of 5% significant level on each individual observation. The observations marked in red from the outlier plot are outliers. Figure 2 to Figure 4 shows the outliers from each variable.

1. Change in brand value

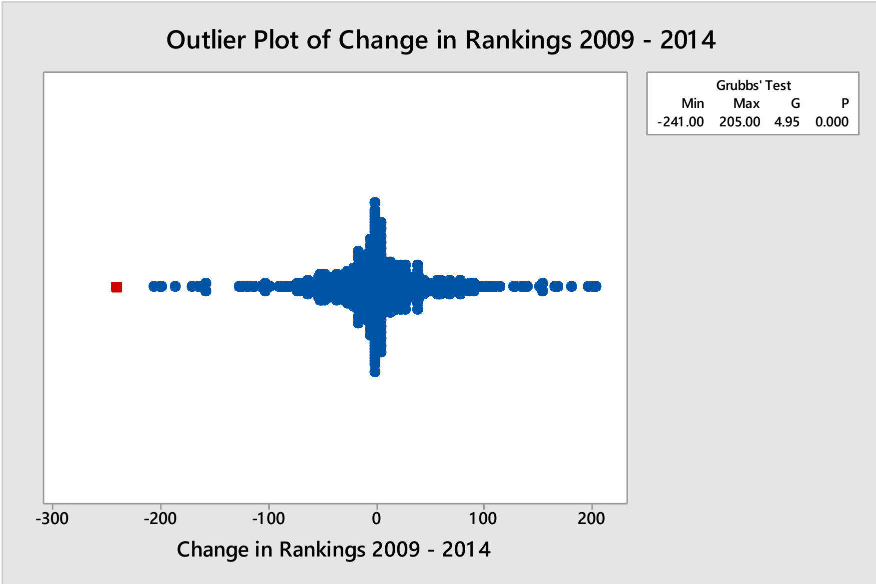
Figure 2: Outlier plot of change in brand value



Change in brand value has only one outlier (Row 418, observation = 2.7708).

2. Change in brand ranking

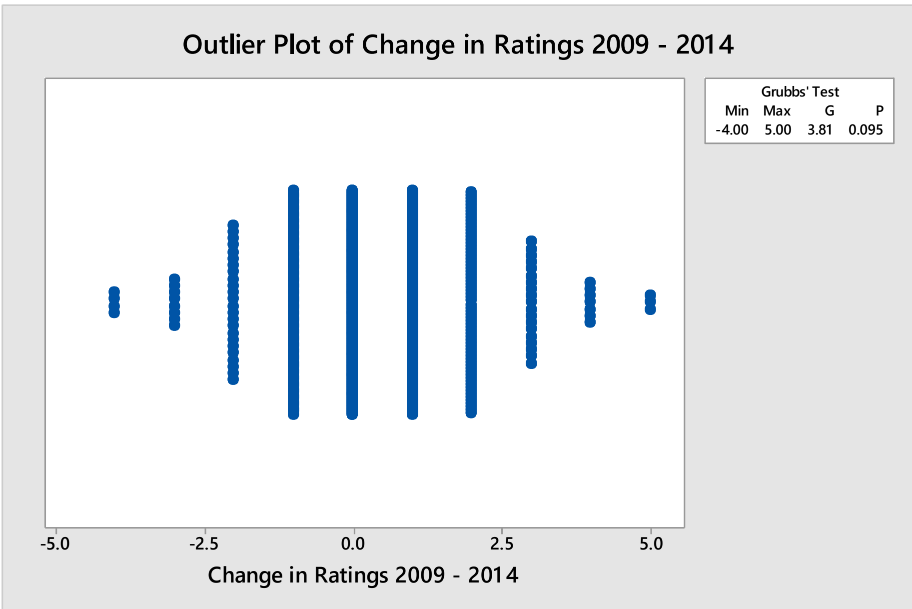
Figure 3: Outlier plot of change in brand ranking



Change in brand value has only one outlier (Row 685, observation = -241).

3. Change in brand rating

Figure 4: Outlier plot of change in brand rating



Change in brand rating has no outlier.

The three exclusion processes resulted in a dataset of 120 companies with eight years of monthly share prices from the company's primary stock exchange. The dataset has 720 observations from the 120 companies.

For the data to be comparable the following variables were transformed:

1. Brand value was transformed to a year on year percentage change in the brand value.
2. Brand ranking was transformed to a year on year change in brand ranking.
3. Brand rating was converted to numerical values according to the levels then transformed to a year on year change in brand rating.

Table 4: Brand Ratings Transformation

Brand Rating Code	Brand Rating Description	Numeric Value
AAA+	Extremely Strong	1
AA	Very Strong	2
A	Strong	3
BBB-B	Average	4
CCC-C	Weak	5
DDD-D	Failing	6

4. The company share price from the company's primary stock exchange was transformed to an annual percentage change in share price (share return).

5.3. Descriptive statistics of the final dataset

Table 5: Descriptive statistics of final dataset

Variables	N	Mean	SE Mean	Standard Deviation	Variance	Sum of Square
YoY Share returns	720	15.95%	0.147	0.3955	0.1564	130.7491
Change in Brand Value	720	10.92%	0.0112	0.3017	0.0910	74.0489
Change in Brand Rankings	720	0.15	1.82	48.75	2376.89	1709001.00
Change in Brand Ratings	720	0.3181	0.0458	1.2302	1.5134	1161

Variables	Minimum	Median	Maximum	Range	Skewness
YoY Share returns	-0.6461	0.0948	4.2964	4.9424	3.77
Change in Brand Value	-0.6558	0.0872	2.7708	3.4266	1.71
Change in Brand Rankings	-241	0	205	446	-0.13
Change in Brand Ratings	-4	0	5	9	0.19

The average for all annual share returns was 15.95%, which was accompanied by positive changes in brand value, brand rankings and brand ratings. Change in brand rankings has the highest sample variance with a 446 range, which illustrates the volatility of brand rankings.

5.4 Testing of the two sample test assumptions

Two sample tests assume that the variables are normally distributed. The strength of the assumptions influences the validity of the results.

Normality test

The normality plot and histogram were used to test the normality of the variables which were used for the two sample test.

Interpreting the normality plot and histogram

The normality plot used the Anderson-Darling test, if the p-value of the Anderson-Darling is < 0.05 then the variable is normally distributed. If the observations form a linear shape, we can also conclude that the variable is normally distributed. The histogram needs to have a normal distribution shape (bell shape) for the variable to be approximately normally distributed.

1. Change in Brand Value

Figure 5: Change in brand value normality plot

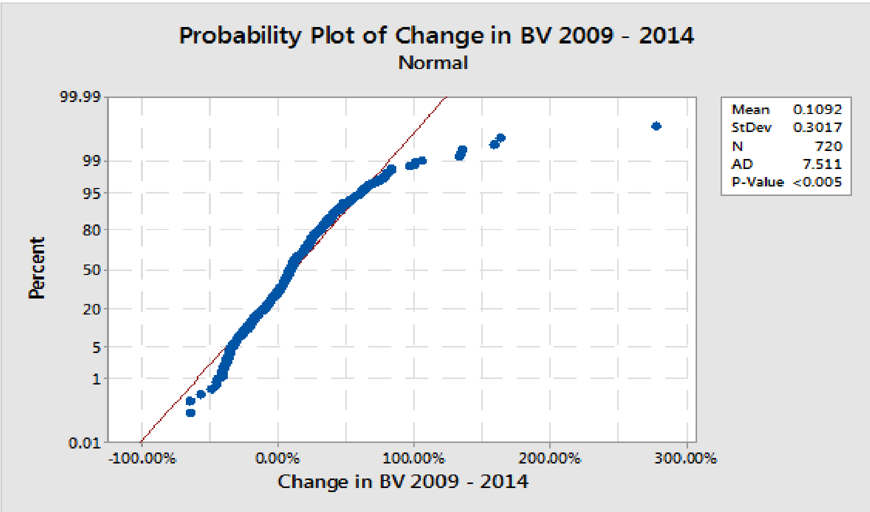
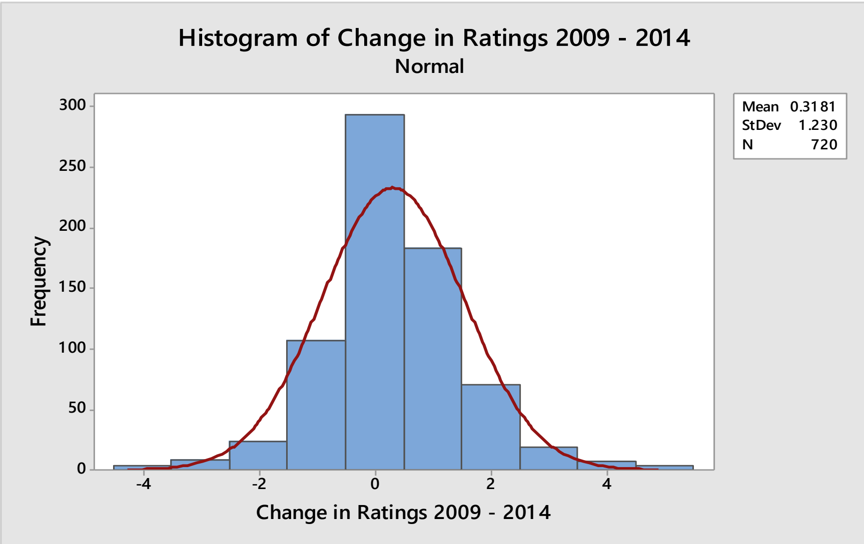


