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EFFECT OF INVESTMENT DIVERSIFICATION ON FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE KENYA

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## EFFECT OF INVESTMENT DIVERSIFICATION ON FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE KENYA

<sup>1</sup>Rebecca Nasimiyu Wanyonyi

Jomo Kenyatta University of Agriculture and Technology Corresponding Authors Email; <u>wanyonyirebecca675@gmail.com</u>

#### Abstract

The general objective of study was to examine investment diversification effect on the financial performance of agricultural firms listed at NSE. The study employed descriptive research design. The study population consisted of seven listed agricultural firms at NSE. The study employed a census approach because of the small number of agricultural listed firms at the NSE. Secondary panel data was used for a period covering seven years (2011-2017).R squared (coefficient of determination) was 52.80%. which showed that investment diversification explain 52.80% of the dependent variable variations that is financial performance The study also found that horizontal diversification, diversification diversification, concentric conglomerate and vertical diversification had a positive relationship with financial performance. The study suggested that firms should look for better avenues to mitigate the risk of doing business or their operations. Through diversification, a firm is not dependent on a limited number of products, locations, or markets in order to remain competitive and survive in the dynamic economic environment.

**Keywords:** *investment diversification, agricultural sector, horizontal diversification, concentric diversification, conglomerate diversification, vertical diversification, financial performance* 



#### **1.0INTRODUCTION**

#### **1.1 Background of the Study**

Currently diversification is an option that many corporates and individuals and are using to improve performance, achieve growth and reduce risk. Diversification involves setting up or acquiring businesses different from current activities, operations products and markets (Kotler and Armstrong, 2008). Firms diversify with the objective to achieve value creation through economic of scope, financial economies, or market power (Chen and Yu, 2012). Diversification in agriculture has been a policy objective of most countries that are developing during their structural change process (Timmer, 1997). Asian nations such as Japan, Thailand, and South Korea have been successful in sector of agriculture through diversification (World Bank, 1990). However, agriculture diversification requires development in technology, better infrastructure provision, and agricultural markets well-functioning to support more diversified production. This poses challenges to countries with limited technologies, inefficient agricultural support systems and government policies that are unfavorable. Different countries have differing capacities to diversify their agricultural sector and therefore as a consequence, the extent and patterns of agricultural diversification may differ among countries.

Ishak and Napier (2004) indicated that a firm that concentrations to prevail in broadening participates in spreading in ventures and expenses. Choices to expand can be fruitful, when administration endeavors to grow better aptitude and competency in broadening. Agribusiness broadening is key because of a few variables; To lessen the unfriendly sustenance conditions, There is consistent stream of salary, Employment creation, decreases appetite and hunger, diminishes troublesome climate conditions, Increases wage of little and negligible ranchers. Kariuki (2013) inspected cultivate enhancement as methodology for overseeing contamination caused by vast scale less differentiated cultivating The following stage in changing customary farming to a dynamic, business part is horticultural expansion. Expansion in the item blend of agribusiness, through a move toward high-esteem items, has extraordinary potential for quickening generation development rates (Mahmud, Mahmud, Rahman & Zohir, 2000). Financial performance is a measure of how well a firm can utilize assets from its primary mode of business and generate revenues with excellent and stable long-term performance.

Efforts globally to invest in agriculture depend on strategies intensification to cope with rising demand for food. Diversification is an adaptive alternative strategy to respond to markets and climate fluctuations. Intensification and diversification strategies are already on-going activities on the farm which may change in response to changing environments, demanding adaptation. A better understanding of agricultural intensification and diversification determinants is likely to lead to better programs to develop increased resilience in farming systems in the presence of fluctuating climates and markets. Investing internationally has the advantage of risk reduction effects due to the number of securities, the size, internationality, industry of the firms Rugman (1976). Portfolio's diversification internationally can help in attracting customers in the wealth management industry, in the period in which production is very low or even negative returns. The fact that nations will not always move in the same direction according to Poterba (1991), it is possible to reduce local risks of business cycles and other weaknesses Levy, Sarnat (1970).



