# An Analysis of the Effect of Business Diversification on the Financial Performance of Commercial Banks in Kenya

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#### **Abstract**

This study sought to investigate the effect of business diversification on the financial performance of commercial banks in Kenya. The study was based on the fact that the banking sector in Kenya is highly regulated with significant business restrictions and attendant disclosures which have created incentives for the banks to diversify. However, the effect of business diversification on financial performance remains inconclusive with diverse studies finding minimal or no relationship while others finding positive significant effect. The study used a mixed research design where descriptive and quantitative research designs were used. The population for this study was all the forty two commercial banks in Kenya. Sources of data were both secondary and primary where quantitative techniques were used to undertake data analysis. To determine the relationship that existed between the variables, both multiple regression analysis and chi-square tests were adopted. The study found that business diversification significantly positively affected how the commercial banks in Kenya performed. The exact effect was however established to be largely dependent on bank-size. Business diversification significantly improved financial performance for small banks. Under medium sized banks category, only location diversification affected financial performance in a significant manner. For large banks all the four forms of business diversification did not have a significant effect on their financial performance. Respondents perceived business diversification to positively affect financial performance of commercial banks in Kenya to a moderate extent. The study was limited by examining financial performance by use of the CAMELS model in a developing country and being conducted in a single industry. Further, CAMELS was measured using a constructed index by data being obtained from the commercial banks' annual audited reports. The study highlighted the need to develop business diversification strategies specifically tailored for each of the tiers of commercial banks with a focus on all forms of diversification for small banks, location diversification for the medium-sized banks and enhancement of existing forms of diversification among large commercial banks.

#### **Background to the Study**

In Kenya, the banking sector frequently experiences intense rivalry from microfinance institutions and non-bank financial institutions coupled with changing regulations (Tsuma, and Gichinga, 2016). Commercial banks are also required to make many disclosures in the financial statements which imply lack of confidentiality on business strategies. In August 2016, the Banking Amendment Act was assented to bringing about interest rate controls in Kenya. Collectively, these specific characteristics of the banking industry make it difficult for the local banks to achieve optimum financial returns (Central Bank of Kenya, 2016).

Bank financial performance is of unique interest due to the fact that poor financial performance will lead to liquidity problems to commercial banks leading to depositors' panic and which may

in turn lead to bank failure. The consequence of a single bank failure is dire and may affect many industries and hence negative consequence on the economic growth (Makokha, Namusonge and Sakwa, 2016). Due to the banks being major financial intermediaries, sources of finance and are the main depositors of savings in the developing countries such as Kenya, their importance is more pronounced (Athanasoglou, Brissimis and Delis, 2006). This has seen the banking industry be a key target in most strategic plans like the Kenya Vision 2030 by enabling increased savings, investments, ensuring monetary stability thus progressing the economy (Republic of Kenya, 2008). So as to thrive in the commercial banks are necessitated to constantly evaluate their business dynamics (Baum and Wally, 2003).

The competitiveness of the banks in Kenya has its origin in the diversification strategies they adopt and apply. The various diversification strategies in place include location diversification, investment diversification, product diversification and channel diversification. Whereby location diversification is venturing to a new market segment, investment diversification entails increasing the assets owned by the business, product diversification entails introducing new and unique products in the market and channel diversification is introducing new service delivery methods (Adamu *et al*, 2011).

Diversification may be in the form of related diversification which involves developing the corporate entity while putting the organization's capability under consideration. This can either be through vertical or horizontal integration (concentric strategy). Diversification can also be achieved through unrelated diversification which involves development of products and services beyond the current capabilities and value network - conglomerate strategy (Johnson and Whittington, 2008).

Most commercial banks adopt a diversification strategy for three main reasons. First, the strategy may be aimed to attain efficiency by maximizing the company's resources using new products to new customers and geographical locations. In addition, a commercial bank may adopt this strategy to be able to stretch its corporate parenting capabilities into new markets and products or services. Lastly a commercial bank may employ this strategy to increase its market power by having diverse range of products and services (Luo, 2009).

#### **Statement of the Problem**

The banking sector all over the world acts as the life blood of economic development and is a major source of finance to the economy. Commercial banks provide essential financial services and advice to both individuals and corporates (Tsuma, and Gichinga, 2016). However, interest rate capping has been seen as a threat to the profitability of the banks in Kenya and hence the need for commercial banks to diversify their income sources (World Bank, 2017). Additionally, banks face several (often conflicting) regulations that include capital and leverage level requirements, riskiness of assets, branching and asset investment restrictions among others raising the need to make their portfolio current and unique (Ongore, and Kusa, 2013) such as the imposition of capital requirements. Commercial banks also are required to maintain certain level of cash flow position to ensure they meet the cash demand of the depositors (Turkmen, and Yigit, 2012).

To increase profitability and to overcome increasing competition in the banking industry, commercial banks have been forced to diversify their businesses. Business diversification has received much attention from scholars due to the debate on how exactly the business

diversification impact on how the banks perform. The studies conducted in the sector have been inconclusive with contradicting results being obtained. The banks were established to have well diversified portfolios as evidenced by the studies conducted by Kamp *et al.* (2004) and Turkmen and Yigit (2012). On the relationship that exists, Acharya *et al.* (2002) established that diversification in the industry and sector caused diminished returns with more risky loans. Similarly Hayden *et al.* (2007) established that diversification led to reduced returns in the German banks.