Figure 6: Change in brand value histogram



The p-value of the normality plot (Figure 5) is < 0.05, the observations are linearly shaped and the histogram (Figure 6) has a normal distribution shape (bell shaped), which means that one can conclude that the change in brand value is normally distributed.

2. Change in Brand Ranking

Figure 7: Change in brand rankings normality plot

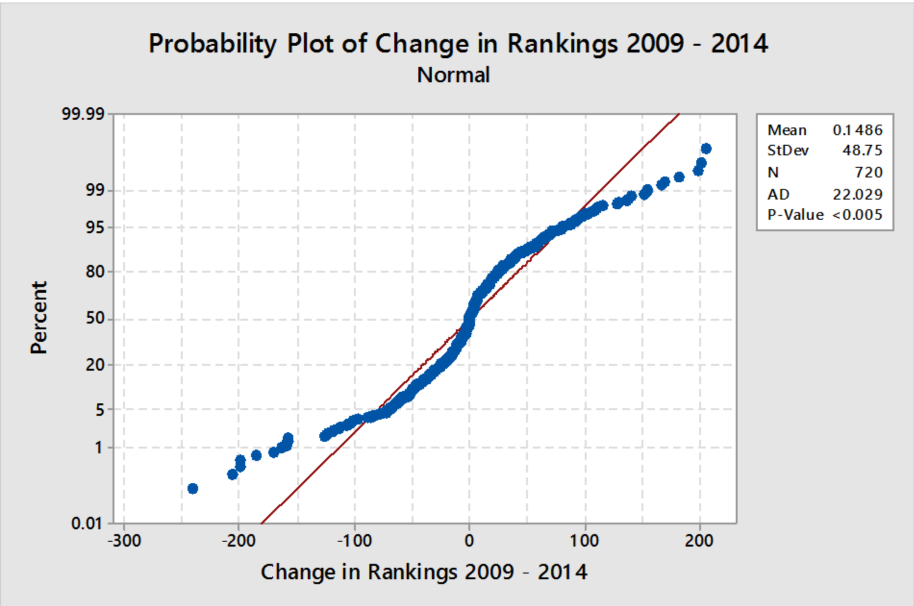
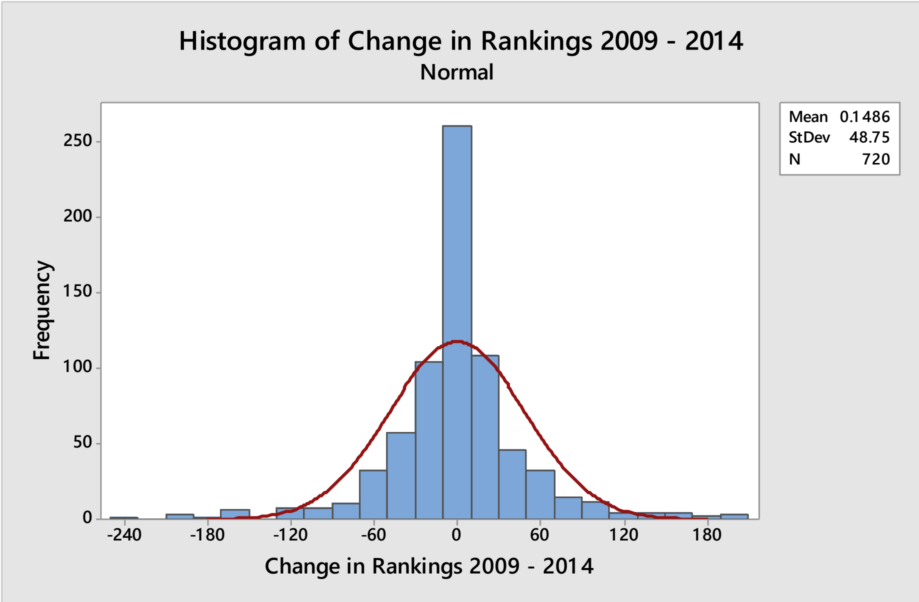


Figure 8: Change in brand ranking histogram



The p-value of the normality plot (Figure 7) is < 0.05, the observations are linearly shaped and the histogram (Figure 8) has a normal distribution shape (bell shaped), which means that one can conclude that the change in brand rankings is normally distributed.

3. Change in Brand Ratings

Figure 9: Change in brand ratings normality plot

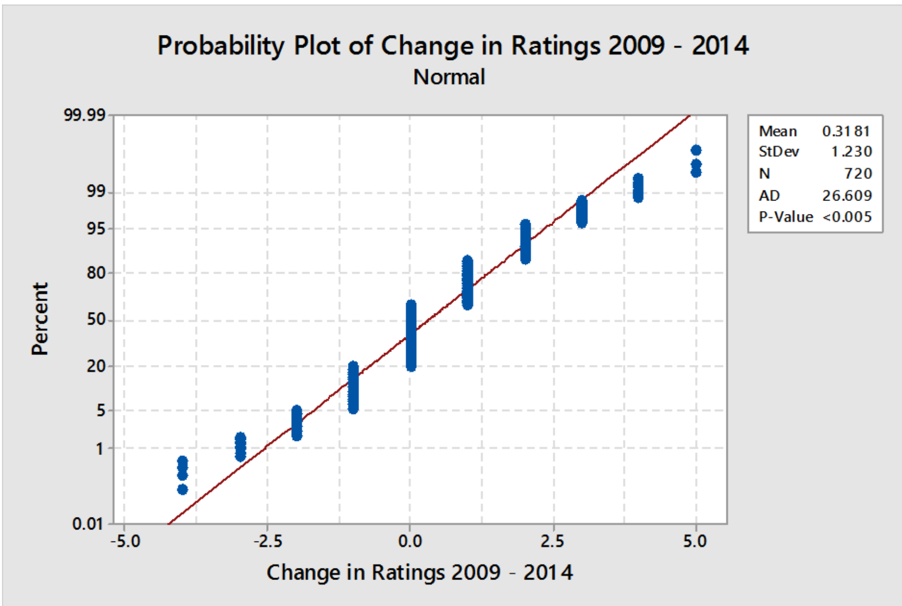
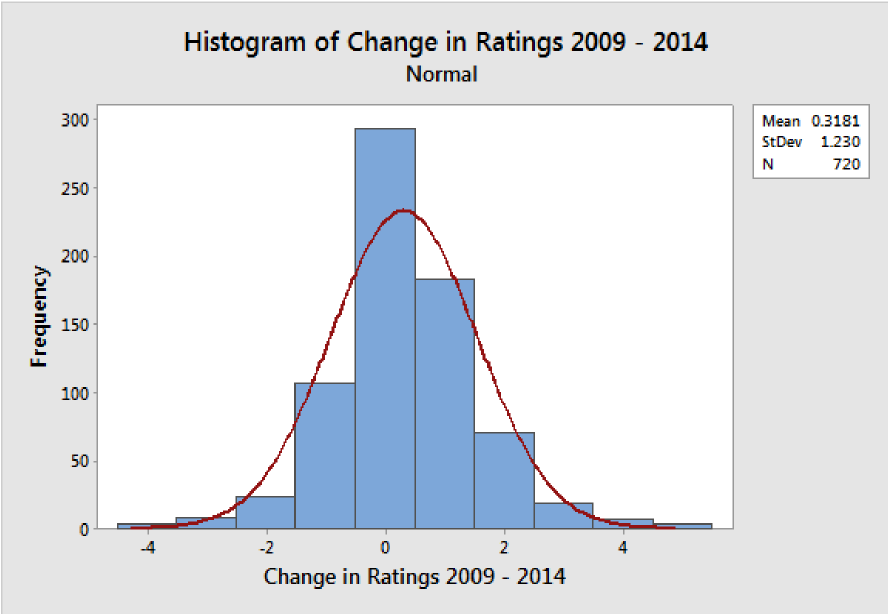