There is improvement in agricultural production at the global level, at a higher rate than the population in recent times, resulting to consistent increase in per capita agricultural production and consistent reduction in global prices of most of agricultural commodities, It has been achieved by technological revolution that improves yields through use of modern inputs like improved inputs and equipment's (Peter Hazell irrigation. & Stanley Wood, 2007). Diversification in agriculture is viewed as stage process. Cropping level is a shift from monoculture where many developing countries are (Petit & Bargouti, 1993) the next level is where the firm has various enterprises and may engage in different activities at different time of the year Metcalf (1989). The concept of diversification is a shift from excess production of commodities to those that can be expanded Newby (1988) .Diversification of farmland can further reduce risk as exposure is spread among crops, government structures, and climates. When there is drought in Russia, growing conditions in Australia may be very favorable.

About 80% of households in Kenya engage in agriculture. Farming is small scale by farmers who own not more than 5 acres with limited technology. There is still large scale coffee, tea, and sisal plantations, but a growing number of small scale farmers grow these cash crops. In the late 1970s and in 1986 Coffee production booms temporarily assisted the economy to come out of deficit spending and monetary expansion. Agricultural expansion of crop exports has been the most vital factor in boosting economic development. Much of activities in agricultural are also mainly providing food for domestic consumption and raw materials. Agriculture in Kenya is sufficiently diversified in crops for food to produce nearly all of the basic food. According to World Bank report (2005), agriculture contributes 35% of GDP and 40% of export earnings ,though according to KNBS(2016) to cope with fluctuations in the global markets of commodity prices, Kenya will have to continuously diversify to reduce its inclination on commodity exports by having more favorable conditions for private investment in downstream agricultural processing or manufacturing, and services to assist expand job creation, accelerate long-term growth, reduce poverty, and minimize vulnerability to price volatility. Agricultural sector performance 2015 improved due to good weather and rainfall though coffee prices had fluctuated significantly due to international reduction of prices (Soko, 2016).

#### **1.2 Problem Statement**

Efficient diversification decision results in good performance. Performance has effect on value and survival of all firms including the agricultural sector in Kenya. Diversification has received a lot of attention as one of the key risk reduction strategies by individuals and corporates. Daud and Salamudin (2009) examined that most of those firms that have diversified portfolios of assets, perform better than firms that engage and only depend on one activity. Mansi and Reeb (2002) studied that in diversification, firms are more likely to manage and reduce risks because if one activity does not doing well, the other activity is likely to do better because they may not be facing similar risks preventing the firm from suffering total loss. Environmental problems that are escalating in agriculture if not looked into would result to various risks levels impacting negatively in agricultural productivity at regional and local levels (Cassman & Wood, 2005). According to Nigeria Capital Market report (2015), most of poorly performing firms are in agricultural sector mostly.



Listed agricultural firms in Kenya are experiencing low listing and activity on NSE due to low returns affecting their performance, NSE report (2016). For instance, Rea Vipingo stopped trading in 2013 on NSE and eventually in 2015 it was delisted according to NSE Report (2015) which was due to its poor financial performance. Raei, Tehrani and Farhangzadeh (2015) examined the relationship between Diversification Strategy and Firm Performance at the Tehran Stock Exchange in Iran. The study concluded that there is no major relationship between diversification on financial performance for non-financial firms listed at NSE in kenya, Mwangi (2015) studied corporate diversification on the financial performance for manufacturing firms listed at NSE in Kenya. The studies concluded that there is a positive relationship between diversification and financial performance

This indicates that studies reveal mixed results and whether diversification improves or worsens financial performance is still demanding further study. Similar studies have inspected recorded firms at NSE however there is negligible concentration to recorded rural firms at NSE. The neighborhood thinks about uncover that different firms have distinctive outcomes on broadening and budgetary execution. Speculation broadening impact on monetary execution recorded agrarian firms at NSE may likewise give general discoveries. The investigation would need to look at the effect of speculation broadening on money related execution of rural recorded firms at NSE

#### **1.3 Study Objectives**

The general objective of study was to examine investment diversification effect on the financial performance of agricultural firms listed at NSE.