While Makokha, Namusonge, and Sakwa (2016) investigated how the commercial banks in Kenya are impacted by the portfolio diversification established that they helped to improve how the banks performed. This contradicts Kipleting (2016) who studied the effect of investment diversification on the financial performance of commercial banks in Kenya and found no significant effect of diversification on their financial performance. In a similar manner, Kiweu (2012) on his study on the effect of income diversification initiatives by Kenyan commercial banks established only minimal positive relationship with their financial performance.

This shows that business diversification is not entirely a new concept as evidenced by the numerous studies have been conducted. However, the available literature is not sufficient enough to provide a framework for determining the influence this business diversification has on the financial performance. This is despite the importance of banking industry in the Kenyan economy and the regular changing regulation in the banking industry such as interest rate capping. Thus, understanding the effects of business diversification will help great in improving their performance. As such, this study sought to address this research gap by investigating the effect of business diversification on the financial performance of commercial banks in Kenya.

# **Research Objectives**

# **General Objectives**

The general objective of the study was to determine the effect of business diversification on financial performance of commercial banks in Kenya.

# **Specific Objectives**

- i. To determine the effect of channel diversification on financial performance of commercial banks in Kenya.
- ii. To determine the effect of product diversification on financial performance of commercial banks in Kenya.
- iii. To determine the effect of location diversification on financial performance of commercial banks in Kenya.
- iv. To determine the effect of investment diversification on financial performance of commercial banks in Kenya.
- v. To assess the perception of stakeholders in the banking sector regarding the relationship between business diversification on the financial performance of commercial banks in Kenya.

#### **Research Questions**

- i. How does channel diversification affect the financial performance of commercial banks in Kenya?
- ii. What is the effect of product diversification on the financial performance of commercial banks in Kenya?

- iii. How does location diversification affect the financial performance of commercial banks in Kenya?
- iv. What is the effect of investment diversification on the financial performance of commercial banks in Kenya?
- v. How do stakeholders in the banking sector perceive the relationship between business diversification and the financial performance of commercial banks in Kenya?

#### **Theoretical Review**

The study was guided by the following theories; Portfolio Theory, Agency Theory and Stakeholders' Theory. These theories provided the theoretical underpinnings of this study.

## **Portfolio Theory**

The Modern Portfolio theory was developed by Markowitz (1952). The theory holds that both maximum expected returns and the variations in the minimum values should exist so as to attain an efficient portfolio. The portfolio which is efficient encompasses assets which are either risky but of high value or those that are less risky but having lower value. Therefore profits may be attained by avoiding those assets that are likely to result in diminished returns or those that do not perform as well as expected. This thus leads to a scenario whereby there are options in the assets and resources to be used in accomplishing a particular task or else known as diversification (Brealey and Myers, 2003).

Commercial Banks have over the years noticed that there is a need to diversify their portfolio of offerings to remain relevant, increase their earnings and maintain their sustainability in this cut-throat competitive financial services industry. With the liberalization of the market coupled with deregulation and globalization, banks have found it increasingly difficult and costly to maintain their profitability. Jongeneel (2011) noted factors such as and evolved e-commerce channel and changes in consumer attitudes leading to the steady decline in interest margins on loans of Commercial Banks from the 1980s.

The theory's proposition to this study is that the banks may reduce the risk facing the investments by distributing the investment amounts among all those securities which give a maximum expected return. This theory indicates that where the investment diversification is well implemented as a performance improvement strategy, it may enable banks attain competitive advantage. It may also be utilised in coming up with other strategies, based on the benefits accrued.

#### **Agency Theory**

The Agency Theory came about through the works of Jensen and Meckling in (1976). The theory holds that in every business situation, managers may have conflicting interests from those of the shareholders (Jensen and Meckling, 1976). This arises from the fact that the managers make most managerial decisions in such a way that they benefit the most at the expense of the business. Agency problems are thus likely to occur and should be anticipated by putting in place mechanisms to monitor and regulate these managerial actions (Jensen and Meckling, 1976).

According to the theory, important managerial decisions should not be undertaken solely by the manager in charge, but by through a designated board. This will ensure that the strategies put in place have no personal motives behind them. The theory's assumption is that aligning both the interests of managers and stakeholders may lead to improved performance. The Agency Theory

has however faced criticism as this may not be easy in application as each party always yearns to gain the most for themselves first (Gleason, 2011).

Agency Theory's proposition to this study is that the formulation of the diversification strategies in the banks is the sole responsibility of the managers involved. In this regard, the strategies will obtain a positive impact on the organization if the managers' interests are well aligned with those of the stakeholders. They should aim to maximize the use of the available resources to gain competitive advantage and increased returns. This is by ensuring proper implementation and evaluation of the diversification strategies.

# The Stakeholder Theory

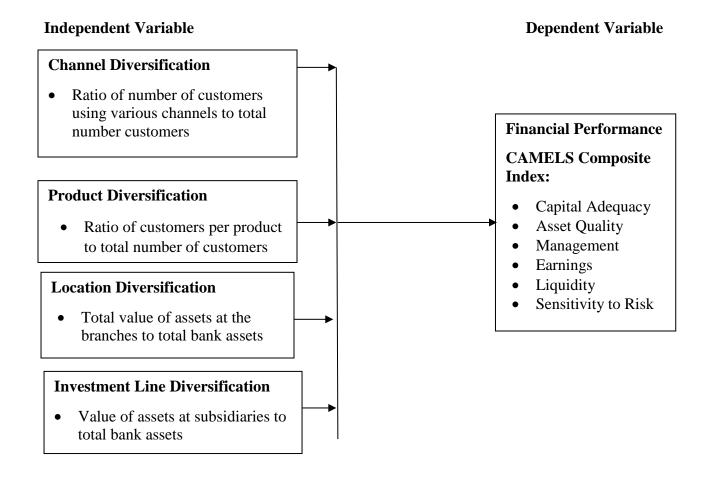
Stakeholder theory was proposed by Freeman (1984) to explain the association between broad categories of persons with interests in an organization. The general hypothesis of the stakeholder's theory is that in decision making, the management of the organizations ought to consider the interest of shareholders, customers, suppliers, agents, government and more broadly, the society. Thus, the decisions that the management of an organization takes to a big extent are affected by the diverse interests of the stakeholders who could be the shareholders, employees of the organizations, customers, government and their agents among other parties.