Figure 10: Change in brand rating histogram



The p-value of the normality plot (Figure 9) is < 0.05, the observations are linearly shaped and the histogram (Figure 10) has a normal distribution shape (bell shaped), which means that one can conclude that the change in brand ratings is normally distributed.

The variables all strongly met the assumptions for the two sample test which was used to investigate the research propositions.

5.4 Test of the propositions

For details for the tests in this section, please refer to the appendices.

5.4.2 Proposition 1

The impact of change in a company's brand value on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand value and a group of companies with a negative change in brand value.

Test for equality of variance

Since p-value is less than 0.05, the test concluded that the variances are unequal at a 5% level of significance.

Test for equality of means

Statistical conclusion: Since p-value (= 1) > α (= 0,025), do not reject H0 in favour of H1.There is insufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is no significant positive impact (improvement) of a positive change in brand value on a company's share return.

5.4.2 Proposition 2

The impact of change in a company's brand rankings on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand rankings and a group of companies with a negative change in brand rankings.

Test for equality of variance

Since p-value is less than 0.05, the test concluded that the variances are unequal at a 5% level of significance.

Test for equality of means

Statistical conclusion: Since p-value (= 0.342) > α (= 0,025), do not reject H0 in favour of H1. There was insufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is no significant positive impact (improvement) of a positive change in brand rankings on a company's share return.

5.4.3 Proposition 3

The impact of change in a company's brand ratings on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand ratings and a group of companies with a negative change in brand ratings.

Test for equality of variance

Since p-value is less than 0.05, the test concluded that the variances are unequal at a 5% level of significance.

Test for equality of means

Statistical conclusion: Since p-value (= 0.022) < α (= 0,025), do reject H0 in favour of H1.There is sufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is a significant positive impact (improvement) of a positive change in brand ratings on the mean of a company's share return.

5.5 Conclusion

The data used met the requirements to produce reliable results from the two sample test. The test resulted in the followings findings: a positive change in brand value and brand rankings do not have a significant positive impact on a company's share return a positive change in brand ratings has a positive impact on a company's share return.

6 Findings

6.1 Introduction

The objective of this chapter is to discuss the results reported in Chapter 5. The discussion of the results was done in context of the literature review (Chapter 2) and the research propositions in Chapter 3. This chapter first discusses the descriptive statistics, followed by the reliability of the test used to generate results, then the findings on the three propositions, and finally the conclusion of all the discussions and findings.

6.2 Descriptive Statistics

The average for all annual share returns was 15.95%, which was accompanied by positive changes in brand value, brand rankings and brand ratings. This means that a general increase in brand value, ranking and ratings leads to an increase in share returns. The two sample test was used to analysis the significance of the relationship. A change in brand rankings had the highest sample variance with a 446 range, which highlighted the volatility of brand rankings as they are affected by many variables, for example a brand's ranking is affected by its own performance and the performance of brands around it.

6.3 Findings of the three propositions

6.3.1 Brand Value/Equity

The first proposition of the research was the following: Changes in a company's brand value impacts that company's share value. This proposition was developed from some of the following statements as outlined in chapter 2:

1) There is evidence that a firm's efforts to build strong brand equity that is secure against dilution through trademarks have a positive impact on its financial value.
2) As Leuthesser (1988) summarised, Al Shockerand Bart Weitz (2001) defined brand equity, from the consumer perspective, as a utility, loyalty, or differentiated clear image which is not explained by product attributes. They further defined brand equity from the firm perspective as the incremental cash flow resulting from the product with the brand name compared with that which would result without the brand name.
3) Favourable consumer response and positive customer-based brand equity, in turn, can lead to enhanced revenues, lower costs, and greater profits.

The literature review showed that there is a positive relationship between brands and firm performance. This chapter extends the investigation to include the impact of brands on a company's share price. This will ascertain whether brand metrics can be added to stock analysis theory.

Proposition 1 was investigated using the two sample test between a group of companies with a positive change in brand value and a group of companies with a negative change in brand value. The alternative hypothesis (the assumption which was being tested) was that the companies with a positive change in brand value's share returns are greater than the companies with a negative change in brand value.

For a two sample test to be reliable the variables used should satisfy certain assumptions.

Credibility of the variable and data used, and how reliable the two sample test is in terms of the assumptions made to perform the test.

1) The change in brand value data had one outlier, which was removed for the data used in the two sample test. From Chapter 4 we know that outliers can influence the results and may be an unusual event, therefore by excluding it from the test, it made the variable closer to the norm. Out of 720 data points only one was an outlier, which shows that the data used would not change significantly.
2) Using Figure 5 and Figure 6 in Chapter 5 we can observe that change in brand value is strongly normally distributed as the histogram is approximately normally distributed and the p-value of the Anderson-Darling test (which tests for normality of data) is less than 0.0005 (which is significantly lower than 0.05).

After analysing the data preparation tests and exclusions made before running the two sample test, it gave the researcher confidence that the results from the two sample test were reliable and he could confidently infer from them.

Results of the two sample test

Two types of sample tests could be used to test this hypothesis, i.e. the equal variance and the unequal variance two sample tests. The variance test concluded that the group of companies with a negative change in brand value has a variance which is different from the group of companies with a positive change in brand value. This shows that the two groups are fundamentally different and behave differently from a value perspective.

The two sample test concluded that the average share return of the group of companies with a positive change in brand value was not significantly greater than that for the group of companies with a negative brand value. This is because the p-value of the two sample test was close to 1, which resulted in the researcher accepting the null hypothesis.

This finding illustrates that an annual improvement in brand value or equity does not offer enough confidence that the brand will perform in future. This result is not aligned with the findings regarding brand value in Chapter 2 by researchers such as Aaker (1991), Aaker and Keller (1990), Broniarczyk and Alba (1994), Farquhar (1989; 1990), Feldwick (1996), Keller (1993), Loken and Roedder-John (1993), and Park, Milberg, and Lawson (1991). The above researchers offered evidence that a strong brand value or equity leads to high levels of customer satisfaction, reduced price sensitivity, fewer customer defections, a greater share of customers' wallets, more referrals, and a higher percentage of repeat business, which all positively influence future firm value.

The change in brand value does not take into consideration how the competitors are performing, however Chapter 2 illustrated that a brand is a component which creates an advantage over competitors, and the brand's impact on a firm is not only influenced by its value but also by the competitor's values. For example, if brand awareness increases for all vehicle firms, the differentiating factor will be the level of increase of each brand value. The literature also illustrated that there has been an increase in competition and firms are spending a high portion of their budget to create brands, which makes the elements of a competitor's brand value movements crucial, however this proposition only tested for an individual brand value movement in isolation of the rest of the competition's movements.

As discussed in Chapter 2, a brand's objective is not only to acquire new customers, but also to keep its current loyal customers. Ghodeswar (2008) stated that one of the main objectives of branding is to create a greater resistance among loyal customers to competitive strategies. This means that the marketing and branding strategies of competitors should not be allowed to persuade loyal customers to change brands. Chapter 2 further discussed that having loyal customers who are resistant of competitive strategies allows the firm to have higher certainty of future profits and customer lifetime value. This allows investors to have a clearer picture of the future performance of a firm, which illustrates that competitors are key when it comes to a brand's impact on firm performance.

