INFLUENCE OF PRODUCT DIVERSIFICATION STRATEGY ON PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract

Threats to firms' performance by environmental uncertainty, intense competition and the challenges of market liberalization have led to these firms rethinking their strategies. The study was an investigation on the influence of product diversification strategy on performance of non-financial firms listed at the Nairobi Securities Exchange in Kenya. Descriptive correlational survey design was employed. A census of 45 non-financial firms was taken. Both primary and secondary data was collected. Secondary data was obtained from the audited annual reports of these companies for a period of five years. To complement it semi-structured questionnaires were given to 135 departmental managers. Data analysis was carried out using SPSS in the form of descriptive and inferential statistics. To exhibit the relevant relationships regression model was used. The study established that there was a significant positive relationship

between product diversification and firm performance. Regression analysis revealed that 15.2% of changes in firm performance were attributed to use of this strategy. This study concluded that product diversification strategy was an essential strategy for firms to use in widening their markets. The study recommended that stakeholders of the firms that are yet to diversify their product portfolio should diversify to remain competitive and profitable.

Keywords: Product Diversification, Firm Performance, Listed Non-Financial Firms, Kenya

INTRODUCTION

Firms have in the recent years been forced to rationalize their operations and review their corporate strategy in response to stiff competition resulting from changes in business environment as well as introduction of competitive policies. Firms worldwide are facing intense competition from other firms around the world in this age of globalization (Ng'ang'a, Namusonge, & Sakwa, 2016). Due to intense competition that business organizations face and many other challenges that erode their profit levels, business organizations are forced to embrace new ideas for them to stay ahead of their competitors. Diversification is one of the strategies that have been used by several organizations across the globe in order to enhance their business objectives. Marinelli (2011) asserts that most organizations around the world consider diversification as one of the ways of value creation. Diversification strategies allow firms to venture in business lines different from the current activities and also operate in several economic markets.

Product Diversification Strategy

A significant issue in firms operating in the modern business world is diversification as a corporate strategy. As a corporate strategy diversification seeks to increase profits through increase in the sales volume obtained from venturing into new markets and new products. It is a form of growth strategy that involves significant increase in the performance objectives surpassing past performance records (Andreas, 2009).

Firms identify opportunities in the external business environment and expand their businesses into these industries or products that complement their current offerings. They diversify especially where there are opportunities to reduce costs, when they have powerful and well-known brands and to spread risk across a range of businesses. Sometimes pressure from powerful stakeholders may force a firm to diversify. According to Foss and Christensen (2001), firms diversify to create positive spill overs since the value of resources in one industry is

increased due to investment in another. Various firms may adopt different diversification strategies with the aim of improving their performance. Product diversification involves the addition of new products to existing products either being manufactured or being marketed. It can be classified as either related or unrelated diversification.

Firm Performance

Firm performance stimulation is a priority in both public and private sectors since it is associated directly with an entity's value creation. Firms are constantly striving for better results, competitive advantage and influence. However, most are struggling to enhance their performance. Firm Performance is the extent to which an investment is profitable (Murimiri, 2009). In the corporate world performance is the criterion by which a firm measures its capability to prevail. The research study used accounting based measures of firm performance represented by return on capital employed, return on total assets and profit margin.

Listed Firms on Nairobi Securities Exchange

A listed or quoted company is the one whose shares are bought and sold at the stock / securities exchange (Saleemi, 1993). There are sixty four (64) listed firms presently at the NSE (NSE, 2015-2016). These firms are in different industries or sectors. The Nairobi Securities Exchange (NSE) was renamed after the Nairobi Stock Exchange in July 2011. It was constituted in 1954 as a voluntary association of stock brokers in the European community and was registered under the Societies Act. The change of name reflected the NSE's strategic plan of evolving into a full service securities exchange which would aid trading, securities, debt and derivatives clearance and settlements. Numerous developments have occurred since its constitution. Some of the developments include automation of trading through the automated trading system in 2009. It has also been converted from a company limited by guarantee to one limited by shares. In 2014 the capital market authority approved the listing of NSE stock through an initial public offer and subsequently self-listing its shares on the main investment market segment.

Statement of the Problem

Kenya as a country embarked on liberalization program in 1994 and some of the liberalization measures had a huge impact on the dynamics of the competitive environment. Generally, companies faced a lot of challenges especially after this liberalization. They also faced intense competition from other firms around the world in this age of globalization, this intense competition and globalisation eroded many companies' profits (Ng'ang'a , Namusonge, &

Sakwa, 2016). Growth in globalisation in the African economy has had impacts on many industries. For instance there has been a growing influence of foreign companies especially in construction in Africa including Kenya which according to Muchira (2013) brought a lot of jitters amongst the local construction companies that lost in the construction contracts award. About 75% of the Kenyan government construction contracts are performed by the foreigners a trend that has triggered alarm and protests from these firms as their profits have been dwindling. Some of the listed non- financial firms have also been performing dismally for example Uchumi Supermarket posted a loss of Kshs. 690 million in June 2004 which was after two years of poor performance and was put under receivership (RoK, 2007).

To overcome these challenges there are numerous strategies that listed non-financial firms can adopt, however, it is not clear which of these strategies have the largest influence on profit improvement. Studies examining influence of diversification strategies on firm performance show mixed findings. There is still disagreement as to whether diversification increases or reduces firm performance. The relationship is still controversial, contradictory and inconclusive (Mashiri & Sebele, 2014; Santalo & Beccera, 2008).These researches have not yet reached definitive and interpretable findings to determine whether diversification strategies create or destroy firm's value. This means that the influence of diversification strategies on the performance of the non-financial listed firms remains unclear. It is against this background that the study was carried out. The study sought to investigate the influence of product diversification strategy on performance of non-financial firms listed at NSE in Kenya.

Objective of the Study

The study was carried out to determine the influence of product diversification strategy on the performance of the non-financial firms listed at the NSE in Kenya.