This theory exists in the context of the ideology that both the internal and external groups highly determine how organizations operate (Freeman, 2010). This is based on the assumption that firms are rooted in a network of relationships with stakeholders and that these firms allocate varying amounts of resources and attention to these stakeholders (Reuter, Goebel and Foerstl, 2012). Hence ensuring proper coordination among the stakeholders will in turn translated to improved outcomes in the organization.

The stakeholders, in the case of Kenyan commercial banks, would be the owners, the regulator, employees or customers. The decisions that commercial banks take have to be in line with the expectation and the interest of these stakeholders. The banks' shareholders, for example seek to obtain optimum returns on their investments whilst customers require efficient services from the banks. The diversification forms to be adopted will as such be affected by the stakeholders' interests and the interests of other parties in the micro and macro environment that commercial banks operate in.

#### **Conceptual Framework**

A conceptual framework is a research tool aimed to helping a researcher to develop an understanding on how the research variables are interrelated (Kombo and Tromp, 2009). As shown below, the independent variables were channel diversification, product diversification, location diversification, investment line diversification with bank size as the control variable. The dependent variable was financial performance. Channel Diversification was measured by the ratio of number of customers using various channels to total number customers, product diversification was measured by the ratio of customers per product to total number of customers, location diversification was measured by total value of assets at the branches to total bank assets and investment line diversification was measured by the value of assets at subsidiaries to total bank assets. Financial Performance on the other hand was measured by CAMELS Composite index using capital adequacy, asset quality, management, earnings, liquidity and sensitivity. Particularly, channel diversification, product diversification, location diversification, investment line diversification has a direct effect on the financial performance.



## **Research Design and Methodology**

This study used a mixed research design where both quantitative research design and descriptive design were used. The study used descriptive research since its main objective is to accurately portray the characteristics of persons, situations, or groups, and/or the frequency with which the study phenomena occur.

Quantitative research design on the other hand was used to enable quantitative analysis of data in achievement of the study objectives which will need use of regression analysis. The achievement of the study objectives could not be possible without using a mixed research design.

The population for this study comprised all the 42 commercial banks in Kenya (CBK, 2017). The target population for primary data was however, the 40 operational commercial banks since Charterhouse Bank Limited and Imperial banks were not operational having been placed under receivership. The population comprised of 6 large banks (Tier-I), 15 medium-sized banks (Tier-II) and 19 small banks (Tier-III).

Sampling was not applied by this study and instead, a census approach was used since the population was manageable. The 40 respondents were selected by the snow balling technique so as to minimise biasness and ensure equal representation. One questionnaire was administered per

bank and hence the total questionnaires administered were 40 which the researcher considered as manageable.

The study used both primary and secondary data. Primary data was used to obtain non-quantitative aspects of the study that may not be established from data collected and hence validate the results of quantitative analysis. Secondary data were used to enable quantitative assessment of the study objectives and hence provide more reliable and accurate results on the study objectives.

Primary data was collected using questionnaires where one questionnaire was administered per bank through drop and pick method. After the questionnaires were dropped, the respondents were given three days after which follow-ups were done through phone calls and text messages. Questionnaires were used since they are fast to administer and respondents can fill them at their convenience time. Questionnaires are also cost effective and give the respondents an opportunity to confirm the information being sought before responding to the question.

Secondary data was collected using secondary data collection sheets. Data was obtained from commercial banks financial statements for a period of three years (2014-2016).

Quantitative techniques were used to undertake data analysis. This entailed the generation of descriptive statistics including the mean and standard deviation. To access how various forms of business diversification impact on the financial performance of commercial banks in Kenya, Chi-Square tests of independence between the dependent variable and the four independent variables were done. Chi-square was used since it enabled the evaluation of relationship between the different categories of banks which were different in number.

To achieve the objectives of determining the relationship between the four forms of diversification and the financial performance of commercial banks, multiple regression analysis was undertaken. Diagnostic tests were done prior to conducting the regression analysis which included normality, auto-correlation, multi-collinearity and heteroscedasticity. Analysis was done using Statistical Package for Social Sciences (SPSS).

The dependent variable of financial performance of commercial banks was measured using the CAMELS composite index. The independent variables were channel diversification, product diversification, location diversification and investment-line diversification.

The objective of assessment of the perception of stakeholders in the banking sector regarding the business diversification on the financial performance of commercial banks in Kenya was tested using a questionnaire. Questionnaire was administered randomly to selected respondents. Five-likert scale was used to rate the perceived effect of the four forms of diversification on financial performance of commercial banks. Mean and standard deviation were used to rate the extent to which the various forms of diversification affects commercial banks financial performance.