Hossein et al., (2012), Zhu and Zhou (2009), Rapach (2001) and Yu and Li (2012) argued that fundamental, technical, macro and psychological stock analysis's main objective is to forecast the future performance of share price, which are influenced by future firm value and performance. A change in brand value is a current movement and does not offer information to investors regarding whether the brand will be able to sustain its improvement, which is a key factor for stock analysis. A long term (five years) increase in brand value may thus be a better predictor of the future performance of a brand.

The brand's objective is to have a competitive advantage, so a change in brand value should not be viewed in isolation to predict share prices movement; it must be viewed relative to its competitors. The objective of stock analysis is to forecast future performance of share prices, thus studying a long term change in brand value may be a better predictor of share price performance instead of a one year movement of brand value.

6.3.2 Brand Rankings

The second proposition of the research is the following: A change in a company's brand ranking impacts that company's share value

Proposition 2 was investigated using the two sample test between a group of companies with a positive change in brand ranking and a group of companies with a negative change in brand ranking. The alternative hypothesis (the assumption which was being tested) was that the companies with a positive change in brand ranking's share returns were greater than the companies with a negative change in brand ranking.

For a two sample test to be reliable the variables used should satisfy certain assumptions.

<u>Credibility of the variable and data used, and how reliable the two sample test is in terms of the assumptions taken to perform the test.</u>

1) The change in brand value data had one outlier, which was removed for the data used in the t-statistics test. From chapter 4 we know that outliers can influence the results and may be an unusual event, therefore by excluding it from the test it made the variable closer to the norm. Out of 720 data points only one was an outlier, which shows that the data used would not change significantly.

2) Using Figure 7 and Figure 8 in Chapter 5 one can observe that change in a brand ranking is strongly normally distributed, as the histogram is approximately normally distributed and the p-value of the Anderson-Darling test (which tests for normality of data) is less than 0.0005 (which is significantly lower than 0.05).

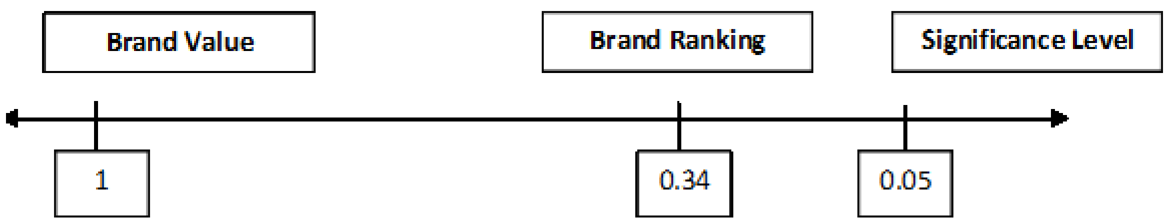
After analysing the data preparation tests and exclusions made before running the two sample test, it gave the researcher confidence that the results from the two sample test were reliable and she could confidently infer from them.

<u>Results of the two sample test</u>

Two sample tests could be used to test this hypothesis, namely the equal variance and the unequal variance two sample tests. The variance test concluded that the group of companies with a negative change in brand ranking has a variance which is different from the group of companies with a positive change in brand ranking. This shows that the two groups are fundamentally different and behave differently from a value perspective.

The two sample test concluded that the average share return of the group of companies with a positive change in brand ranking is not significantly greater than the one for a group of companies with a negative brand ranking. This is because the p-value of the two sample test was greater than 0.05.

Figure 11: Brand value and brand ranking p-value



Brand ranking's p-value was significantly smaller than brand value's p-value, which illustrates that brand ranking is a stronger influencer of company share price than brand value as illustrated in Figure 11. This is because the change in brand rankings occurs because of a change in brand value, but the ranking movement only occurs when one brand outperforms the other brands around it on the ranking. Brand value can improve, but for it to result in a move up the rankings it needs to improve above a certain level in relation to the performance of the brands around it.

The rankings used were not segmented into industries or markets, which means that the brand value is not only compared to companies which are competitors, but also to companies which operate in different markets. The literature outlined in chapter 2 stated that the objective of a brand is to create an advantage over competitors, so including companies which are not in the same markets in the rankings dilutes the strength of the change in rankings. As discussed in chapter 2, Urban and Hauser (1993) stated that the strength of a brand's positioning lies in how a product is different or better than its competitors. All brand activities are done to get an advantage over competitors and brand rankings should be conducted amongst companies which are competitors. If the rankings were of companies which are competitors, this would mean an improvement in a company's brand rankings would be directly linked to the firm's performance.

Stock analysis researchers stated that stock analysts make decisions to buy a stock using a company's future prospects, yet brand ranking is too volatile and an improvement in rankings one year can be cancelled out by deterioration the next year. The Shell brand improved from 19th position in 2012 to 12th in 2013, but that improvement was cancelled out in 2014 when Shell's brand moved from 12th position in 2013 to 18th. Just like brand value, a long term movement in a brand's ranking might be a better predictor of a firm's future performance.

This shows that brand ranking and value movements are not clear indicators of how a share price will perform in future.

6.3.3 Brand Rating

The third proposition of the research is the following: A change in a company's brand rating impacts that company's share value

Proposition 3 was investigated using the two sample test between a group of companies with a positive change in brand rating and a group of companies with a negative change in brand rating. The alternative hypothesis (an assumption which was being tested) was that the companies with a positive change in brand rating's share returns are greater than the companies with a negative change in brand rating.

For a two sample test to be reliable the variables used should satisfy certain assumptions.

Credibility of the variable and data used and how reliable the two sample test is in terms of the assumptions taken to perform the test.

1) The change in brand rating data had no outlier, which allowed for the usage of the actual data without any changes. From chapter 4 we know that outliers can influence the results and may be an unusual event, but because brand ratings do not have outliers this made the variable closer to the norm.
2) Using Figure 9 and Figure 10 in Chapter 5, we can observe that change in brand ratings is strongly normally distributed as the histogram is approximately normally distributed and the p-value of the Anderson-Darling test (which tests for normality of data) is less than 0.0005 (which is significantly lower than 0.05).

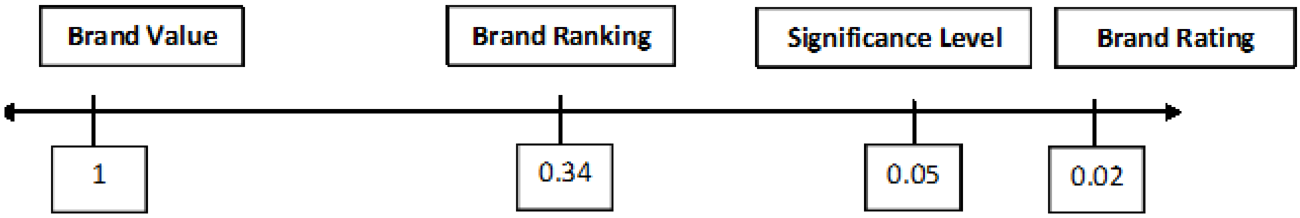
After analysing the data preparation tests and exclusions made before running the two sample test, it gave the researcher confidence that the results from the two sample test was reliable and that she could confidently infer from its result.

Results of the two sample test

Two sample tests could be used to test this hypothesis, namely the equal variance and the unequal variance two sample test. The variance test concluded that the group of companies with a negative change in brand rating had a variance, which is different from the group of companies with a positive change in brand rating. This shows that the two groups are fundamentally different and behave differently from a value perspective.

The two sample test concluded that the average share return of the group of companies with a positive change in brand rating is significantly greater than the one for a group of companies with a negative brand rating (see Figure 12).

Figure 12: Brand value, ranking and rating p-value



This is because the p-value of the two sample test was less than 0.05. The findings thus conclude that an improvement in brand rating will result in the share price of that company improving.