Hypothesis of the Study

H_0: There is no significant influence of product diversification strategy on performance of the Non-financial firms listed at NSE in Kenya.

Figure 1: Conceptual Framework

Product diversification (X_1)	Firm Performance (Y)
• Related diversification • Unrelated diversification	• Return on total assets • Return on capital employed • Profit Margin

THEORETICAL REVIEW

Resource Based View Theory

Resource Based View theory is defined by Rothaermel (2012) as a theory which emphasizes resources of a firm as fundamental determinants of performance and competitive advantage. It is a theoretical approach that considers strategies like diversification as a way of seeking new uses for resources already existing or filling gaps in the resource base of an organisation (Theuven, 2004). It is a perspective that drew more from Penrose (1959) theory of enterprise growth and was popularized by Wernerfelt (1984) and Barney (1991) in their works. The traditional model of Resource Based View (RBV) was theorized in 1991 and is still acknowledged as one of the most capable models for studying and analysing resource strategy relationships 20 years later (Barney, Ketchen, & Wright, 2011). The view of the theory is that each organization is a collection of unique resources and capabilities.

The resources of a firm can be categorized into three; physical, human and organizational. These resources should be valuable, rare, inimitable and non-substitutable (VRIN) to enable a firm reach a sustainable competitive advantage (Barney, 1991). The perspective of RBV as remarked by Andreu, Claver and Quer (2008) is that the growth of a company requires a balance between exploiting the already existing resources in a firm and developing new ones. RBV leans towards the firm's sustainable competitive advantage, since it focuses on exploitation of its unique resources.

Corporations have capabilities which can be shared among the firm's business units by transferring them from one business to another thus achieving synergy and hence giving a firm an edge. Firms' capabilities are complex bundle of skills and knowledge that have been accumulated over time and are exercised through processes that enable firms to coordinate their activities and make use of their assets (Day & Nedungadi, 2004).

Firms using related diversification strategy can outperform those using unrelated diversification strategies (Hitt , Hoskisson, & Kim, 1997). This is to the extent that the key to superior performance from a diversification strategy depends on the firm's ability to share resources; an unrelated diversified firm is unlikely to have resources that can be useful to all its business units. Asset specificity in a firm's resources may bring sustainable competitive power to their owner relative to competitors, but also create a challenge on the other hand especially on the firm's ability to transfer these resources to new application (Montgomery & Wernerfelt, 1988).

This means that a firm sometimes may not be in a position to use the available resources in new ventures especially where these new ventures require other resources different from what the firm has. Asset specificity leads to several empirical predictions that

revolve around the concept of relatedness of diversification activities: the more closely those activities are related or complementary, the more profitable diversification is expected to be. According to Christensen and Foss (1997) and Foss and Christensen (2001), diversified firms can create spill over since the values of resources in one industry increases due to investment in another industry.

Previous studies have revealed that analysis of internal resources can enable firms to determine their potential or realize sources of competencies and capabilities, and thus a firm can achieve competitive advantage if its resources are inimitable by its competitors (Barney, 1991). Financial resources have the highest degree of flexibility and are suitable for both related and unrelated product diversification. However, sources of these finances should be considered as they have varying implications to the firm. In many firms, managers use internal funds for unrelated diversification.

The RBV theory has been criticized for some reasons despite its increase in literature devoted to its advancement conceptually and empirically. The reasons are first; from the perspective of modern strategic management Penrose's (1959) understanding of competitive advantage missed out on how firms developed sustainable superior competitive advantage, but instead adopted a frame work for seeking profit. Second, RBV has been regarded as a static theory as it fails to address the fundamental issue of how future resources can be created or how the current stock of valuable, rare, imperfectly imitable and imperfectly sustainable resources can be refreshed in an unstable environment (Priem & Butler, 2001).

Williamson's (1985) asserts that although resources can be exploited through contracts, due to their asset specificity nature it is sometimes almost impossible to contract with them in the market transactions. The theory has also been criticized for being too abstract and therefore lacking operational validity. Third, like the Porter's five forces model, RBV cannot account for competitive advantage for firms in highly dynamic markets.

The unique path dependent resources can be leveraged across related product lines and provide higher rents. For instance physical or tangible resources are highly inflexible because they can only be used in a few similar industries. Therefore, if a firm has an excess physical capacity, it is very unlikely that the firm will engage in related diversification (Chatterjee & Wernerfelt, 2001). This is because some physical or tangible resources are very inflexible in their use; however, the flexible ones might also be limited in their use. Capabilities such as managerial expertise have the potential to create value when shared across businesses (Miller, 2006).

According to Chatterjee and Wernerfelt (2001) the type of diversification strategy depends on the firm's resource specificity as this dictates which product diversification strategy

a firm can adopt. It can adopt either related or unrelated product diversification strategy. If the firm is well endowed with physical resources then this implies that it can only venture in related products. However, finances are highly flexible and this would allow a firm to venture in both related and unrelated. Additionally a resource that can only be used in one product is not suitable for diversification into unrelated businesses but rather in related businesses. In the resource-based approach, managerial expertise has the potential to create value when shared across businesses (Miller, 2006). This expertise if well managed can benefit the different business units of a firm.

EMPIRICAL REVIEW

Product diversification involves the addition of new products to existing products either being manufactured or being marketed. It is also defined by as the development of a firm beyond the present product and market but still contains the broad confines of the industry value chain (Oyedijo, 2012). Corporate diversification is considered as a strategy for firms to expand their operations to maximise their profits. According to Kim *et al.*, (2009) it refers to a firm's expansion into 'related and unrelated' investments. Product diversification can be classified as either related or unrelated.