The study had both primary and secondary data objectives wherein the study was seeking the opinions of bank officials about the relationship between financial performance of banks and each type of diversification (primary data). Concurrently, the study analysed these relationships using the secondary data measures like number of customers using channels and products, value of subsidiary assets and number of employees in branches. Finally, the study compared both the primary and secondary data analysis results for their consistency.

Ethical standards in the study were maintained by ensuring that all information obtained from various sources was fully acknowledged. Permission to collect data was also sought from the university and from commercial banks. All information obtained was used only for academic purposes and was treated with confidentiality. The researcher ensured that no one or any organization or any party is harmed by this study.

#### **Study Findings**

The small bank chi square test statistics where financial performance (FP) is the dependent variable and independent variables being channel diversification (channel\_div), product diversification (product\_div), location diversification (location\_div) and investment diversification (investment\_div) are presented in Table 4.11.

#### **Small Banks Test Statistics**

	FP_Small	Channel_div	Product_div	Location_div	Investment_div
Chi-Square	8.188 <sup>a</sup>	45.469 <sup>b</sup>	61.937 <sup>c</sup>	57.469 <sup>d</sup>	34.438 <sup>e</sup>
Df	54	30	25	22	20
Asymp. Sig.	1.000	.035	.000	.000	.023

- a. 55 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.
- b. 31 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.1.
- c. 26 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.5.
- d. 23 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.8.
- e. 21 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 3.0.

For small sized banks, channel diversification had a p-value of 0.035<0.05, product diversification had a p-value of 0.000<0.05, location diversification had a p-value of 0.000<0.05 and investment diversification had a p-value of 0.023<0.05. Therefore, all four forms of diversification had a significant positive effect on business diversification. As such, adoption of diversification by small banks will lead to an improvement in their financial performance.

The medium bank chi square test statistics where financial performance (FP) is the dependent variable and independent variables being channel diversification (channel\_div), product diversification (product\_div), location diversification (location\_div) and investment diversification (investment\_div).

#### **Medium Sized Banks Test Statistics**

	FP_medium	Channel_div	Product_div	Location_div	Investment_div
Chi-Square	8.000 <sup>a</sup>	25.857 <sup>b</sup>	11.333°	$30.000^{d}$	17.429 <sup>e</sup>
Df	34	24	27	17	15
Asymp. Sig.	1.000	.360	.996	.026	.294

- a. 35 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.
- b. 25 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.7.
- c. 28 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.5.
- d. 18 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.3.
- e. 16 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.6.

Channel diversification had a p-value of 0.36>0.05, product diversification had a p-value of 0.996>0.05, location diversification had a p-value of 0.026<0.05 and investment diversification had a p-value of 0.294>0.05. Therefore, for medium banks, channel diversification, product diversification and investment diversification do not have significant effect on financial performance. Location diversification has significant positive effect on financial performance of medium sized banks.

## **Large Banks Test Statistics**

	FR_large	Channel_div	Product_div	Location_div	Investment_div
Chi-Square	2.100 <sup>a</sup>	$2.800^{b}$	$4.000^{c}$	$6.000^{d}$	9.000 <sup>e</sup>
Df	16	11	14	12	9
Asymp. Sig.	1.000	.993	.995	.916	.437

- a. 17 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.
- b. 12 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.7.
- c. 15 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.3.
- d. 13 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.5.
- e. 10 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.0.

Channel diversification had a p-value of 0.993>0.05, product diversification had a p-value of 0.995>0.05, location diversification had a p-value of 0.916<0.05 and investment diversification had a p-value of 0.437>0.05. Therefore, for large banks, all forms of business diversification have no significant effect on financial performance of commercial banks. Therefore, large banks diversification will not affect financial performance.

Therefore, business diversification improves significantly financial performance of small banks. However, as the bank become bigger, business diversification continues to affect the performance of the banks to a less extent. This is supported by the findings that under medium sized banks, only location diversification has significant effect on financial performance and for large banks, all forms of business diversification do not affect commercial banks financial performance.

#### **Regression Analysis**

Regression analysis was used to confirm the chi square results. Regression for all the commercial banks were run followed by regression for small banks, medium banks and large banks.

# **Model Summary Results for all Commercial Banks**

			Std. Error of the
R	R Square	Adjusted R Square	<b>Estimate</b>
.473a	0.223	0.198	0.63574

a. Predictors: (Constant), Investment Line Diversification, Channel Diversification, Location Diversification, Product Diversification

The coefficient of correlation was 0.473 indicating that business diversification has a positive effect on financial performance. Thus, bank diversifying the business would improve financial performance. The coefficient of determination (R<sup>2</sup> Square) was 0.223 implying that that the regression could explain only 22.3% of the variation performance. The remaining 77.7% of the variation could be due to other predictors not in the model.

b. Dependent Variable: Financial Performance

**ANOVA Results for all Commercial Banks** 

	Sum of		Mean		
	Squares	Df	Square	${f F}$	Sig.
Regression	14.068	4	3.517	8.702	.000a
Residual	48.903	121	0.404		
Total	62.971	125			

a. Predictors: (Constant), Investment Line Diversification, Channel Diversification, Location Diversification, Product Diversification

The model result of model fitness indicates an F-statistic of 8.702 and a p-value of 0.000<0.05. This indicates that the model is fit for prediction at 95% confidence level. Thus, business diversification generally has significant effect on commercial banks financial performance.