The specific objectives were;

- i. To examine horizontal diversification effect of on financial performance of agricultural firms listed at NSE.
- ii. To determine concentric diversification effect on financial performance of agricultural firms listed at NSE
- iii. To assess the effect of conglomerate diversification on financial performance of agricultural firms listed at NSE
- iv. To find out vertical diversification effect on financial performance of agricultural firms listed at NSE

#### 2.0LITERATURE REVIEW

#### 2.1Theoretical Review

#### 2.1.1 Portfolio Theory

Portfolio hypothesis by Harry Markowitz (1952) fights that hazard loath financial specialists can concoct portfolios to advance or boost expected profits for a given level of market chance, and that hazard is a piece of higher reward. It is a standout amongst the most critical monetary hypotheses managing money and venture. As indicated by the hypothesis, it is conceivable to think of an effective boondocks of ideal portfolios, yielding most extreme expected return for a



given level of hazard. It says that it is smarter to take a gander at the normal hazard and return of in excess of one stock in light of the fact that a financial specialist can get the advantages of expansion, especially in hazard decrease of the portfolio. MPT recommends that the hazard in an arrangement of various individual stocks will be not as much as the hazard inborn in holding any of the individual stocks (gave the dangers of the different stocks are extraordinary). A portfolio that has two unsafe stocks: one that satisfies when it downpours and another that satisfies when it doesn't rain will satisfy, paying little respect to whether it rains or sparkles.

One dangerous resource added to another can diminish the general danger of a portfolio. As indicated by Markowitz speculation is picking a mix of stocks that is appropriate among which to disperse one's savings. There are factual estimation of hazard utilized in current portfolio hypothesis which are alpha, beta, standard deviation and others. These are markers proposed to help speculators decide a venture's hazard remunerate profile. It requires a financial specialist to begin with a hazard free resource, and afterward include broadened dangerous resources that yield an effective portfolio that is with least hazard and most extreme return. Concocting productive portfolios along these lines is exceptionally mind boggling; the equivalent is with putting most expansion speculations into training. MPT defines the idea of enhancement in contributing, with the goal of choosing an accumulation of venture resources that have by and large lower chance than an individual resource. The idea driving the MPT is that in speculation portfolio it is important to consider how cost of every benefit changes in respect to other resource value change in the portfolio Machuki (2011).

#### 2.1.2 Resource-Based Theory

Based on the work of Penrose (1959), Resource-Based Theory states that the owning strategic resources is an opportunity to come up with ways to achieve competitive advantages. The Theory also states that corporate diversification is a result of availability of resources underutilized which are valuable in other areas of the business, and the inclination of management to exploit that value potential from the resources according to Penrose. .In diversification the theory focuses on resource characteristics that warrant a diversification strategy in order to achieve the value-creating potential from them. One of them is the indivisibility of the resources which (Teece, 1980; 1982) suggested that indivisibility leads to market failure where the excess capacity of the underutilized resources is difficult sale or rent out to other uses. The recognition of value-creating potential in the underutilized resource calls for the active involvement of the top management team and corporate diversification strategy requirement. Teece (1980) argued that efficiency of corporate diversification is the internalizing of the indivisible knowhow and other inputs to sharing production processes. The theory argues that a diversified firm is in a position to achieve economies of scale by scaling down cost structure through spreading the fixed cost on human capital as an indivisible resource over multiple production processes. fungibility is the degree to which potential in a resource reduces from the original resource context or capability according to (Levinthal & Wu, 2010; Montgomery & Wernerfelt (1988). Low fungibility resources have no close relationship to business applications and have low value potential and capabilities.