Thompson Jr. *et al.*, (2005) define related product diversification as "a strategy that involves businesses whose value chains possess competitively valuable cross-business value chain match-ups or strategic fits". The strategic fits would exist whenever value chain activities of different businesses are sufficiently similar as to present opportunities for the diversifying firms (Marangu, Oyagi, & Gongera, 2014). Related product diversification involves building shareholders' value by capturing cross business strategic fits (Collins & Montgomery, 2008). The appeal of related diversification is exploiting match-ups to realize a "2+2=5" performance outcome and thus build shareholder value.

Related diversification also involves the opportunities of a second business that benefits from access to core competencies of the company (Pearce & Robinson, 2010). Most companies favour related diversification in order to capitalize on synergies such as; transferring valuable expertise, technological knowhow, or other capabilities from one business to another. Synergies also arise from combining related activities of separate businesses to achieve lower costs, exploiting common use of a well-known brand name and cross-business collaboration to create competitively valuable resources strengths and capabilities, use of common sales force to call on customers, advertising related products together and joint delivery.

According to Johnson and Scholes (2005) unrelated diversification refers to pursuit of opportunities beyond the present product and market base of a firm outside the present

industry. Unrelated diversification strategy is an important component of the strategic management of a firm, and the relationship between a firm's diversification strategy and its economic performance is an issue of considerable interest to managers and academicians (Kotler& Armstrong, 2008). Businesses are said to be unrelated when their value chain are so dissimilar that no competitive valuable cross-business relationships exist.

An unrelated diversified company has, under a single corporate umbrella, more than one business unit which operate their activities in different industries. As a result of value chain dissimilarity no real potential exists for transfer of skills, technology or other resources from one business to another. Many companies decide to diversify into industries or businesses that have good profit opportunities (Thompson & Strickland, 2006). In most cases companies that pursue unrelated diversification always acquire an established company rather than by forming a subsidiary.

Various strategic management scholars sought to establish the relationship between product diversification strategy and firm performance, the findings revealed mixed results as some posited positive relationships others negative and while still others non-linear relationships. Some study findings strongly evidenced that firms that diversified into related areas were more profitable than other diversified firms (Rumelt, 1974, 1982, Palepu, 1985, Ramanujam and Varadarajan, 1989). Chen and Ho's (2000) study revealed that corporate diversification in Singapore showed that diversification had a negative impact on firm value which implied that corporate diversification led to a diversification discount. Their findings also showed that large firms tend to diversify compared to smaller firms.

Phung and Mishra (2016) did a study on the impact of corporate diversification on firm performance of listed companies in Vietnam over a period between 2007 to 2012. The findings revealed that corporate diversification had a negative effect on the firm performance. Further, the findings also revealed that lack of a corporate governance system which is efficient may encourage firms to follow diversification strategies which would impair the firm's performance.

The findings of the study by Doaei, Anuar and Ismail (2015) on 102 manufacturing firms listed in Busra Malaysia revealed that there existed a negative relationship between product diversification and efficiency, international diversification and efficiency. According to Denis, Denis, and Sarin (1997) and Berger and Ofek (1995) they argued that based on the agency theory managers pursued their own interest and in this view product diversification had a negative impact on firm performance.

Boubaker, Mensi, and Nguyen (2008) in their study using annual data from 25 non-banking listed firms on the Tunis Stock Exchange found a strong evidence of corporate diversification decreasing the firm value. While Singh (2007) who analysed the relationship

between corporate diversification and firm performance of 889 Indian firms found that diversified firms performed significantly worse than focused firms. Further their findings revealed a significant negative relationship between degree of diversification and firm performance and made a conclusion that this was a result of inefficiencies in costs of the diversified firms.

Some studies on corporate diversification posited a non-linear relationship between corporate diversification and firm performance. For instance Khanna and Palepu (2000) in their study of 1309 listed firms in India showed a non-linear relationship between corporate diversification and firm performance. Diversification initially decreased firm's profits but after some time it improved upon reaching a certain level. Li and Rwegasira (2008) in an investigation on the relationship between corporate diversification and firm performance for 300 firms listed in China from 2003 to 2004 reported a U-shaped relationship between corporate diversification and firm performance.

The investigation by George and Kabir (2008) on the relationship between corporate diversification and performance of 607 Indian firms listed on the Bombay Stock Exchange revealed that, at first sight, diversification strategies of firms appeared to lower firm performance. The result supported prior studies documenting a 'diversification discount'. However, when the authors turned their attention to distinguishing features like the organizational structure and corporate governance of these firms, the results revealed that diversification strategies of independent firms significantly lowered the firm profitability whereas those of firms that were affiliated to business groups had an insignificant impact on firm performance. The results indicated that performance as measured in terms of turnover growth, net profit, return on sales, return on equity and return on assets increased in line with increase in diversification from 2000 to 2004.

Findings of a study by Jung and Chan-Olmsted (2005) on media conglomerates revealed related product and international diversification contributed to better financial performance of the media conglomerates. The researchers also noted that excessive diversification which led to high degree of unrelated diversification would decrease the performance.

Study by Schoar (2002) using a data set from the US Census Bureau's Longitudinal Research Database revealed that there exists a positive correlation between diversification and performance. However the findings by Schoar are given a different opinion by Chang *et al*. (2011) who asserts that there was lack of distinction between related and unrelated diversification and therefore a study was carried out keeping the distinction between related and unrelated diversification clear using the Entropy Measure and its decomposed components as proxies. Using Data Envelopment Analysis method to measure firm's relative productivity,

conclusion was made that related (unrelated) diversification contributed to the increase (decrease) of productivity.

La Rocca and Staglianò (2012) in their study of Italian firms between 1980 and 2007 on the effect of unrelated corporate diversification on firm performance findings revealed that there was a positive effect which was explained by the fact that these firms diversified to reduce information asymmetry and derive benefits from the internal capital market. Hann, Ogneva, and Ozbas (2013) who carried out a study of the US firms from 1998 to 2006 stated that diversified firms could reduce the cost of capital and therefore improve the firm's value more than focused firms, the positive effect according to their findings was accelerated when the firms' managers received incentives in the form of stock options.