**Model Coefficients Results for all Commercial Banks** 

		ndardized			
	Coc	efficients	Standa	rdized Coef	ficients
	В	Std. Error	Beta	${f T}$	Sig.
(Constant)	1.007	0.314		3.209	0.002
Channel Diversification	0.938	0.39	0.2	2.404	0.018
Product Diversification	1.084	0.299	0.303	3.62	0.000
Location Diversification	1.186	0.472	0.204	2.515	0.013
Investment Diversification	0.856	1.169	0.059	0.732	0.465

a. Dependent Variable: Financial Performance

The findings obtained show that channel diversification had a coefficient of 0. 938. The positive coefficient imply that channel diversification strategy has a positive impact on the financial performance. The variable had a p-value of 0.018 implying it was significant at the 95% confidence level as it is less than 0.05.

Product diversification had a coefficient of 1.268. The positive coefficient imply that product diversification has a positive impact on the financial performance. The variable had a p-value of 0.000 implying it was significant at the 95% confidence level as it is less than 0.05. Location diversification had a coefficient of 1.186. The positive coefficient imply that location diversification has a positive impact on the financial performance. The variable had a p-value of 0.013 implying it was not significant at the 95% confidence level as it is more than 0.05.

Investment diversification had a coefficient of 0.856. The positive coefficient imply that investment diversification has a positive impact on the financial performance. The variable had a p-value of 0.018 implying it was significant at the 95% confidence level as it is less than 0.05. The constant indicates that when business diversification is zero, financial performance of commercial banks will be 1.007. The diversification strategies thus have an overall positive relationship to the financial performance. The predictive model thus obtained is; Y = 1.007 + 1.007

b. Dependent Variable: Financial Performance

 $0.938X_1 + 1.084X_2 + 1.186X_3 + 0.856X_4$  where; Y is Financial Performance of commercial banks measured using financial performance composite index,  $X_1$  is Channel Diversification,  $X_2$  is Product Diversification,  $X_3$  Location Diversification and  $X_4$  is Business Line Diversification.

# Regression Analysis for Small Sized Commercial Banks in Kenya

Multiple regression analysis was for done for small sized commercial banks in Kenya. The findings of the model summary are presented below.

**Model Summary Results for Small Sized Commercial Banks** 

Adjusted R						
R	R Square	Square	Std. Error of the Estimate			
0.867	0.752	0.685	0.66294			

a. Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification

Business diversification has strong effect on financial performance of commercial banks (r=0.867). The coefficient of correlation is positive indicating that business diversification has positive effect on financial performance of commercial banks. Business diversification explained 75.2% of financial performance of commercial banks ( $R^2$ =0.752).

**ANOVA Results for Small Sized Commercial Banks** 

	Sum of		Mean			
	Squares	Df	Square	F	Sig.	
Regression	2.447	4	3.256	7.409	.000	
Residual	17.328	58	0.439			
Total	19.775	62				

Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification, b. Dependent Variable: financial performance

The ANOVA results indicates that business diversification has a significant effect on financial performance of small sized commercial banks (F=7.409, p<0.05). Therefore, business diversification will lead to improved financial performance.

**Model Coefficients Results for Small Sized Commercial Banks** 

	Unstanda	rdized			
	Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	1.618	0.522		3.10	0.004
Channel Diversification	0.29	0.042	0.023	6.90	0.000
Product Diversification	1.268	0.466	0.965	2.72	0.005
Location Diversification	2.699	0.864	1.91	3.12	0.003
<b>Investment Line Diversification</b>	2.11	0.759	0.906	2.78	0.004

Dependent variable: financial performance

Findings indicate that channel diversification had a coefficient of 0.29 (p<0.05), product diversification 1.268 (p<0.05), location diversification 2.699 (p<0.05) and investment line diversification 2.11 (p<0.05). The positive coefficients indicates that the respective forms of diversification had positive effect on commercial banks financial performance. The positive effect was significant (p<0.05).

#### Regression Analysis for Medium Sized Commercial Banks in Kenya

Multiple regression analysis was for done for medium sized commercial banks in Kenya. The findings of the model summary are presented below.

**Model Summary Results for Medium Sized Commercial Banks** 

R	R Square	Adjusted R Square	Std. Error of the Estimate
.411	0.169	0.131	0.52899

Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification

Business diversification has a moderate effect on financial performance of commercial banks (r=0.411). The coefficient of correlation is positive indicating that business diversification has positive effect on financial performance of commercial banks. Business diversification explained 16.9% of financial performance of commercial banks ( $R^2$ =0.169).

**ANOVA Results for Medium Sized Commercial Banks** 

	Sum of		Mean		
	Squares	Df	Square	F	Sig.
Regression	13.026	4	3.256	1.975	.150a
Residual	16.261	37	0.439		
Total	29.287	41			

a. Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification

The ANOVA results in table 4.20 indicates that business diversification has an insignificant effect on financial performance of small sized commercial banks (F=1.975, p>0.05). Therefore, business diversification does not significantly lead to improved financial performance.

**Model Coefficients Results for Medium Sized Commercial Banks** 

	Unstand	ardized			
	Coeffici	Coefficients		zed Coefficie	nts
	В	Std. Error	Beta	t	Sig.
(Constant)	0.868	0.664		1.306	0.211
<b>Channel Diversification</b>	-0.288	1.567	-0.042	-0.184	0.857
<b>Product Diversification</b>	-0.697	0.617	-0.251	-1.129	0.277
<b>Location Diversification</b>	0.356	0.141	0.6	2.527	0.023
Investment Line					
Diversification	-0.004	2.442	0	-0.002	0.999

a. Dependent Variable: financial performance

Findings indicate that channel diversification had, product diversification, and investment line diversification had an insignificant effect on financial performance (p>0.05). Only location diversification had a positive and significant effect on financial performance of commercial banks (coefficient=0.356, p<0.05).