Fungibility influences nature which is related or unrelated diversification engaged in. The scalability is the degree to which resources and capabilities are available for other purposes



(Levinthal & Wu, 2010; Mahoney & Pandian, 1992; Penrose, 1959). A resource or capability with less scalability can be used in other business activities without limiting its potential in current applications. A resource or capability with less scalability, when availed to other uses, would demand a reduction of its use in current applications which impacts on the level of diversification in which the firm engages in. According to the theory, the existence of economies of scope, and the urge of managers to benefit from those economies of scope, gives the motivation to diversify into related activities. The theory also suggests that when economies of scope no longer useful, there should be scaling down in diversification levels. In conclusion RBT suggests that level of diversification and performance are influenced greatly by its resources and capabilities.

#### 2.1.3 Agency Theory

Agency theory by Jesen and Meckling (1976) explains the relationship between principals and agents in business. The theory considers corporate diversification as emanating from the separation of ownership and control which pushes the management to pursue their own objectives at the expense of shareholders Jensen & Meckling (1976). Excessive expansion through diversification might occur to increase demand for the management skills and knowledge Shleifer and Vishny (1989) or to diversify management employment risk of according to Amihud & Lev (1981). Corporate diversification can benefit management at the expense of shareholders that is value destroying like managerial compensation though it may not result in increased profitability according to (Murphy, 1985) Failure and managerial employment risk is reduced in diversification. Decisions arrived at under situations such as these results in agency costs, where diversification activities driven by such motives are for management self-interests like huge compensation while being detrimental to shareholders (Amihud & Lev, 1981).

The argument of agency theory is that managers pursue their own interests that are unfavorable to shareholders by diversification according to Jensen (1986). Diversification makes managers to reduce their personal risk according to (Amihud & Lev (1981), as well as increase their compensation, power and prestige (Jensen & Murphy (1990). This leads to growth of the firm due to diversification. As diversification strategies reduce shareholder wealth, there is a clear conflict of interest between managers and shareholders regarding diversification as a strategic decision.

#### 2.2 Empirical Review

Mwangi (2015), the study examined to determine the effect of corporate diversification on the financial performance of listed manufacturing firms in Kenya. The study concluded that corporate diversification was related positively to financial performance. Growth and firm size were found to be negatively related to financial performance. The correlation results average between corporate diversification and financial performance. Through diversification, a firm is not dependent on a few products, locations, or markets for survival.

Kenyoru, Chumba and Rotich (2016) examined the effects of product diversification strategy on financial performance of a firm on Commercial Banks in Kericho. Primary data was used. The



study employed an explanatory survey design. The study concluded that horizontal diversification had positive significant effect on financial performance

Ade Oyedijo (2012) examined the impacts of item advertise broadening system on Corporate money related execution and development on firms recorded on Nigeria Securities Exchange. The investigation uncovered that related broadening significantly affects execution while irrelevant enhancement has a negative yet no critical effect on execution. Additionally from the investigation, particular firms performed better firms that participate in irrelevant broadening as it were. The examination likewise inferred that the money related execution of firms in Nigeria are altogether influenced by the method of expansion.

Kimeu (2014) the investigation tried to decide the impact of portfolio structure on budgetary execution of venture organizations recorded at NSE. The examination found that interest in bonds emphatically influences the money related execution. The investigation additionally demonstrated that interest in land and value emphatically affected on their budgetary execution. The investigation recommended that the administration of venture organizations require strong association structure and strategy usage to impact their portfolio.

Kuria (2016) contemplated the impacts of corporate broadening on budgetary execution among non-money related firms whose offers were exchanging on the Nairobi Securities Exchange. Distinct research configuration was connected utilizing auxiliary information. Relapse examination was utilized. The discoveries demonstrated elite was by firms that differentiated crosswise over product offerings, topographical broadening and incredibly impacted firm execution. The discoveries likewise demonstrated that by and large non-money related firms recorded were expanded. Enhancement had a solid and positive association with firm execution. The discoveries additionally demonstrate the importance of the item enhancement procedure in the levels of firm execution enlisted by non-monetary firms. The investigation presumed that by coordinating item broadening into the activities of firm would prompt enhanced budgetary

Gellrich, Hackethal, Holzhäuser (2005) examined vertical integration and its impact on profitability and shareholder value in the global banking industry. The results suggested that banks either operating on highly integrated or highly disintegrated levels of vertical integration display superior performance. Vertically integrated banks show lower levels of firm risk.