A study by Berg (2016) which focused on Indian publicly listed firms between 2006 and 2012 and used accounting-based and market-based measures of firm performance, tried to explain the factors that influenced the costs and benefits of diversified firms in comparison to non-diversified firms. The findings revealed that on average diversified firms had a higher performance than non-diversified firms. However, due to the meltdown of global economic activities during the global financial crisis, the performance of both diversified and non-diversified firms in India deteriorated.

A study done by Oladele (2012) on product diversification and performance of manufacturing firms in Nigeria indicated that diversifying firms had higher level of return on assets. Study by Mashiri and Sebele (2014) on the listed conglomerates in the food and beverages sector with operations in the Zimbabwe Securities Exchange revealed a positive and linear relationship between diversification and firm performance as measured by turnover.

Findings of a study on the dairy industry carried out by Kariuki (2016) revealed a significant positive linear correlation between dairy enterprise performance and access to inputs, level of technological innovation and access to markets. The researcher also sought to find out if value addition measured in terms of related product diversification had a moderating effect on the relationship of access to inputs, level of technological innovation, access to markets and enterprise performance, it was revealed that it had a positive implication on the profitability of the dairy enterprise.

In a case study by Khamati (2014) findings revealed a positive relationship between diversification strategy and performance of Radio Africa Limited in Kenya. It was also established that though the performance improved as a result of the strategy the overall growth in revenues was decreasing at a decreasing rate. Study by Mwangi (2015) revealed that corporate diversification was positively related to financial performance of listed manufacturing firms in Kenya. However, growth and firm size were found to be negatively related to financial

performance of these listed manufacturing firms. The correlation results were found to be weak but moderate between corporate diversification and financial performance of listed manufacturing firm.

Marangu, Oyagi, and Gongera (2014) using descriptive correlational survey design carried out a census study on sugar firms in Kenya on the effect of concentric diversification strategy on organisation competitiveness. Using a questionnaire to collect primary data from the production and marketing managers and analysing this data using descriptive and inferential statistics, results revealed that concentric strategies had an overall significance impact on competitiveness, at individual level the regression analysis showed that there was a statistically positive linear relationship between concentric diversification and firm competitiveness. This implied that concentric diversification had a positive effect on sugar firm's competitiveness.

RESEARCH METHODOLOGY

Research Design

According to Kothari (2004), research design is the conceptual structure in which research is carried out; it is a design plan in which the data collection, measurement and analysis is contained. The study adopted the descriptive correlational survey design. Its purpose was to establish the relationships between and among variables of study and performance of the non-financial firms listed at the NSE. In descriptive research design information is collected without changing the environment. This research design was deemed appropriate as it gave a description of a group of people, phenomena or an event based on the influence on another variable (Salkind, 2010).

It was also deemed appropriate because of the observational nature of data that was collected from the annual reports of the companies. It examined the relationship among variables (correlational). Correlational research is some form of descriptive research which describes in quantitative terms the degree to which variables are related. It explores the relationship between variables and predicting a subject's score on one variable given his or her score on another variable (Mugenda, 2008; Mugenda & Mugenda, 2012).

Target Population

The researcher's target population consisted of all the 45 listed non-financial companies at the Nairobi Securities Exchange (NSE) in Kenya. Firms in the financial sectors were excluded because they were highly regulated by the Central Bank Prudential on liquidity, assets and other disclosures (Pratheepkanth, 2011). The exclusion was also due to the fact that their financial statements were presented differently from those of other sectors.

Census Design

Since the number of non-financial firms listed was small then census approach was deemed fit for adoption as recommended by Mugenda and Mugenda (2003). Data was collected for 44 firms as one Rea Vipingo had been excluded from the study due to delisting. This data collected was for the period 2011 to 2015. The period was appropriate for the study as during this period some non-financial firms such as Kenya Airways, Uchumi supermarket, Transcentury had dismal performance. The five year period was also considered appropriate because many firms did their strategic plans and hardly did they change before the term was over.

Data Collection Instruments

The study required both primary and secondary data. A semi structured questionnaire was used to collect the primary data. According to Kothari (2004) the questionnaire is very useful in extensive inquiries and can lead to reliable results despite being expensive. It also allows the respondent adequate time to think through the responses. The questionnaire had both closed and open ended questions. The secondary data was collected from the annual audited reports for the chosen companies for the period from 2011 to 2015.

Pilot Testing

The aim of pilot testing is to enable the researcher to pre-test the instruments to ensure that items in the instrument are clearly stated and that they have the same meaning to all respondents (Mugenda, 2008). Pilot testing in this study was done by collecting data from managers of the listed firms not participating in the main study. The study took 10% of the main sample size and therefore four firms were picked through convenience sampling, this was based on the recommendation by Cooper and Schindler (2008). Convenience sampling was deemed appropriate as the researcher used respondents that were voluntarily available (Leedy & Ormrod, 2005). A total of three managers from each firm were used in the testing of the reliability and validity of the questionnaire.

Reliability of Data Collection Instrument

Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results after repeated trials. Reliability enables the researcher to identify misunderstanding, ambiguities and inadequate items in the research instrument and make the necessary adjustments so that the data collected can have more reliability. To test for reliability the study employed Cronbach's alpha coefficient which ranges from zero (0) to one (1) (Kipkebut, 2010) and indicates the extent to which a set of test items can be treated as

measuring a single latent variable (Cronbach, 1951). Higher values of this coefficient meant that scales are more reliable. A value of 0.7 is acceptable as recommended by Field *et al.*, (2012) and a minimum level of 0.6 is also considered good by Bryman (2008). The recommended value of greater than 0.7 was adopted for this study. The findings showed that the scales were reliable as they surpassed the minimum Cronbach's alpha value threshold of 0.7 that is recommended by Sekaran (2003). Accordingly, none of the items in the questionnaire were deleted after the pilot study. The questionnaire was adequate to be used in the final survey.