#### Regression Analysis for Large Sized Commercial Banks in Kenya

Multiple regression analysis was for done for large sized commercial banks in Kenya.

**Model Summary Results for Large Sized Commercial Banks** 

R	R Square	Adjusted R Square	Std. Error of the Estimate
.152a	0.023	0.021	0.54659

a. Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification

Business diversification has a weak effect on financial performance of commercial banks (r=0.152). The coefficient of correlation is positive indicating that business diversification has positive effect on financial performance of commercial banks. Business diversification explained 2.3% of financial performance of commercial banks (R<sup>2</sup>=0.023).

The model ANOVA results are presented below.

Model ANOVA Results for Large Sized Commercial Banks

	Sum of		Mean		
	Squares	Df	Square	F	Sig.
Regression	2.211	4	0.553	1.025	.250a
Residual	4.198	15	0.28		
Total	6.408	19			

a. Predictors: (Constant), Investment Line Diversification, Location Diversification, Channel Diversification, Product Diversification

The ANOVA results indicates that business diversification has an insignificant effect on financial performance of small sized commercial banks (F=1.025, p>0.05). Therefore, business diversification not significantly lead to improved financial performance.

The model coefficients are presented below.

**Model Coefficients Results for Large Sized Commercial Banks** 

	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	1.379	0.225		6.128	0.00
Channel Diversification	0.08	0.045	0.227	1.774	0.081
Product Diversification	0.723	0.573	0.162	1.262	0.212
Location Diversification	0.361	0.558	0.08	0.647	0.52
<b>Investment Diversification</b>	0.35	0.329	0.132	1.064	0.292

Dependent Variable: financial performance

Findings indicate that all forms of diversification namely; channel diversification had, product diversification, and investment line diversification and location diversification had an insignificant effect on financial performance (p>0.05). Thus, for large commercial banks, business diversification does not lead to improved financial performance. This could be the bank having been fully diversified and thus further diversification does not reduce risk or improve financial performance.

#### Conclusion

Based on the findings, the study concludes that business diversification improves significantly financial performance of small banks. However, as the bank become bigger, business

b. Dependent Variable: Financial Performance

diversification continues to affect the performance of the banks to a less extent. This is supported by the findings that under medium sized banks, only location diversification has significant effect on financial performance and for large banks, all forms of business diversification do not affect commercial banks financial performance. Generally, without specifying the size of the bank, diversification positively affects financial performance of commercial banks. However, the effect is not very strong although significant. This could be due to economic and financial shocks which naturally reduced the potential for diversification benefits.

#### Recommendations

Business diversification was found to improve financial performance of small commercial banks. As the bank size increases from medium to large, the effect of business diversification continue to reduce. Under small banks, all forms of business diversification significantly affects financial performance. Under medium sized banks, only location diversification that significantly affects financial performance while under large banks, no form of diversification affects financial performance.

The study therefore recommends that business diversification should be a target for all small commercial banks that seek to increase their financial performance. The small bank management should target to invest on product diversification, channel diversification, location diversification and investment diversification since this will enhance their financial performance. However, medium sized banks should target at enhancing location diversification since this form of diversification will improve financial performance. Large banks on the other hand should not focus much on business diversification since they are already fully diversified but should focus more on enhancing the existing forms of diversification. This will enrich the products, services and investments made by the banks and consequently sustainable profitability.

#### References

- Acharya, V., Hasan, I., and Saunders, A. (2002). Should banks be diversified? Evidence from individual bank loan portfolios. Bank for International Settlements, BIS Working Papers No 118.
- Adamu, N., Zubairu, I., Yahya, I., & Makarfi, I., (2011). Evaluating the Impact of Product Diversification on Financial Performance of Selected Nigerian Construction Firms. Journal of Construction in Developing Countries, 16 (2), 91–114
- Amato, L. & Wilder, R. P. (1985). The Effects of Firm Size on Profit Rates in U. S. Manufacturing, *Southern Economic Journal*, 52, No. 1, pp. 181 190.
- Ammar, A. (2003). Indicator Variables Model of Firm's Size-Profitability Relationship of Electrical Contractors Using Financial and Economic Data. *Journal of Construction Engineering and Management*, 129, pp. 192 197.
- Anderson R., T. Bates, J. Bizjak, & Lemmon, M (2000). Corporate governance and firm diversification, *Financial Management Journal*, 29, 5-22.
- Apps. R (1996). The Monetary and Financial System.3 ed., London; Bonkers Books Ltd.
- Athansasoglou, P., Brissimis, S. & Delis, M. (2006). Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability. *Journal of International Financial Markets, Institutions and Money. 1*, 121-136.
- Ayanda A. M., Christopher E. I. & Mudashiru M. A. (2013). Determinants of banks\_profitability in developing economy: evidence from Nigerian banking industry.