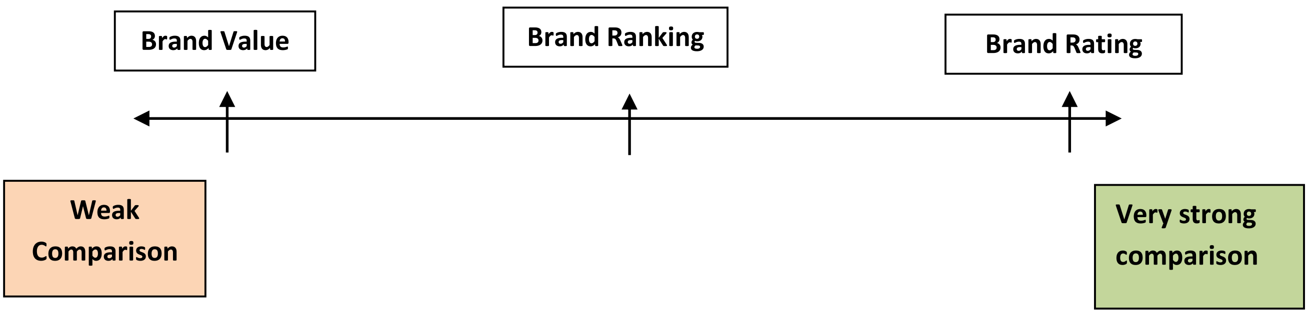
Chapter 2 outlined that brand rating's main component is brand attitude, and MacInnis and Park (2005) declared that a favourable brand attitude is highly correlated to brand attachment. This finding substantiates that improvement in brand attitude, which is linked with an improvement in brand attachment, are strong variables in determining the future performance of a brand. Knapp (2001) stated that strong brand performance leads to high levels of customer satisfaction, reduced price sensitivity, fewer customer defections, a greater share of customers' wallets, more referrals, and a higher percentage of repeat business. These benefits will lead to strong firm performance.

Since the finding infers that improvement in brand attitude leads to increase future performance of the brand, then we can confidently agree with Petty, Haugtvedt and Smith (1995) states that brand attitude strength predicts customers' future purchase behaviour.

Hossein et al.,(2012), Zhu and Zhou (2009), Rapach (2001) and Yu and Li (2012) illustrated that the main objective of fundamental, technical, macro and psychological stock analysis is to forecast the future performance of a share price, which is influenced by firm value and performance. This means that the brand attitude strength's capability of predicting the future performance of the brand will be an important variable in the stock analysis processes.

Brandirectory's concept of calculating a brand rating is similar to that of a credit rating, which measures the future potential of the brand relative to its competitors. Credit and brand ratings are built from a continued market confidence in the credibility and reliability of the brand or credit company. This is determined from the long-term performance, not the short term performance, such as annual brand value and ranking change. Brand ratings compare the branding variables of a brand to its competitors, which a change in brand value and rankings does not compare (see Figure 13).

Figure 13: Level of comparison to competitors' brand improvements



Brand ranking and brand value measures the current state, while brand ratings measure the future view of the brand. Brand rating should thus be an important variable or indicator of the performance of a company share price, and analysts should incorporate brand ratings as a factor in their decision to buy or sell stock.

6.4 Conclusion

The objective of this chapter was to discuss the results from Chapter 5 in the context of the research propositions in Chapter 3 and the literature review in Chapter 2.

The results in this chapter show that the yearly movements of brand rankings and brand value are not good predictors of a company's share price's future performance, however brand ranking is a stronger predictor because the movement of brand rankings is caused by one brand value outperforming another. Brand rating was the only significant factor because a change in brand rating offers a view of the future performance of the brand, which is aligned with the stock analysis theories of predicting the future performance of a firm. The other main reason why a brand rating is significant is because its core component is comparing one brand to its competitors.

7. Conclusion

7.1 Introduction

The objective of this research was to extend the existing stock analysis theories to branding indicators by investigating the impact of branding indicators on a company share price. The literature review led to three propositions that projected the relationship of three variables to the company share price. The three variables included brand equity, brand rankings and brand ratings.

The purpose of this chapter is to consolidate the findings of the research. This chapter will discuss the insights and implications of the findings on the target audience, provide recommendations for future researchers, and advance a conclusion.

7.2 Academic contributions: Research Findings

This research has contributed towards a better understanding of branding measurements and how they impact shareholder value (a company share price). Srinivasan et al., (2008) stated that management and shareholders have been questioning the value added by marketing. This research shared insights into management and shareholders' questions regarding the value added by marketing activities. This research gained insights into the relationship between annual changes in brand value, brand rankings and brand ratings with a company share price (shareholder value) to investigate the impact of branding indicators on a company's share price.

This research has found that there are two important components that need to be incorporated into branding measurements in order to understand the impact of branding on a company share price (shareholder value).

These components are:

1) Branding measurements should take into consideration the competitors' performance.

   This finding was evident in both the literature and the analysis of the propositions. The literature showed that the main objective of a brand is to create an advantage over competitors and that the benefits of branding activities manifest when one brand is stronger than another (Ghodeswar, 2008). The propositions investigated highlighted that changes in brand value and brand rankings do not positively significantly impact a company's share price. This finding illustrated that brand value and brand ranking are not the best measures of the impact of branding activities on shareholder value (a company's share price). The research also showed that brand rankings, even though not a significant predictor of a company share price, is a stronger predictor than brand value because it marginally incorporates competitors' performance, whereas a change in brand rating significantly positively impacts shareholders' value (a company's share price). This is because the change in brand rating incorporates a competitor's performance, whereas brand value and brand ranking do not.

   The importance of this component of brand measurements was also illustrated when brand rankings resulted in a stronger impact than brand rankings, because it marginally incorporates a competitor's performance.

   This conclusion is aligned to the literature in chapter 2because a brand rating is calculated with consideration of a competitor's brand strength in mind (Hossein et al., 2012; Ghodeswar, 2008; Zhu & Zhou, 2009; Aaker, 1991).

2) Brand measurements to be used for stock analysis should be future-oriented and not just a snapshot of the current state of the brand. This was evidenced by the stock analysis literature and the findings from the investigation of the propositions.

   The stock analysis literature showed that future performance prediction is the objective of stock analysis; this means that the variables used to predict stock performance should offer insights into the future performance of a company. Change in brand value and brand ranking do not positively significantly impact share prices (shareholders' value)because they offer a snapshot of the current state of the brand and do not offer an insight into how the brand will perform in the future. A change in brand rating, on the other hand, has a positive significant impact on a company's share price (shareholders' value), because it is future performance-oriented.

The research revealed that there is a positive impact by branding indicators on a company's share price, but the branding indicators should incorporate competitors' performance and should be future-oriented.

7.3 Research Implications

The research findings will add value to the management and shareholders of companies, as well as analysts, portfolio managers, and other professional investors and the branding community at large. This section will outline the implications of this research on these audiences.

7.3.1 Research implications for management and shareholders

From the literature in chapter 2, one can see that management and shareholders have been questioning the value added by marketing activities, which are a big part of a company's budget (Srinivasan et al., 2008). This research has shown that branding has a positive impact on a company share price, and that a positive view of the future performance of a brand leads to an increase in a company's share price.

This research has also offered a measure that management and shareholders can use to access the strength of their brand which trickles down to shareholder value, and further encourages management and shareholders to offer marketing activities the right amount of focus and budget, especially given the current intense competitive business environment.

7.3.2 Research implications to analysts, portfolio managers, and other professional investors

Analysts, portfolio managers and other professional investors currently use financial indicators, macroeconomics indicators, historical movements and psychological behaviour to forecast future stock performance, none of which incorporate branding indicators. Yet this research has shown that branding indicators are strong predictors of the future performance of a company's share price. This research has also offered investors information about the measurements that can be used to predict the future performance of a brand; these measurements should incorporate competitors' performance and also should be future-oriented.

7.3.3 Research implication for the branding community

This research has discovered the importance of comparing brands to their competitors, as most research houses create rankings of companies that are not in the same industry or market. This research outlined that these rankings do not offer enough information to establish the value of a brand and its impact on a business. This study encourages marketing research houses to create rankings of companies in the same industries, which will create more value for the users of the rankings. Other than rankings, this will assist research houses to incorporate competitor comparisons when evaluating brands and their share price movements.

7.4 Future Research

This research has offered stock analysis and branding literature insights as shown in chapters 5 and 6. This research has inspired meaningful potential research topics that can be explored in future. The following three research ideas were inspired by the study's findings:

Topic 1: The impact of brand rankings on companies in the same market (competitors) on a company's share price.