Validity of Data Collection Instrument

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda & Mugenda, 2003). When an instrument measures what it is supposed to measure then it is said to have validity. According to Sekaran (2003) validity of the questionnaire data is dependent on the ability and willingness of the respondents to provide the requested information. The study considered construct validity which referred to the degree to which a construct's operationalization did measure what the theory said it did.

In this study, to ensure validity of the data collection instrument it involved going through the instrument and ensuring that it answered the set objectives. Content validity was also a concern in the study; it is the degree to which a test's content matches the content domain associated with the construct. Bailey (1994) notes that by using a panel of experts to review the test specifications and the selection of item, content validity of a test can be improved. This study therefore used the expertise of research supervisors and other researchers to improve on the questionnaire.

Data Analysis Approach

The raw data collected from the field was transformed into meaningful information as it was cleaned, edited and then coded. The researcher used descriptive analysis, correlation analysis and regression analysis to analyse the data.

ANALYSIS AND FINDINGS

Response Rate

The response rate of questionnaires was 116 out of the desired 135, this was 85.9%. According to Babbie (2004) and Mugenda and Mugenda (2003), this response rate was high enough to analyse and make conclusions. A response rate of at least 51% in an open study is considered adequate by Nachmias and Nachmias (2006) while Cooper and Schindler (2003) argue that a response rate of 30% of the total sample size provide enough data to be used to generalize

characteristics. This response rate could be attributed to frequent follow-ups by the researcher to all the respondents and appropriate data collection procedure employed.

Descriptive Statistics

The study sought to establish the product classes and the approximate number of products/services offered by the target companies. To determine the firm's performance it was necessary to know what the firms offered in the market and therefore knowledge of companies' product classes and number of products/services was considered inevitable.

The results on Table 1 showed that 34.5% produced independent products, 32.8% produced complementary while another 32.8% produced substitute's products. The study further sought to establish the number of products produced by the sampled firms. The results showed that 15.5% produced only 1 product, 22.4% produced 2-3 products, 22.4% produced between 4 and 5 products, 6-7 products were produced by 23.3% while those who produced over 7 products were 16.4%. These results showed that over 85% of the listed non-financial firms produced more than one products which implied that they had diversified in terms of products produced.

Table 1: Frequency for Product Diversification Sub-variables

		Frequency	Percent (%)
Product classes produced	Substitutes	38	32.8
	Complementary	38	32.8
	Independent	40	34.5
Total		**116**	**100**
Approximate number of products a firm currently has in the market	1 Product	18	15.5
	2-3 products	26	22.4
	4-5 products	26	22.4
	6-7 products	27	23.3
	Over 7 products	19	16.4
Total		**116**	**100**

Table 2 presents the findings based on the statements measured on Likert scale on the extent of product diversification among listed non-financial firms in Kenya. The study sought to establish whether firm introduced new products in the market often, most of the respondents as shown by the results agreed (42.2%) and strongly agreed (45.7%). The statement had a mean

of 4.27 which confirmed majority of the respondents agreed and strongly agreed with the statement. Similarly, the statement on whether it was significant for the firm to introduce products related to existing products in the market. The results showed that majority of the respondents were in agreement as indicated by the mean response of 4.26. The study sought to establish to what extent the respondents would agree that their firm embarked on the introduction of related products on the strength of existing brand products, the mean of 4.10 for the statement implied that majority of the respondents indicated to high extent.

The results also revealed that majority respondents agreed as shown by the mean of 4.20 that their firms advertised related products together. The statements on whether listed non-financial firms delivered/distributed related products together, whether listed non-financial firms utilized the same expertise in the development and marketing of related products, whether introduction of related products had resulted in reduction of cost of doing business and finally whether listed non-financial firms introduced products that are unrelated to current products had mean response of above 4. This is an indication that the majority of the respondents either agreed or strongly agreed with these statements.

Statements measuring level of product diversification had standard deviation of close to one which implied varying responses from the respondents. These results implied that some of the listed non-financial firms were highly diversified in terms of products produced compared to others that were not as diversified. However, the results of the mean implied that majority were diversified in terms of products produced.

Table 2: Attributes of Product Diversification

Statements	N	SA	A	N	D	SD	Mean	Std Dev
The firm introduces new products in the market often.	116	45.7%	42.2%	6.9%	3.4%	1.7%	4.27	0.87
It is significant for the firm to introduce products related to existing products in the market.	116	49.1%	36.2%	8.6%	3.4%	2.6%	4.26	0.94
Extent to which you agree that your firm embarked on the introduction of related products on the strength of existing brand products.	116	40.5%	41.4%	9.5%	5.2%	3.4%	4.10	1.01

The firm advertises related products together.	116	40.5%	47.4%	6.0%	3.4%	2.6%	4.20	0.90
Extent to which you agree that your firm delivers/distributes related products together.	116	44.0%	39.7%	11.2 %	3.4%	1.7%	4.21	0.90
To what extent would agree that your firm utilizes the same expertise in the development and marketing of related products.	116	44.0%	38.8%	7.8%	4.3%	5.2%	4.12	1.07
Extent to which you agree that introduction of related products has resulted in reduction of cost of doing business.	116	46.6%	44.0%	5.2%	0.9%	3.4%	4.29	0.88
The firm has introduced products that are unrelated to current products.	116	39.7%	43.1%	9.5%	3.4%	4.3%	4.10	1.01
Average							**4.19**	**0.95**

The findings presented in Table 3 showed some of the reasons cited by the respondents for their firms' diversification into unrelated products. The findings revealed that 26.7% cited low operational costs in unrelated products, 25.9% cited high profit margin in unrelated products, 24.1% cited less competition faced by unrelated products and finally 23.3% cited better sales in unrelated products. The findings implied that various firms had different reasons for diversifying into unrelated products.