  Interdisciplinary Journal of contemporary research in business, 4 (1): 55-181

- Baele, L., Jonghe, O., Vennet, R., (2006). *Does the stock market value bank diversification*? 6th Annual Bank Research Conference, Department of Financial Economics, Ghent University, Woodrow Wilsonplein 5D, 9000 Ghent, Belgium.
- Baum, J.R. & Wally, S. (2003). Strategic decision speed and firm performance. *Strategic Management Journal*, 24 (11): 1107–1129
- Brealey, R.A., & Myers, C.S. (2003). *Principles of Corporate Finance*, (7th edition), McGraw-Hill Companies.
- CBK (2017). Directory-of-Licensed-Commercial-Banks-Mortgage-Finance-Institutions-and-Non-Operating-Holding-Companies. Retrieved on March 5<sup>th</sup> 2017 from https://www.centralbank.go.ke/wp-content/uploads/2016/06/Directory-of-Licensed-Commercial-Banks-Mortgage-Finance-Institutions-and-Non-Operating-Holding-Companies.pdf
- CBK, (2016): 21 Commercial Banks Meet CBK Capital Requirement. Retrieved February, 20th, 2017: <a href="http://www.treasury.go.ke/news-updates/172-21-banks-meet-cbk-capital-requirement.html">http://www.treasury.go.ke/news-updates/172-21-banks-meet-cbk-capital-requirement.html</a>
- Central Bank of Kenya (2016). *Banking Supervision Annual Report 2016*; Nairobi: Central Bank of Kenya
- Chang, H., (2014). Regional and Product Diversification and the Performance of Retail Multinationals. Discussion Paper, Henley Business School, University of Reading.
- DeCoster, J., (2011). *Transforming and Restructuring Data*. Department of Psychology, University of Alabama, Gordon Palmer Hall
- Demsetz, R. S., &Strahan, P. E. (1997). Diversification, size, and risk at bank holding companies. *Journal of money, credit, and banking*, *3*, 300-313.
- Freeman, R. (2010). *Strategic Management: A Stakeholder Approach*. Cambridge University Press.
- Gasbarro, D., Sadgina, I. M., & Zumwalt, J. K. (2002). The Changing Relationship between CAMEL Ratings and Bank Soundness during the Indonesian Banking Crisis, *Journal of Quantitative Finance and Accounting*, 19, 247-260.
- Gleason, K., (2011). Corporate Governance and Diversification. Haile/US Bank College of Business, Northern Kentucky University, Highland Heights
- Ibrahim, Y.M. & Kaka, A. P. (2007). The impact of diversification on the performance of UK construction firms. *Journal of Financial Management of Property and Construction*, 12 (2): 73–86.
- Jackson, S. E., May, K. E., & Whitney, K. (2010). Understanding the dynamics of diversity in decision-making teams. In R. A. Guzzo, E. Salas, &Associates (Eds.), *Team effectiveness and decision making in organizations* (204-261). San Francisco, CA: Jossey-Bass.
- Jensen, M.C., & W.H. Meckling, (1976), Theory of the firm: Managerial behaviour, agency costs, and ownership structure, *Journal of Financial Economics*, *3*, 305-360.
- Johnson G, Scholes K, Whittington R.(2008), *Exploring Corporate Strategy*, 8th edition, Pearson Prentice Hall, Harlow
- Jongeneel, O.C.W. (2011). *Bancassurance: Stale of Staunch? A Pan- European country analysis*. Unpublished Msc. Economics & Business Thesis, Erasmus University Rotterdam

- Kamp, A., (2004). *Do Banks Diversify Loan Portfolios? A Tentative Answer Based on Individual Bank Loan Portfolios*. Deutsche Bundesbank, Discussion Paper Series 2: Banking and Financial Studies No 03/2005.
- Kannan, P., & Saravanan, R., (2012). Diversification Strategies for Managing a Business. EXCEL International *Journal of Multidisciplinary Management Studies*, 2, 5. Online available at http://zenithresearch.org.in/
- Katrodia A. (2012). Corporate Governance Practices in the Banking Sector. *ABHINAV Journal of Research in Commerce and Management*, 1 (1): 37-44
- Kigen, K. P. (2010). The impact of mobile banking on transaction costs of microfinance institutions, Unpublished MBA Thesis, University of Nairobi
- Kipleting, M, (2016). Effect of investment Diversification on the Financial Performance of Commercial Banks in Kenya. *IOSR Journal of Business and Management*, 18, 11. PP 102-115
- Kiweu, J., (2012). Income Diversification in the Banking Sector and Earnings Volatility: Evidence from Kenyan Commercial Banks. KBA Centre for Research on Financial Markets and Policy Working Paper Series. Nairobi, Kenya Banker's Association
- Kombo, D.K., & Tromp, D.L.A. (2009). *Proposal and Thesis Writing: An Introduction*. Paulines Publications Africa, Don Bosco Printing Press, Nairobi Kenya
- Kongiri, A.T. (2012). Effects of CAMEL Variables on Bank Efficiency: A Panel Analysis of Kenyan Commercial Banks. Unpublished MBA Project, University of Nairobi
- Kothari, C. (2004). *Research Methodology: Methods & Techniques*. 2nd edition. New age International Publishers, New Delhi, India.
- Kumar, M. (2007). Ensuring Fee Income, the Bancassurance Way. *Journal of Bancassurance*, 60, 12-16,
- Lee. J. (2009). Does Size Matter in Firm Performance? Evidence from US Public Firms. *Int. J. of the Economics of Business*, 16, No. 2, pp. 189 203.
- Li, F. & Srinivasan, S., (2011). Corporate governance when founders are directors, *Journal of Financial Economics* 102, 454-469.
- Luo, Y. (2009), Product Diversification in International Joint Ventures: Performance Implications in an Emerging Market, *Strategic Management Journal*, 23, 1, pp. 1-20.
- Makkar A. & Singh S. (2013). Analysis of the Financial Performance of Indian Commercial Banks: A Comparative Study. *Indian Journal of Finance*, 7 (1): 41-49
- Makokha, A., Namusonge, G., & Sakwa, M., (2016b). Effect of Risk Management Practices on Financial Performance in Kenya Commercial Banks. *Research Journal of Finance and Accounting*, 7, 16, PP—222-226
- Markides, C.C. (2016). Diversification, restructuring and economic performance. *Strategic Management Journal*, 16 (2): 101–118.
- Markowitz, H. (1952). Portfolio Selection. The Journal of Finance, 7 (1), 77-91.
- Masulis, R., C. Wang, & Xie, F., (2006). Corporate governance and acquirer returns, Journal of Finance, 62, 1851-1889.
- McHugh, M. (2013). The Chi-square test of independence. *Biochemical Medica*; 23 (2):143-9. http://dx.doi.org/10.11613/BM.2013.018
- Moeller, S.B, F.P. Schlingemann & R.M. Stulz, 2004, Firm size and the gains from acquisitions, *Journal of Financial Economics*, 73, 201-228.