Brand value and brand ratings are not significant influencers of share prices because of their weakness in taking into consideration competitors' performances. This research question will thus utilise the brand rankings of competing companies.

Topic 2: The importance of strong brand ratings on a firm's performance.

During this research it was established that there is not enough literature on brand rating, which was the strongest predictor of company share price movement of the three values examined. This topic would thus investigate the value added to a firm by strong brand ratings, and would gain insights into the added value of brands on shareholder value.

Topic 3: The impact of an increase in competition on branding activities' value.

Competition is at the core of the objective of a brand, which is to differentiate one product or service from another. The literature has stated that because of globalisation, competition is increasing which has increased the importance of brands. This proposed question will offer insights into the significance of competition on value added by brands.

7.5 Research limitation

The share prices used in the research to investigate the impact of brand value, brand rankings and brand ratings were from different stock exchanges, which in turn use different characteristics to measure the level of efficiency of markets. Stock exchange quality is dependent on the efficiency of their systems to facilitate trading, the availability of information, liquidity, transaction costs and information processing efficiency, which are different for each exchange (Wuyts, 2007). It would thus have been more favourable if the share prices were from one stock exchange.

The brand rankings include companies (Brands) which are in different industries. Ghodeswar (2008) refers to the main objective of a brand is to differentiate a company's products or services from their competitors'. This limitation weakens the strength of the brand ranking variable.

7.6 Conclusion

The literature reviewed outlined the benefits of a brand and described how a brand is an important feature for making a profit in this competitive business environment. The literature also outlined that current stock analyses do not include branding factors in order to predict the future performance of share prices. This research's objective was therefore to investigate the impact of branding indicators on a company's share price.

The research found that branding positively impacts a company's share price and has argued that stock analysis models should add branding indicators. These branding indicators should incorporate competitors' performances and should also be future-oriented, such as brand ratings.

This research offers insights to the following stakeholders:

- Management and shareholders will be able to better understand the value added by brands, as the majority of them have questioned the value added by marketing activities in the past.
- Analysts, portfolio managers and other professional investors will know to add branding indicators to their stock analysis models.
- The branding community will gain insight into important areas to consider when designing a brand performance measurement.

Appendices

Chapter 4 Hypothesis tests

Proposition 1

The impact of change in a company's brand value on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand value and a group of companies with a negative change in brand value.

Problem Description

KPI (Random Variable) Share return (in percentage) - Quantitative

Data type Numeric and Continuous. Implies means and standard deviations

How many populations? Two – Companies with a positive change in brand value and companies with negative change in brand value.

Is the population independent? Yes

Test classification Two sample test for difference in means (independent samples).

Statistical question Is the mean of the share price returns for the companies with a negative change in brand value less than that of the companies with a positive change in brand value?

The t-test either assumes that the variance in the two samples is equal or they are unequal. This assumption needed to be tested before the t-test was conducted.

Test for the assumption of equal variance

Let population 1 = Companies with a negative change in brand value

Let population 2 = Companies with a positive change in brand value

$$H_0: \sigma_2^2 - \sigma_1^2 = 0$$

$$H_1: \sigma_2^2 - \sigma_1^2 \neq 0$$

The F-test was used to test the equality of variances.

F-Test components

Equality of variance test	
Ratio of sample variances p-value	1.590 0.00001

Conclusion: Since p-value is less than 0.05, the researcher rejected H0 of equal variances at a 5% level of significance and concluded that the population variances were unequal.

Decision: Use a t-test for unequal variance to test for equality of means.

Test for equality of means

Let population 1 = Companies with a negative change in brand value

Let population 2 = Companies with a positive change in brand value

Formulation of hypothesis

H0: $\mu 2 - \mu 1 \leq 0$

H1: $\mu 2 - \mu 1 > 0$

Sample Summaries	Positive change sample	Negative change sample
Sample size Sample mean Sample standard deviation	487 0.093 0.314	233 0.298 0.499

Hypothesis test (Difference of means)	Unequal variance
Hypothesised mean difference Alternative hypothesis Sample mean difference	=0 <0 0.205

90% lower bound for difference 95% lower bound for difference 99% lower bound for difference Degrees of freedom	-0.2514 -0.2644 -0.2890 322
T-Value Statistics p-value	5.76 1
Null Hypothesis at 10% significance Null Hypothesis at 5% significance Null Hypothesis at 1% significance	Not Reject Not Reject Not Reject

Note:α = 0.025. Do not reject H0 at the 2.5% level of significance

Statistical conclusion:

Since p-value (= 1) > α (= 0,025), do not reject H0 in favour of H1.There is insufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is no significant positive impact (improvement) of a positive change in brand value on a company's share return.

Proposition 2

The impact of change in a company's brand rankings on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand rankings and a group of companies with a negative change in brand rankings.

Problem Description

KPI (Random Variable) Share return (in percentage) - Quantitative

Data type Numeric and Continuous. Implies means and standard deviations

How many populations? Two – Companies with a positive change in brand rankings and companies with a negative change in brand rankings.

Is the population independent? Yes

Test classification Two sample test for difference in means (independent samples).

Statistical question Is the mean of the share price returns for the companies with a negative change in brand rankings less than that of the companies with a positive change in brand rankings?

The t-test either assumes that the variance in the two samples is equal or they are unequal. This assumption needed to be tested before the t-test was conducted.

Test for the assumption of equal variance

Let population 1 = Companies with a negative change in brand rankings

Let population 2 = Companies with a positive change in brand rankings

$$\mathrm{H_0}: \sigma_2^2 - \sigma_1^2 = 0$$

$$\mathrm{H_1}: \sigma_2^2 - \sigma_1^2 \neq 0$$

The F-test was used to test the equality of variances.

F-Test Components

Equality of variance test	
Ratio of sample variances	0,586

p-value	0.000

Conclusion: Since p-value is less than 0.05,
the researcher rejected H0 of equal variances at a 5% level of significant and concluded that the population variances were equal.

Decision: Use a t-test for unequal variance to test for equality of means.

<u>Test for equality of means</u>

Let population 1 = Companies with a negative change in brand rankings

Let population 2 = Companies with a positive change in brand rankings

Formulation of hypothesis

H0: $\mu_{2-}\mu_{1} \geq 0$

H1: $\mu_{2-}\mu_{1} < 0$

Sample Summaries	**Positive change sample**	**Negative change sample**
Sample size	344	375
Sample mean	0.153	0.165
Sample standard deviation	0.447	0.342

Hypothesis test (Difference of means)	**Equal variance**
Hypothesised mean difference	≤0
Alternative hypothesis	>0
Sample mean difference	-0.0122
90% lower bound for difference	0.0262
95% lower bound for difference	0.0371
99% lower bound for difference	0.0575

Degrees of freedom	641
t-Test Statistics p-value	-0.41 0.342
Null Hypothesis at 10% significance Null Hypothesis at 5% significance Null Hypothesis at 1% significance	Not Reject Not Reject Not Reject

Note:α = 0.025. Do not reject H0 at the 2.5% level of significance

Statistical conclusion:

Since p-value (= 0.342) > α (= 0,025), do not reject H0 in favour of H1. There was insufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is no significant positive impact (improvement) of a positive change in brand rankings on a company's share return.

Proposition 3

The impact of change in a company's brand ratings on the share value of a company was investigated using the two sample test between a group of companies with a positive change in brand ratings and a group of companies with a negative change in brand ratings.

Problem Description

KPI (Random Variable) Share return (in percentage) - Quantitative

Data type Numeric and Continuous. Implies means and standard deviations.

How many populations? Two – Companies with a positive change in brand rankings and companies with a negative change in brand rankings.

Is the population independent? Yes

Test classification Two sample test for difference in means (independent samples).

Statistical question Is the mean of the share price returns for the companies with a negative change in brand rankings less than that of the companies with a positive change in brand rankings?

The t-test either assumes that the variance in the two samples is equal or they are unequal. This assumption needed to be tested before the t-test was conducted.

Test for the assumption of equal variance

Let population 1 = Companies with a negative change in brand rankings

Let population 2 = Companies with a positive change in brand rankings

$$H_0: \sigma_2^2 - \sigma_1^2 = 0$$

$$H_1: \sigma_2^2 - \sigma_1^2 \neq 0$$

The F-test was used to test the equality of variances.