The study also asked the respondents to rate their firms in terms of product diversification. The results presented in Table 3 showed that 21.6% rated their firms as highly diversified; another 21.6% indicated they were moderately diversified, 20.7% indicated they were somehow diversified while equal proportion of 18.1% indicated they were least diversified

and single product. These findings further confirmed that majority of the listed non-financial firms were diversified in terms of products produced.

Table 3: Frequency for Product Diversification Sub Variables

		Frequency	Percent (%)
Reasons for engaging in products not similar to current products	Better sales in unrelated products	27	23.3
	Less competition faced by unrelated products	28	24.1
	High profit margin in unrelated products	30	25.9
	Low operational costs in unrelated products	31	26.7
	Total	**116**	**100**
Description of the firm with regard to product diversification	Highly diversified	25	21.6
	Moderately diversified	25	21.6
	Somehow diversified	24	20.7
	Least diversified	21	18.1
	Single product	21	18.1
	Total	**116**	**100**

Inferential Statistics

Correlation Analysis

Correlation was conducted to test the strength of the association between product diversification strategy and firm performance. The results of correlation analysis as shown on Table 4 indicated that product diversification had a positive and significant correlation (r=0.390, p=0.000) with performance of listed non-financial firms in Kenya. The association between product diversification and firm performance of listed non-financial firms was moderately strong. The findings implied that positive increase in product diversification would result in corresponding positive change in firm performance.

Table 4: Relationship between Product Diversification Strategy and Firm Performance

		Product Diversification	Firm Performance
Product Diversification	Pearson correlation	1	0.39**
	Sig. (2-tailed)		0.000
	N	116	116
Firm Performance	Pearson correlation	0.39**	1
	Sig. (2-tailed)	0.000	0.000
	N	116	116

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

Regression Analysis

This section contains the results of regression analysis. Regression modelling was adopted to link the independent variables to the dependent variable. According to Kothari (2004), regression is the determination of a statistical relationship between two or more variables. Analysis of variance (ANOVA) as described by Kothari is a procedure for testing difference among different data groups for homogeneity. The essence of ANOVA is in the total amount of variation in a data set that can be broken into two types; that which can be attributed to chance and that which can be attributed to specific causes. F-test is also used in the context of ANOVA.

Product Diversification and Firm Performance

Linear regression analysis was employed to test the nature of influence of product diversification strategy on firm performance. The model summary presented in Table 5 results showed a relationship R= 0.390 which indicated a strong positive association between product diversification strategy and firm performance. R-squared = 0.152 indicated that 15.2% of variation in the performance listed non-financial firms can be explained by product diversification strategy while the remaining percentage of 84.8% is explained by other variables not in the model.

Table 5: Model Summary for Product Diversification

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
1	0.390	0.152	0.145	0.61182

a. Predictors: (Constant), Product Diversification

Hypothesis testing

The study sought to examine the influence of product diversification strategy on performance of non-financial firms listed at NSE in Kenya. In order to accomplish this, the following hypothesis was formulated;

H$_0$: There is no significant influence of product diversification strategy on the performance of the non-financial firms listed at NSE in Kenya.

Analysis of variance (ANOVA) was used to test the hypothesis and a 95% confidence level was set for this analysis. The results of ANOVA on Table 6 showed that F value 20.466 with p-value=0.000< 0.05 meant that the null hypothesis was rejected and conclusion made that there is a significant influence of product diversification strategy on performance of listed non-financial firms at NSE in Kenya.

Table 6: ANOVA for Product Diversification Strategy

Model		Sum of Squares	Df	Mean Square	F	P-value
	Regression	7.661	1	7.661	20.466	0.000[b]
1	Residual	42.673	114	0.374		
	Total	50.333	115			

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Product Diversification

To test the significance of the influence of product diversification strategy on firm performance, the regression coefficients (β), the intercept (α), and the significance of all coefficients in the model were subjected to the t-test to test the null hypothesis that the coefficient is zero. The null hypothesis state that, β (beta) = 0, meaning there is no significant influence of product diversification strategy on firm performance as the slope β (beta) = 0.

The model **Y= β$_0$+ β$_1$X$_1$+ε** therefore became **Firm Performance = 1.002+ 0.437Product Diversification Strategy (X$_1$) +ε.** The beta coefficient results of the resulting model showed that the constant α = 1.002 was significantly different from 0, since the p-value = 0.000 is less than 0.05. The coefficient *β* = 0.437 similarly was significantly different from 0 with a p-value = 0.000 which was less than 0.05. The results revealed that there is a positive and significant relationship between product diversification strategy and firm performance. The results implied that a unit change in product diversification strategy would result in 0.437 units change in performance of the non-financial companies listed at NSE in Kenya.

Table 7: Regression Coefficients for Product Diversification

	β	Std. Error	Beta	t	P-value
(Constant)	1.002	0.409		2.45	0.016
Product Diversification Strategy	0.437	0.097	0.39	4.524	0.000

a. Dependent Variable: Firm Performance

DISCUSSION

The objective of the study was to determine the influence of product diversification strategy on the performance of listed non-financial firms in Kenya. The descriptive results in this study implied that majority (over 85%) of the listed non-financial firms produced more than one products meaning they were diversified in terms of products produced. The products offered by the non-financial firms had implications on supplies to the local demand and competition within the industry on raw materials used in the production process. Further implications of these findings revealed that due to challenges faced in different industries to which these firms belong in terms of cost of production, companies are opting to diversify into other product or service offerings in order to improve their profit margin and also capacity utilization.

The listed non-financial firms diversified especially where there were opportunities to reduce costs and also when they felt that they had powerful and well-known brands and where they felt they could spread risk across a range of businesses. The results of correlation analysis indicated that product diversification strategy had a positive and significant correlation with performance of listed non-financial firms in Kenya. The association between product diversification and firm performance of listed non-financial was moderately strong.