A study by Mahaga (2003) on vertical integration and performance of food manufacturing firms in Nairobi revealed that there was positive relationship between vertical integration and (ROE). The study also concluded that the performance of food manufacturing firms is positively related to the degree to which firms are vertically integrated. The study concluded that firms in the food manufacturing industry had varying degrees of vertical integration and different extents of value adding. Further the study concluded that there was a positive correlation between the degree of vertical integration and the turnover of food manufacturing firms in the year 2000.

Murithi (2011) study examined to establish if there existed any relationship between the degree of vertical integration and performance of construction firms in Kenya. The findings of the study indicated that there exists no relationship between vertical integration and performance of firms. They recommended that there should be minimal emphasis on vertical integration as a strategy and concentrate on other strategies that impact performance positively.



#### 3.0 RESEARCH METHODOLOGY

The study employed descriptive research design. The study population consisted of seven listed agricultural firms at NSE. The study employed a census approach because of the small number of agricultural listed firms at the NSE. Secondary panel data was used for a period covering seven years (2011-2017).Secondary data was collected from audited consolidated financial statements contained in the NSE handbooks 2013 and 2016-2017.

#### 4.0 RESULTS

#### 4.1 Descriptive Results

Descriptive results were presented in Table 1.

#### **Table 1: Descriptive**

	Obs	Mean	Std.Dev	Min	Max	
ROA	48	0.08742	0.12491	-0.167	0.458	
horizontal Diversification	48	22979.5	52506.2	-17045	207844	
concentric Diversification	48	24012.7	44257	-31565	146621	
conglomerate Diversification	48	79108.6	111568	-87986	323423	
vertical Diversification	48	201658	333607	-832223	976400	

Results in Table 1 revealed that the mean of return on assets of agricultural firms listed in NSE was 0.08742. The minimum reported return on assets was -0.167 while the maximum was 0.458. The return on assets was spread within a standard deviation of 0.12491 and this implies that there was a wide spread of return on assets from the mean return on assets.

The results also revealed that the mean of income from horizontal diversification of agricultural firms listed in NSE was 22979.5. The minimum reported horizontal diversification was -17045 while the maximum was 207844. The horizontal diversification was spread within a standard deviation of 52506.2 and this implies that there was a wide spread horizontal diversification from the mean horizontal diversification.

The results also revealed that mean of income from concentric diversification of agricultural firms listed in NSE were 24012.7. The minimum reported concentric diversification was -31565 while the maximum was 146621. The concentric diversification was spread within a standard deviation of 44257 and this implies that there was a wide spread concentric diversification from the mean concentric diversification.

The results also revealed that the mean of income from conglomerate diversification of agricultural firms listed in NSE was 79108.6. The minimum reported conglomerate diversification was -87986 while the maximum was 323423. The conglomerate diversification was spread within a standard deviation of 111568 and this implies that there was a wide spread conglomerate diversification.



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The results also revealed that the mean of income from vertical diversification of agricultural firms listed in NSE was 201658. The minimum reported vertical diversification was 832223 while the maximum was 976400. The vertical diversification was spread within a standard deviation of 333607 and this implies that there was a wide spread vertical diversification from the mean vertical diversification.

#### **4.2 Correlation Analysis**

#### horizontal concentric conglomerate vertical Diversificatio Diversificatio Diversificatio Diversificatio ROA n n n n ROA 1 horizontal 1 Diversification 0.0249 concentric Diversification 0.4094 0.6121 1 conglomerate Diversification 0.3562 0.3708 0.3622 1 vertical 0.203 Diversification 0.3988 0.3256 0.7921

#### **Table 2: Correlation Matrix**

The results showed that horizontal diversification and return on assets are positively related 0.0249). These findings agree with Ajuzie (2014) who concluded that horizontal diversification has a positive and significant effect on the financial performance. The results showed that concentric diversification and return on asset are positively related (0.4094). These findings agreed with that of Jasper van den Berg (2016) whose results showed a positive relationship between concentric diversification and financial performance. It was further concluded that concentric diversified firms a higher firm performance than non-diversified firms.