F-Test Components

Equality of variance test	
Ratio of sample variances	2,047
p-value	0.000

Conclusion: Since p-value is less than 0.05, the researcher rejected H0 of equal variances at a 5% level of significance and concluded that the population variances were unequal.

Decision: Use a t-test for unequal variance to test for equality of means

Test for equality of means

Let population 1 = Companies with a negative change in brand rankings

Let population 2 = Companies with a positive change in brand rankings

Formulation of hypothesis

H0: $\mu_{2-}\mu_1 \geq 0$

H1: $\mu_{2-}\mu_1 < 0$

Sample Summaries	**Positive change sample**	**Negative change sample**
Sample size	283	436
Sample mean	0.199	0.134
Sample standard deviation	0.475	0.332

Hypothesis test (Difference of means)	**Equal variance**
Hypothesised mean difference	≤0
Alternative hypothesis	>0
Sample mean difference	0.0658
90% lower bound for difference	0.0242
95% lower bound for difference	0.0123

99% lower bound for difference Degrees of freedom	-0.0099 459
t-Test Statistics p-value	2.03 0.022
Null Hypothesis at 10% significance Null Hypothesis at 5% significance Null Hypothesis at 1% significance	Reject Reject Reject

Note: α = 0.025. Do not reject H0 at the 2.5% level of significance

Statistical conclusion:

Since p-value (= 0.022) < α (= 0,025), do reject H0 in favour of H1.There is sufficient sample evidence to reject H0 in favour of H1 at α = 0,025.

Proposition Conclusion: There is a significant positive impact (improvement) of a positive change in brand ratings on the mean of a company's share return.

References

Aaker, D. (1991). *Managing Brand Equity.* New York: Simon and Schuster.

Aaker, D. (2010). Marketing challenges in the next decade. *Journal of Brand Management*, 315-316.

Aaker, D. A. (1996). Measuring brand equity across products and markets. *California management review*, 103.

Aaker, D., & Keller, K. L. (1990). Consumer evaluations of brand extensions. *The Journal of Marketing*, 27-41.

Abarbanell, J., & Bushee, B. (1997). Fundamental analysis, future earnings, and stock prices. *Journal of Accounting Research*, 1-24.

Bernard, R. H. (2011). *Research methods in anthropology.* Plymouth: AltaMira.

Bernard, V. (1995). The Feltham-Ohlson Framework: Implications for Empiricists. *Contemporary Accounting Research*, 733-747.

Bharadwaj , S., Tuli, K., & Bonfrer, A. (2011). The impact of brand quality on shareholder wealth. *Journal of Marketing*, 88-104.

Bititci, U., Carrie, A., & McDevitt, L. (1997). Integrated Performance Measurement Systems: A Development Guide. *International Journal of Operations and Production Management*, 522-535.

Blackston, M. (2000). Observations: building brand equity by managing the brand's relationships. *Journal of Advertising Research*, 101-105.

Bloomberg, L. D., & Volpe, M. (2012). *Completing your qualitative dissertation: A road map from beginning to end.* California: SAGE Publication.

Bottomley, P., & Doyle, J. (1996). The formation of attitudes towards brand extensions: Testing and generalising Aaker and Keller's model. *International Journal of Research in Marketing*, 365-377.

Bowden, J. L.-H. (2009). The process of customer engagement : a conceptual framework. *Journal of marketing theory and practice*, 63-74.

Chaudhuri , A., & Holbrook, M. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of marketing*, 81-93.

Christodoulides, G., & De Chernatony , L. (2010). Consumer-based brand equity conceptualization and measurement: A literature review. *International journal of research in marketing*, 43-66.

Cooper, D., & Schindler, P. (2014). *Business Research Methods.* Maidenhead: McGraw-Hill/Irwin.

Cravens, K., & Guilding, C. (1999). Strategic brand valuation: A cross-functional perspective. *Business Horizons*, 53-62.

Creswell, J., & Clark, V. P. (2007). *Designing and conducting mixed methods research.* California: SAGE Publications.

Danaher, P., & Rust, R. (1996). Determining the optimal return on investment for an advertising campaign. *European Journal of Operational Research*, 511-521.

Dave, R. (2001). Macro shocks and real stock prices. *Journal of Economics and Business*, 5-26.

Dawes, J. (2009). Brand Loyalty in the U.K. Sportswear Market. *International Journal of Market Research*.

Dechow, P., Hutton, A., Meulbroek, L., & Sloan, R. (2001). Short-sellers, fundamental analysis, and stock returns. *Journal of Financial Economics*, 77-106.

Deleersnyder, B., Dekimpe, M., Steenkamp, J.-B., & Leeflang, P. (2009). The role of national culture in advertising's sensitivity to business cycles: An investigation across continents. *Journal of Marketing Research*, 623-636.

Dillon , W., Madden, T., Kirmani, A., & Mukherjee , S. (2001). Understanding what's in a brand rating: A model for assessing brand and attribute effects and their relationship to brand equity. *Journal of Marketing Research*, 415-429.

Drigotas, S., & Rusbul, C. (1992). Should I Stay or Should I Go? A Dependence Model of Breakups. *Journal of Personality and Social Psychology*, 62.

Dubin, J. (1998). *The Demand for Branded and Unbranded Products—An Econometric Method for Valuing Intangible Assets.* Norwell: Kluwer Academic Publishers.

Edell, J., & Keller, K. L. (1989). The Information Processing of Coordinated Media Campaigns. *Journal of Marketing Research*, 149-163.

Farley, J., Keller, K. L., & Lehmann, D. (2008). The structure of survey-based brand metrics. *Journal of International Marketing*, 29-56.

Farquhar, P. (1989). Managing Brand Equity. *Marketing research*, 24-33.

Fleming, D., Chow, C., & Chen, G. (2009). Strategy, performance-measurement systems, and performance: A study of Chinese firms. *The International Journal of Accounting*, 256–278.

Fornell, C., Mithas, S., Morgenson, F., & Krishnan, S. M. (2006). Customer Satisfaction and Stock Prices:High Returns, Low Risk. *Journal of Market*, 3–14.

Fournier, S. (1998). Consumers and their brands: developing relationship theory in consumer research. *Journal of consumer research*, 343-353.

Froot , K., O'connell, P., & Seasholes, M. (2001). The portfolio #ows of international investor. *Journal of Financial Economics*, 151-193.

Ghodeswar, B. (2008). Building brand identity in competitive markets: a conceptual model. *Journal of Product & Brand Management*, 4-12.

Gök , O. (2009). Linking account portfolio management to customer information: Using customer satisfaction metrics for portfolio analysis. *Industrial Marketing Management*, 433-439.

Graneheim , U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 105-112.

Grubbs, F. (1969). Procedures for Detecting Outlying Observations in Samples. *Technometrics*, 1-21.

Gwin, C. R., & Gwin, C. F. (2003). Product attributes model: a tool for evaluating brand positioning. *Journal of Marketing Theory and Practice*, 30-42.

Hanssens, D., Rust, R., & Srivastava, R. (2009). Marketing strategy and Wall Street: nailing down marketing's impact. *Journal of Marketing*, 115-118.

Harris, F., & De Chernatony, L. (2001). Corporate branding and corporate brand performance. *European Journal of marketing*, 441-456.

Haxthausen, O. (2009). Valuing brands and brand investments: Key learnings and future expectations. *Journal Of Brand Management*, 18-25.

Heckler, S., Houston, M., & Keller, K. L. (1998). The effects of brand name suggestiveness on advertising recall. *The Journal of Marketing*, 48-57.

Hennessey, S., Yun, D., James-MacEachern , M., & MacDonald, R. (2010). The effects of advertising awareness and media form on travel intentions. *Journal of Hospitality Marketing & Management*, 217-243.

Hinde, R. (1976). *Towards Understanding Relationships.* London: Academic Press.

Hoeffler , S., & Keller, K. L. (2003). The marketing advantages of strong brands. *The Journal of Brand Management*, 421-445.

Homburg , C., Klarmann, M., & Schmidt, M. (2010). Brand awareness in business markets: when is it related to firm performance? *International Journal of Research in Marketing*, 201-212.