The correlation findings implied that positive increase in product diversification strategy would result to a corresponding positive change in firm performance. The regression results revealed that there is a positive and significant relationship between product diversification strategy and firm performance. The results implied that a change in product diversification strategy would result to an increase in performance of the non-financial companies listed at NSE in Kenya.

The study rejected the null hypothesis H_0: there is no significant influence of product diversification strategy on the performance of the companies listed at NSE in Kenya, hence the study concluded that product diversification strategy significantly influenced the performance of listed non-financial firms in Kenya.

CONCLUSION

The study established a positive and significant relationship between product diversification strategy and firm performance. The study therefore recommended that managers and shareholders of the firms that are yet to diversify their product portfolio should diversify to remain competitive and profitable in this turbulent business environment. For practicing managers the study also recommends that a firm should establish cautiously which product diversification to formulate and implement in order to better their firm's performance.

A firm's management can decide to adopt related diversification in order to capitalise on the synergies derived from the use of such a strategy. Such synergies would include transferring valuable expertise, technological knowhow, or other capabilities from one business to another among many. These firms can also diversify in related products which ensure no additional costs but an increase in the number of product in the market. The study further recommended that the non-financial firms should indeed adopt product diversification strategy in order for them to optimally use any under-utilised resources and also put slack resources into good use.

The positive influence of product diversification on performance of listed non-financial firms is a motivating factor for firms seeking to venture into new products whether related or unrelated. Its positive impact on firm performance also suggests that governments, in this case Kenyan government should put in place policies that will encourage firms to undertake these expansion operations. The regulatory authorities should also formulate policies that ensure that there is a fair play in the market by all relevant market players in the different industries. This is by ensuring that the non-financial firms have strong corporate governance mechanisms put in place to protect the interests of different stakeholders.

REFERENCES

Andreas, R. (2009, June). Implementing strategy: tap into the power of four key factors to deliver success. Retrieved June 2016, from Institute of management Accountants.

Andreu, R., Claver , E., & Quer, D. (2008). Type of diversification and company resources: new empirical evidence from Spanish tourism industry. International Journal of Tourism Research, 11(3), 229-239.

Babbie, E. (2004). The Practice of Social Research (10th ed.). Belmont, CA: Wedsworth/Thompson Learning.

Barney, J. B. (1991). Enterprise resources and sustained competitiveness advantage. Journal of management, 17(1), 99-120.

Barney, J. B., Ketchen, D. J., & Wright , M. (2011). The future of resource-based theory:revitalization or decline? Journal of Management, 37(5), 1299-1315.

Berg, J. (2016). Corporate diversification and firm performance: The effect of the global financial crisis on diversification in India. Unpublished Master Thesis.

Berger, P., & Ofek, E. (1995). Diversification's effect on firm value. Journal of Finance economics, 37(1), 39-65.

Boubaker, A., Mensi, W., & Nguyen, D. (2008). 'More on Corporate Diversification, Firm Size and Value Creation'. Econmic Bulletin, 7, 1-7.

Chatterjee, S., & Wernerfelt, B. (2001). The link between resources and type of diversification: Theory and evidence. Strategic management journal, 12, 33-48.

Chen, S.-S., & Ho, K. (2000). 'Corporate Diversification, Ownership Structure and Firm Value: The Singapore Evidence'. International Review of Financial Analysis, 9, 315-326.

Christensen, J. F., & Foss, N. J. (1997). Dynamic corporate coherence and competence-based competition: Theoretical foundations and strategic implications. (A. Heene, & R. Sanchez, Eds.) Competence based strategic management, 287-312.

Cooper , D. R., & Schindler, P. S. (2003). Business Research Methods (8th ed.). New York: McGraw Hill.

Cooper, D. R., & Schindler, P. S. (2008). Business Research Methods (10th ed.). Boston: McGraw-Hill.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometric, 16(4), 297-334.

Day, G. S., & Nedungadi, P. (2004). Managerial representations of competitive advantage. Journal of Strategic, 58, 31-44.

Doaei, M., Anuar, M. A., & Ismail, Z. (2015). Corporate diversification and efficiency of manufacturing firms listed in Busra Malaysia. Iranian Journal of Management Studies, 8(4), 523-544.

Field, A., Miles, J., & Field, Z. (2012). Discovering Statistics Using R. Los Angeles: SAGE.

Foss, N. J., & Christensen, J. F. (2001). A Market-process Approach to Corporate Coherence. Managerial nd Decision Economics, 22(4-5), 213-226.

George, R., & Kabir, R. (2012). 'Heterogeneity in Business Groups and the Corporate Diversification-Firm Performance Relationship. Journal of Business Research, 65, 412-420.

Hann, R. N., Ogneva, M., & Ozbas, O. (2013). Corporate diversification and the cost of capital. The Journal of Finance, 68, 1961-1999.

Hitt , M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: effects of innovation and firm performance in product-diversified firms. Academic Management Journal, 40(4), 767-798.

Johnson, G., Scholes , K., & Whittington, R. (2008). Exploring corporate strategy, texts and cases (7th ed.). Essex: Pearson Education Limited.

Jung, J., & Chan-Olmsted, S. M. (2005). Impacts of Media Conglomerates' Dual Diversification on Financial Performance. Journal of Media Economics, 18(3), 183-202.

Kariuki, A. N. (2016). Influence of Product diversification drivers on performance of dairy enterprises in Kenya. Unpublished PhD Thesis JKUAT.

Khamati, A. D. (2014). Diversification strategy and performance of Radio Africa limited in Kenya. Unpublished MBA project.

Khanna, T., & Palepu, K. (2000). Is Group affliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups. Journal of Finance, 55, 867-891.