The results revealed that conglomerate diversification and return on asset are positively related (0.3562). These findings agreed with that of Maurizio and Raffaele (1980 to 2007) who found out that conglomerate diversification positively affects firms' performance. This implies that the decision to diversify unrelated is made in the shareholders' best interest. Lastly the results revealed that vertical diversification and return on asset are positively related (0.3988). These findings are in line with that of Mahaga (2003) who concluded a positive correlation between the degree of vertical integration and the turnover of manufacturing firms for food in the year 2000.

#### **4.3 Regression Analysis**

#### **Table 3: Regression results**

	Coefficients	Std.Error	t	p>t	[95%Con.l	[nterval]
horizontal Diversification	1.29	3.99	3.24	0.001	2.07	-5.10



concentric Diversification	2.25	4.69	4.79	0.000	1.33	3.17
conglomerate Diversification	3.24	2.12	0.59	0.008	5.40	2.91
vertical Diversification	2.34	6.57	3.56	0.000	1.05	3.63
_cons	0.0274	0.0334	0.82	0.412	0.03808	0.092883
P=0.000						
Chi2(4) = 43.06						
R squared $= 0.5280$						

The results from the Table 3 revealed that R squared (coefficient of determination) was 52.80%. This shows that investment diversification explain 52.80% of the dependent variable variations that is financial performance. This also shows that 47.2% of the variation in the dependent variable is attributed to other factors not captured in the model. These results are in line with Kuria (2016) studied the effects of corporate diversification on financial performance among non-financial firms at the Nairobi Securities Exchange who concluded that there is positive relationship between corporate diversification and financial performance.

The F statistics outcome in Table 3 indicates that the overall model was statistically significant. This implies that independent variables horizontal, concentric, conglomerate and vertical diversifications are good predictors of financial performance. This was supported by Wald statistics of 43.06 (F calculated at 0.05 significance level).Since the F calculated is greater than F critical (value=2.449) and the reported P value (0.000) which was less than conventional probability of 0.05 significance level or the accepted critical value. The results are consistent with Mwangi (2015) and Kuria (2016) who studied effect of corporate diversification on financial performance of firms listed at NSE in Kenya who found out that there is significant and positive relationship between corporate diversification and financial performance.

From the results the estimated Model was as shown below:

### $Y_{it} = 0.0274 + 1.29 HD_{it} + 2.25 CCD_{it} + 3.24 CD_{it} + 2.34 VD_{it}$

#### Where;

**Y**<sub>it</sub>=ROA (financial performance)

HD<sub>it</sub>=Horizontal diversification

CCD<sub>it</sub>=Concentric diversification

**CDit** =Conglomerate diversification

VID<sub>it =</sub> Vertical diversification

From the model all independent variables increase financial performance of agricultural firms listed at NSE. Also the variable that generates the highest t-value is the most significant and the one that that generates the lowest t-value is the least significant. From the table of coefficients concentric diversification has the highest t-value of 4.79 hence the most significant while Conglomerate diversification has the least t-value of 0.59 the least significant.



Further from the results in table 3, Coefficients revealed that horizontal diversification have a positive and significant relationship with return on assets (r=1.29, p=0.001) at 95% confidence level. This reveals that a unit increase in horizontal diversification would lead to an increase in financial performance by 1.29. These findings are in line with those of Mwangi (2015), who concluded that horizontal diversification, was positively related to financial performance of listed manufacturing firms in Kenya

The results in table 3 showed that concentric diversification have a positive and significant relationship with return on assets (r=2.25, p=0.000) at 95% confidence level. This shows that a unit increase in concentric diversification would lead to an increase in financial performance by 2.25. These findings agree with that of den Berg (2016) whose results concluded that concentric diversified firms have on average a higher firm performance than non-diversified firms.