- Mohiuddin, G., (2014). Use of CAMEL Model: A Study on Financial Performance of Selected Commercial Banks in Bangladesh. *Universal Journal of Accounting and Finance*, 2 (5): 151-160
- Moraa, S., (2014). The Analysis of Profitability of Kenya's Top Six Commercial Banks: Internal Factor Analysis. Research Journal of Finance and Accounting, 2, 8, PP—124-133
- Mutua, J., (2015). Effect of Mitigating Credit Risk on Performance of Commercial Banks in Kenya: A Case of Chuka Town. *European Journal of Business and Social Sciences*, 4, 07 P.P. 113 125
- Mwando, S. (2013). Contribution of Agency Banking in Financial Performance of Commercial Banks in Kenya. *Journal of Economics and Sustainable Development*. 4, 20, pp 16-24.
- Namisi, R.N. (2002). Board of Directors Composition, Team Processes and Organizational Performance of Selected Financial Institutions in Uganda. Unpublished Research Dissertation, Makerere University
- Nyathira, C.N. (2012). Financial Innovation and its effect on Financial Performance of Commercial Banks in Kenya. Unpublished MBA project, University of Nairobi.
- Olweny, T., & Shipho, T., (2011). Effects of Banking Sectoral Factors on the Profitability of Commercial Banks in Kenya. *Economics and Finance Review 1*(5) pp. 01 30
- Olweny, T., &Shipho, T. M. (2013). Effects of banking sectoral factors on the profitability of commercial banks in Kenya. *Economics and Finance Review*, 1 (5), 1-30.
- Ongore, V.O & Kusa, G.M (2013), Determinants of Financial Performance of Commercial Banks in Kenya, *International Journal of Economics and Financial Issues*, 3 (1): 237-252
- Otieno, O. A & Moronge, M. (2014). Influence of Product Diversification on the Financial Performance of Selected Commercial Banks in Kenya. *European Journal of Business Management*, 1 (11), 336-341
- Palich, L.E., Cardinal, L.B. & Miller, C.C. (2000). Curvilinearity in the diversification-performance linkage: An examination of over three decades of research. *Strategic Management Journal*, 21(2): 155–174.
- Papadogonas, T.A. (2007). The financial performance of large and small firms: evidence from Greece, *Int. J. Financial Services Management*, 2, No. ½, pp. 14 20.
- Pawaskar, V. (1999). Effects of product market diversification on firm performance: A study of the Indian corporate sector. Unpublished PhD. dissertation. Indira Gandhi Institute of Development Research, Mumbai
- Pervan, M., & Josipa, V., (2012). Influence of Firm Size on Its Business Success. *Croatian Operational Research Review (CRORR)*, Vol. 3, pp 213-223
- Republic of Kenya (2008), Kenya VISION 2030. Nairobi: Government Printer, Nairobi
- Reuter, C., Goebel, P., & Foerstl, K. (2012). The impact of stakeholder orientation on sustainability and cost prevalence in supplier selection decisions. *Journal of Purchasing and Supply Management*, 18 (4), 270-281.
- Siddiqui, M., A. &Shoaib A., (2011). Measuring performance through capital structure: Evidence from banking sector of Pakistan. *African Journal of Business Management*, 5 (1): 1871-1879.
- Sufian, F., & Chong R. R. (2008). Determinants of bank profitability in developing economy: Empirical evidence from the Philippines. *Asian Academy of Management Journal of accounting and finance*, 4 (1); 91–112.

- Tchouassi, G. (2012) Can Mobile Phones Really Work to Extend Banking Services to the Unbanked? Empirical Lessons from Selected Sub-Saharan Africa Countries, *International journal of Development Societies*, 1, No. 2, 2012, 70-81
- Thiong'o, P., (2016). Effect of Loan Portfolio Growth on Financial Performance of Commercial Banks in Kenya. *Imperial Journal of Interdisciplinary Research (IJIR)*. 2, 11, pp 2113-2120
- Tsuma, M., & Gichinga, L., (2016). Factors Influencing Financial Performance of Commercial Banks in Kenya- A Case Study of National Bank of Kenya Coast Region. *The International Journal of Business & Management*, 4, 4, pp 62-79
- Vijayakumar, A. (2012). Evaluating Performance of Banks through CAMEL Model. A Case Study of State Banks of India and Its Associates. *International Interdisciplinary Research Journal*, 2 (6), 104 124
- Waithaka, N. (2013). *The Effect of Basel II Requirements of Kenyan Commercial Banks lending*. Unpublished Msc. Finance Project, University of Nairobi.
- World Bank (2017). *Country overview, Kenya*. Accessed on April 25, 2017 from http://www.worldbank.org/en/country/kenya/overview