Kim, K.-H., Al-Shammari, H., Kim, B., & Lee, S.-H. (2009). 'CEO Duality Leadership and Corporate Diversification Behaviour'. Journal of Business Research, 62, 1173-1180.

Kipkebut, D. J. (2010). Human resource management practices and organisational commitment in higher educational institutions: A Kenyan Case. The IUP Journal of Organizational Behaviour.

Kothari, R. (2004). Research Methodology: Methods and Techniques. New Delhi: Age.

Kothari, S., Leone, A., & Wasley, C. (2012). Performance matched discretionary accrual measures. Journal of Accounting and Economics, 39(13), 163-197.

Kotler, P., & Armstrong, G. (2008). Marketing: An Introduction. New Jersey: Prentice-Hall International Inc.

La Rocca, M., & Stagliano, R. (2012). 'Unrelated Diversification and Firm Performance: 1980-2007 Evidence from Italy'. Australasian Accounting Business and Finance Journal, 6, 75-82.

Leedy , P. D., & Ormrod, J. E. (2005). Practical Research: Planning and design (8th ed.). New Jersey: Pearson/Prentice Hall.

Li, X., & Rwegasira, K. (2008). 'Diversification and Corporate Performance in China: An Agency Theory Perspective'. Journal of Transnational Management, 13, 132-147.

Marangu, W., Oyagi, B., & Gongera, E. (2014). An analysis of concentric diversification strategy on organisation competitiveness: Case of sugar firms in Kenya. European journal of business ans management, 6(19), 175-180.

Marinelli, F. (2011). The Relationship between Diversification and Firm Performance: Is there really a causal relationship? Free Press.

Mashiri, E., & Sebele, F. (2014). Diversification as a corporate strategy and its effects on firm performance: A study of Zimbabwean conglomerates in food and beverages sector. International Journal of Economics and Finance, 182-195.

Montgomery, C. A., & Wernerfelt, B. (1988). Diversification, ricardian rents and Tobin's q. Rnad Journal of Economics, 19(4), 623-632.

Mugenda, A. (2008). Social Science Research, Theory and Principles. Nairobi: Applied Research and Training Services.

Mugenda, A. G., & Mugenda, O. M. (2012). Research Methods Dictionary. Nairobi: Applied Research and Training Services.

Mugenda, O., & Mugenda, A. (2003). Research Methods - Quantitative and Qualitative Approaches. Nairobi: ACTS Press.

Murimiri, S. W. (2009). Competitive Business Strategy and Firm Performance of Commercal banks in Kenya. Unpublished MBA project.

Mwangi , E. (2015). The effect of corporate diversification on the financial performance of listed manufacturing firms in Kenya. Unpublished MBA project.

Nachmias, D., & Nachmias, F. (2006). Social Statisitcs for a Diverse Society (3 ed.). Milwaukee; USA: Sage Publications.

Ng'ang'a , P. N., Namusonge, G. S., & Sakwa, M. M. (2016). Effects of ownership structures on financial performance of listed firms in Nairobi Securities Exchange in Kenya. Journal of Business Management, 2(1), 97-113.

Ng'ang'a , P. N., Namusonge, G. S., & Sakwa, M. M. (2016). Effects of Ownership Structures on Financial Performance of Listed Firms in Nairobi Securities Exchange in Kenya. Journal of Business Management, 2(1), 97-113.

NSE. (2015-2016). Handbook.

Oyedijo, A. (2012). Effects of product-market diversification strategy on corporate financial performance and growth. An empirical study of some companies in Nigeria. American International Journal of Contemporary Research, 2(3), 199-210.

Palepu, K. (1985). Diversification strategy, profit performance and the entropy measure. Strategic management Journal, 21, 155-174.

Pearce, J., & Robinson, R. (2010). Strategic Management; Formulation Implementation and Control. New York: McGraw Hill Irwin.

Penrose, E. T. (1959). The theory of growth of the enterprise. London, UK: Basil Blackwell.

Phung, D. N., & Mishra, A. V. (2016). Corporation diversification and firm performance: Evidence from Vietnamese listed firms. Australian Economic Papers, 386-408.

Pratheepkanth, P. (2011). reward system and its impact on employee motivation in commercial bank of Sri lanka Plc in Jaffna district. Global Journal of Management and Business Research, 11(4).

Priem, R., & Butler, J. (2001). Is the resource-based "view" a useful perspective for strategic management research? The Academy of management review, 26(1), 22-40.

Ramanujam, V., & Varadarajan, P. (1989). Research on corporate diversification: A synthesis. Strategic Management Journal, 16(4), 277-299.

Rothaermel, F. T. (2012). Strategic Management: Concepts and Cases. McGraw-Hill/Irwin.

Rumelt, R. P. (1974). Strategy, structure and economic performance. Cambridge: Harvard University Press.

Saleemi, N. A. (1993). Business Finance Simplified (2nd ed.). Nairobi: N.A. Saleemi Publishers.

Salkind, N. J. (2010). Encyclopedia of Research Design. Los Angeles: SAGE.

Schoar, A. (2002). Effects of corporate diversification on productivity. The Journal of Finance, 57(6), 2379-2403.

Sekaran , U. (2003). Research Methods for Business. New York: Wiley & Sons Inc.

Singh, D. A., Gaur, A. S., & Schmid, F. P. (2010). Corporate diversification, TMT experience, and performance evidence from German SMEs. Management International Review, 50, 35-56.

Theuven, L. (2004). Vertical integration in the European package tour business. Annals of Tourism Research, 31(2), 111-125.

Thompson Jr., A. A., Strickland III, A. J., & Gamble, J. E. (2005). Crafting and executing strategy, text and readings (14th ed.). New York: McGraw Hill Irwin.

Wernerfelt, B. (1984). A resource-based view of the enterprise. Strategic management journal, 5(2), 171-180.

Williamson, O. (1985). The economic institutions of capitalism: Firms, markets, relational contracting. New York: Free press.