The results in table 3 showed that conglomerate diversification have a positive and significant relationship with return on assets (r=3.24, p=0.008) at 95% confidence level. This shows that a unit increase in conglomerate diversification would lead to an increase in financial performance by 3.24. These findings are in line with. Kimeu (2014) determined the effect of portfolio composition on financial performance of investment companies listed in Nairobi Securities Exchange. The study found that investment in bonds and shares positively affects the financial performance of firms

The results in table showed that vertical diversification has a positive and significant relationship with return on assets (r=2.34, p=0.000) at 95% confidence level. This implies that a unit increase in vertical diversification would lead to an increase in financial performance by 2.34. These findings are in line with those of Holzhäuser (2005) who found that banks of vertical integration display superior performance and stock market evaluations. Vertically integrated banks show lower levels of firm risk.

#### 5.0SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMENDATIONS

#### **5.1 Summary of the Findings**

The objective of study was to show the effect of horizontal diversification on financial performance of agricultural firms listed at NSE. The findings supported by the regression results showed that horizontal diversification and return on assets are positively and significantly related. These findings agree with that of Mwangi (2015), who concluded that horizontal diversification, was positively related to financial performance of listed manufacturing firms in Kenya.

The objective of the study was to find the effect of concentric diversification on financial performance of agricultural firms listed at NSE. The findings supported by the regression findings showed that concentric diversification and return on assets are positively and significantly related. These results agree with that of den Berg (2016) who concluded that concentric diversified firms have on average a higher firm performance than non-diversified firms.



The objective of the study was to find the effect of conglomerate diversification on financial performance of agricultural firms listed at NSE. The findings a supported by the regression results showed that conglomerate diversification and return on assets are positively and significantly related. These findings agreed with that of Kuria (2016) who concluded that diversification strategies had a strong and positive relationship with firm performance.

The objective of study was to examine the effect of vertical diversification on financial performance of agricultural firms listed at NSE. The findings supported by the regression results showed that vertical diversification and return on assets are positively and significantly related. These findings agree with that of Holzhäuser (2005) who found that banks of vertical integration show superior performance and stock market evaluations .and vertically integrated banks show lower levels of risk.

#### **5.2** Conclusion of the Study

From the study it can be concluded that all modes of investment diversifications have a positive relationship with financial performance but at varying levels attributed to the degree of diversification depending on the capabilities of agricultural firms listed at NSE as per the trend analysis. Most of the agricultural firms have dealt with various agency problems which include incompetent or irrational managers, competent but self-interested managers, wasteful spending in general and wasteful investment in poorly performing divisions in particular and the inability of the internal economy of the firm to correctly signal to management good investment opportunities. Most firms also focused on core organizational capabilities and exploited the interrelationships between business lines to achieve economies of scope by sharing physical business resources and economies of scale through increased coordination and the sharing of marketing, information and technological know-how and capabilities across related and unrelated products and industry.

The result also concluded concentric diversification and return on assets are positively and significantly related and also the most significant variable. Dealing in related activities is less risky due to better understanding of various issues like competition the same industry but in terms of spreading risk the variable is less attractive.

From the study it can be further concluded that there was a consistent decrease in conglomerate diversification period across the 7 years of study. Dealing in unrelated industry activities is risky due to lack of better understanding of the new industry and difficulties in coordination. The market for securities is volatile. But but in terms of spreading risk the variable is most attractive.

The findings also concluded that conglomerate diversification and financial performance are positively and significantly related.

From the study it can be concluded that there was unsteady trends in vertical diversification by firms across the 7 years of study but levels of income were at higher levels than the rest of diversification modes, this is attributed to climatic and market fluctuations however are certain conditions to adhere to for vertical integration to be more successful .There is better control of input and output in vertical diversification in non-agricultural activities would affect financial performance positively.