Hossein, K., Nasser, J., & Mohammadbasher, M. (2012). Studying affecting on analysis's decisions regarding share analysis in Tehran stock exchange: a fundamental analysis approach. *European Journal of Economics, Finance and Administrative Sciences*.

Hsieh , T.-J., Hsiao, H.-F., & Yeh, W.-C. (2011). Forecasting stock markets using wavelet transforms and recurrent neural networks: An integrated system based on artificial bee colony algorithm. *Applied soft computing*, 2510-2525.

Johnson, M. (1973). Commitment: A conceptual structure and empirical application. *The Sociological Quarterly*, 395-406.

Joshi, A., & Hanssens, D. (2010). The direct and indirect effects of advertising spending on firm value. *Journal of Marketing*, 20-33.

Karami, A., Rowley, J., & Analoui, F. (2006). Research and knowledge building in management studies: An analysis of methodological preferences. *International Journal of Management*, 43.

Keller , K. L. (2009). Building strong brands in a modern marketing communications environment. *Journal of marketing communications*, 139-155.

Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 1-22.

Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of marketing research*, 35-50.

Keller, L. K. (2003). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity.* New Jersey: Prentice Hall.

Knapp, D., & Hart, C. (1999). *The Brand Mindset: Five Essential Strategies for Building Brand Advantage Throughout Your Company.* New York: MacGraw-Hill.

Kothari, C. R. (2004). *Research Methodology : Methods and Techniques.* New Dehli: New Age International.

Kotler, P., & Keller, K. L. (2012). *Marketing Management Global Edition.* New Jersey: Pearson Higher Education.

Lachi, J. (1981). Introduction to sample size determination and power analysis for clinical trials. *Controlled clinical trials*, 93-113.

Lehmann, D., & Keller, L. K. (2006). Brands and branding: research findings and future priorities. *Marketing Science*, 740-759.

Lehmann, D., Keller, K. L., & Farley, J. (2008). The Structure of Survey-Based Brand Metrics. *Journal of International Marketing*, 29-56.

Leuthesser, L. (1988). Defining, Measuring, and Managing Brand Equity. *Marketing Science Institute*, 88-104.

Lewis, P., & Saunders, M. (2012). Doing research in business and management: An essential guide to planning your project. *Financial Times/Prentice Hall*.

Li, J., & Yu, J. (2012). Investor attention, psychological anchors, and stock return predictability. *Journal of Financial Economics*, 401-419.

Lo, A., Mamaysky, H., & Wang, J. (2000). Foundations of technical analysis: Computational algorithms, statistical inference, and empirical implementation. *The Journal of Finance*, 1705-1770.

Macdonald, E., & Sharp, B. (2000). Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication. *Journal of Business Research* , 5-15.

Mehta, A. (1994). How advertising response modeling (ARM) can increase ad effectiveness. *Journal of Advertising Research*, 62-62.

Melo, A. D., & Balona, S. (2013). Advertising co-creation and the engagement factor.

Menkhoff, L. (2010). The Use of Technical Analysis by Fund Managers: International Evidence. *Journal of Banking & Finance*, 2573-2586.

Morgan, N., & Reg, L. (2009). Brand Portfolio Strategy and Firm Performance. *Journal of Marketing*, 59-74.

Morgan, N., Slotegraaf, R., & Vorhies, D. (2009). Linking marketing capabilities with profit growth. *International Journal of Research in Marketing*, 284-293.

Murray, S., Holmes, J., & Griffin, D. (1996). The Benefits of Positive Illusions: Idealization and the Construction of Satisfaction in Close Relationship. *Journal of Personality and Social Psycholog*, 79-98.

M'zungu, S., Merrilees, B., & Miller, D. (2010). Brand management to protect brand equity: A conceptual model. *Journal of Brand Management*, 605-617.

Naik, P., & Ramanr, K. (2003). Understanding the Impact of Synergy in Multimedia Communications. *Journal of Marketing Research*, 375–388.

Neely, A., & Adams, C. (2000). Perspectives on Performance: The Performance Prism. *Handbook of Performance Measurement*.

Neely, A., Bourne, M., Mills, J., Platts, K., & Richards, H. (1996). *Getting the Measure of Your Business.* Cambridge: Cambridge University Press.

Ohlson, J. (1995). Earnings, Book Values, and Dividends in Equity Valuation. *Contemporary Accounting Research*, 661-687.

Oliver, R. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 33-44.

Paganoa, M., Randl, O., & Zechner, J. (2001). What makes stock exchanges succeed? Evidence from cross-listing decisions. *European Economic Review*, 770-782.

Park, W., Jaworski, B., & MacInnis, D. (1986). Strategic brand concept-image management. *Journal of Marketing*, 135–145.

Park, W., MacInnis, D., Priester, J., Eisingerich, A., & Iacobucci , D. (2010). Brand Attachment and Brand Attitude Strength:Conceptual and Empirical Differentiation ofTwo Critical Brand Equity Drivers. *Journal of Marketing* , 1-17.

Petty, R., Haugtvedt, C., & Smith, S. (1995). Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behavior. *Attitude strength: Antecedents and consequences*, 93-130.

Rahm, E., & Do, H. H. (2000). Data Cleaning: Problems and Current Approaches. *IEEE Computer Society Technical Committee on Data Engineering*, 3-13.

Rangaswamy, A., Burke, R., & Oliva, T. (1993). Brand equity and the extendibility of brand names. *International Journal of Research in marketing*, 61-75.

Rego, L., Billett, M., & Morgan, N. (2009). Consumer-Based Brand Equity and Firm Risk. *Journal of Marketing*, 47–60.

Reimann, M., Schilke, O., & Thomas, J. (2010). Customer relationship management and firm performance: the mediating role of business strategy. *Journal of the Academy of Marketing Science*, 326-346.

Rousseeuw, P., & Kaufman, L. (2009). *Finding groups in data: an introduction to cluster analysis .* New Jersey: John Wiley & Sons.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students.* Harlow: Pearson Education Limited.

Schafer, J., & Olsen, M. (1998). Multiple imputation for multivariate missing-data problems: A data analyst's perspective. *Multivariate Behavioural Research*, 545-571.

Scholz, F., & Stephens, M. (1987). K-sample Anderson–Darling tests. *Journal of the American Statistical Association*, 918-924.

Seetharaman, A., Nadzir, Z. A., & Gunalan, S. (2001). A conceptual study on brand valuation. *Journal of Product & Brand Management*, 243-256.

Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of cleaner production*, 1699-1710.

Sharma , G. D., & Mahendru, M. (2010). Impact of Macro-Economic Variables on Stock Prices in India. *Global Journal of Management and Business Research*.

Silverman, D. (2011). *Qualitative Research.* London: Sage Publications.

Simonson, A., & Schmitt, B. (2009). *Marketing Aesthetics.* New York: Simon and Schuster.

Sloan, R. (1996). Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings? *The Accounting Review*, 289-315.

Sorensen, H. T., Sarroe, S., & Olsen, J. (1996). A Framework for Evaluation of Secondary Data Sources for Epidemiological Research. *International Journal of Epidemiology*, 435-442.

Srinivasan, S., & Hanssens, D. (2009). Marketing and Firm Value: Metrics, Methods, Findings, and Future Directions. *Journal of Marketing Research*, 293-312.

Stewart, D. (2009). Marketing accountability: linking marketing actions to financial results. *Journal of Business Research*, 636-643.

Thomson, M., Maclnnis, D., & Park, W. (2005). The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands. *Journal of consumer psychology*, 77-91.

Urban, G., & Hauser, J. (1993). *Design and Marketing of New Products.* New Jersey: Prentice Hall.

Wegner, T. (2012). *Applied Business Statistics.* Cape Town: Juta Legal and Academic Publishers.

Weilbacher, W. (1995). *Brand Marketing.* Chicago: NTC Business Books.

Weiss, M. (1990). Productivity growth and regulation of P/L insurance: 1980–1984. *Journal of Productivity Analysis*, 15-38.

Wuyts, G. (2007). Stock Market Liquidity.Determinants and Implications. *Review of Business and Economics*, 279-316.

Zhu, Y., & Zhou, G. (2009). Technical analysis: An asset allocation perspective on the use of moving averages. *Journal of Financial Economics*, 519-544.