Firms that diversify perform better than firms that do not diversify their investments. There are other factors contributing to poor financial performance of agricultural listed firms at NSE but investment diversification has done most firms well to mitigate climatic and market fluctuations in some agricultural firms.

#### **5.3 Recommendations of the Study**

The study recommends that firms should offset the risk of doing business through diversifying to other areas within the industry and other industries. In this way a firm is not dependent on a limited number of products, locations, or markets in order to survive.

The study also recommends that the agricultural firms diversifying into other industry segments should strive to gain better understanding of other industries.

Moreover the study recommends firms to deal with various agency problems which can lead to market imperfections rendering the agricultural sector a risky industry.

The government should formulate and implement better policies in the agricultural sector firms and industry to assist in dealing with recurrent climatic and market fluctuations.

The capital market authority should improve on their policies to encourage the agricultural sector to engage in better diversification decisions to mitigate financial losses and boost performance

The study also recommends that agricultural firms should pursue diversification by focusing on the process of diversification not the mode of diversification because diversification is not a guarantee for profits. Excessive diversification can lead to losses.

#### REFERENCES

- Chen, J. & Yu, J. (2011). Managerial ownership, diversification, and firm performance: evidence from an emerging market. *International Business Review*, 2, 1-4.
- Denis, D., Denis, D. & Yost, K. (2002). Global diversification, industrial diversification, and firm value. *The Journal of Finance*, 57, 5, 51-79.
- Gellrich, T., Hackethal, A., ... & Weitzel, T. (2005). Kreditprozess-Management. Norderstedt, Frankfurt.
- Ishak, Z. & Napier, C. (2004). Corporate ultimate ownership and corporate diversification in Malaysia. *The Fourth Asia Pacific Interdisciplinary Research in Accounting Conference*, Singapore.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

Kotler, P., & Armstrong, G. (2008). Prinsip-prinsip pemasaran(Vol. 1). Jilid.



- Levinthal, D. A., & Wu, B. (2010). Opportunity costs and non-scale free capabilities: profit maximization, corporate scope, and profit margins. *Strategic Management Journal*, *31*(7), 780-801.
- Levy, H., & Sarnat, M. (1970). International diversification of investment portfolios. *The American Economic Review*, 60(4), 668-675.
- Mahmud, W., Rahman, S. H., & Zohir, S. (2000). A Strategic Factor for Growth. *Out of the shadow of famine: Evolving food markets and food policy in Bangladesh*, 232.
- Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic management journal*, *13*(5), 363-380.
- Mansi, S. A., & Reeb, D. M. (2002). Corporate diversification: what gets discounted?. *The Journal of Finance*, 57(5), 2167-2183.
- Montgomery, C. A., & Wernerfelt, B. (1988). Diversification, Ricardian rents, and Tobin's q. *The Rand journal of economics*, 623-632.
- Oyedijo, A. (2012). Competitive strategy orientations of small and medium business owners and their performance impacts: The case of paint manufacturing SMEs in South-Western Nigeria. *Journal of Asian Business Strategy*, 2(1), 1-8.
- Raei, R., Tehrani, R., & Farhangzadeh, B. (2015). A study on relationship between diversification strategy, firm performance and risk: Evidence from Tehran Stock Exchange. *International Journal of Business and Social Science*, 6(1).
- Rajan, R. Servaes, H. & Zingales, L (2000). The cost of diversity: the diversification discount and inefficient investment, *Journal of Finance* 55, 35–80.
- Rugman, A. M. (1976). Risk reduction by international diversification. *Journal of International Business Studies*, 7(2), 75-80.
- Shucksmith, D. M., Bryden, J., Rosenthall, P., Short, C., & Winter, D. M. (1989). Pluriactivity, farm structures and rural change. *Journal of Agricultural Economics*, 40(3), 345-360.
- Timmer, C. P. (1997). POLICY ARENA Building efficiency in agricultural marketing: The long-run role of BULOG in the Indonesian food economy. *Journal of International Development: The Journal of the Development Studies Association*, 9(1), 133-145.