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Effect of Diversification on Competitiveness of Commercial Banks in Kenya

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Abstract:
***Background**: Commercial bank diversification consists of the creation of many service branches across various geographical regions of the country involved, investment in asset kinds, lending book and other income streams, and lastly, interest revenue. Banks undertake diversification interventions to remain competitive. Some of these diversifications may directly impact revenue generation. However, the impact of diversification of assets on commercial banks remains a contentious issue in research. Therefore, the current study is designed to evaluate the individual effect of geographic, income, and asset diversification on commercial bank competitiveness in Kenya.*
***Methodology**: The research adopted the Expost Facto research design based on a positivist type of research philosophy. The study utilised 10-years (2009 to 2018) panel data collected by the Central Bank of Kenya (CBK). Data was analysed inferentially through correlation and regression analysis. Descriptive statistics was used to summarise the basic features of the data meaningfully.*
***Results**: Results showed that geographic, income diversification significantly (p-value<0.05) influence commercial bank competitiveness. However, asset diversification had a negative and insignificant effect on commercial bank competitiveness (p-value>0.05). T).*
***Conclusion:** There were statistically substantial influences of geographical and income diversification on the competitiveness of commercial banks in Kenya, while asset diversification had an insignificant association with the competitiveness of commercial banks.*
***Key Words**: Commercial Banks, Geographical Diversification, Income Diversification, and Asset Diversification.*

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I. Introduction

Background of the study

Diversification is the riskiest of the four "Ansoff" marketing techniques since it requires a company to join a new market while developing a new product. Commercial banks use a variety of strategies to diversify their portfolios; these are income, and asset diversification (Nguyen, 2018; Mulwa, Tarus, & Kosgey, 2015), funding diversification (Nguyen, 2018), regional diversification, and international diversification (Lin, 2010, Mulwa, et al., 2015). Income, asset, and geographic diversity are the three most prevalent ways examined in this research. Income diversification is described as the application of new financial services that generate revenue streams in addition to the standard intermediation services provided by banks (Nepali, 2018). This terminology also entails the creative development of bank income from a variety of activities that shift reliance away from traditional interest-based income-generating activities toward non-interest-based income-generating activities (Nepali, 2018; Kiweu, 2012). Income diversification is closely related to asset diversification, which is the process of dividing a bank's earning assets among traditional lending and non-lending avenues (Goetz, Laeven, & Levine, 2013). Commercial banks can diversify their portfolios by using a geographical diversification strategy. This has been characterised as the act of a bank's branches and service locations opening away from its head office (Obinne et al., 2012) or the dispersion of bank assets throughout geographical areas (Goetze et al., 2013). Geographic diversification, in either case, refers to a bank's proliferation of branches and service outlets throughout a country's or state's geographical boundaries. Since this has been empirically established, commercial bank literature by Nepali (2018) assumes that diversity and size go hand in hand. However, Bapat & Sagar (2015) assert that the impact of diversification in a bank is specifically influenced by its size (Bapat & Sagar, 2015). On the other hand, Nguyen (2018) established that while income diversity has a definite positive influence on profitability, financial diversification was indirectly advantageous as savings were achieved through reduced finance costs. However, the author did not find any significant impact of asset diversification on profitability. Because returns from the national equity market are exposed to various factors both naturally and artificially, companies through their investing agencies usually prefer foreign portfolio diversity over domestic portfolio diversification. They are often influenced by firm life cycles and government regulations, which affect local stock market results in many countries (Aluko, Fapetu, & Azeez, 2018).

Additionally, Tasca and Battiston (2014) highlighted the disagreement about the competitiveness and performance effects of diversification on banks. Tasca and Battisson (2014) developed a new conceptual framework in which full diversification of risks proved inefficient. The two authors noted that commercial banks had to choose an optimal level of diversification according to market conditions because they had a two-dimensional distribution, leading to two different economic trends, which would lead to competitiveness trends in the banking industry. Equally, there were positive findings, in Tunisia, concerning the impact of income diversification on competitiveness (Hamdi, Hakimi, & Zaghdoudi, 2017). In their study conducted in Tunisia's stock exchange, Hamdi, Hakimi, & Zaghdoudi (2017) concluded that the drive to diversify commercial banks boosted bank performance; they used ROA and REVE as indicators. The authors noted that, in the long term, non-interest income appears conceptually to be negative and highly linked to risk levels. This negative connection to the risk would improve the bank's stability. As this mitigates risk, it also increases the bank's competitive positioning in the market. Another commercial bank diversification initiative is investing activity of the bank's assets in various lines. The consequences of diversification in the context of commercial banks were researched in Ethiopia by Hailu and Tassew (2018) through a quantitative analysis. Hailu and Tassew (2018) observed that the financial performance of banks in Ethiopia was significantly affected by investment in financial assets, public security, insurance, the lending portfolio and investment size. The two authors concluded that the financial performance of commercial banks was affected by investment diversification. This suggests that the bank's competitiveness would be attained if there is a sustained diversification of investments with a resulting enhanced financial performance.

Similarly, Mulwa (2018) conducted a study on the diversification of commercial banks in four Eastern-African countries: Kenya, Rwanda, Uganda and Tanzania. The authors noted that there were signs of increased bank profitability as a result of sectoral credit diversification, and one focused on whether banks were able to oversee their multiple portfolios as a result of diversification properly. Mulwa (2018) used the central banks' secondary data in the surveillance reports of each country. The results showed a significant direct impact on the commercial banks of sectoral credit diversification returns. This was consistent with bank assets as the data also showed a substantial adverse link between diversification and asset quality, which was indicated as a monitoring proxy. The analysis revealed that the diversification of sectoral credit enhances the efficiency of banks' supervision. It suggested that banks should establish a diverse loan portfolio where they disperse them through diverse business sectors' intermediaries. The impact of diversification strategies on the competitive advantage of commercial banks in Kenya was also studied in Kenya by Wanjiru and Nzulwa (2018). With five theoretical methods, Portfolio theory, Resource-Based View Theory, Market Power Theory, Transaction Cost Theory, and Diffusion Theory of Innovation, they showed a favourable and significant impact on the bank's competitive advantage. Wanjiru and Nzulwa's study was founded on Shepherd (1970), who indicated that the strength of the market might lead to uncompetitive high and non-risk earnings that may then be utilised for company expansion. In the commercial banks' case, it is feasible to expand them by opening new branches in different places in a country. They also can be diversified to non-traditional asset classes and contribute to non-traditional income inflows. While both ideas seek to foster diversity supposition that the agency's theory is lax, they originate from the notion of agencies that focus on the relationship between managers and officials in organisations. The Tasca and Battiston (2014) follow-up study further pointed out the controversy over competitiveness and performance impact of bank diversification

Problem Statement

In organisational performances, the question of diversification has been contentious. According to Hess et al. (2016), diversification has progressively evolved to become a critical aspect of the contemporary business world. There has been extensive research in various disciplines concerning the relationship between diversification and business performance. However, several researchers, for example, Marinelli (2011), raised concerns that the relationship between variety and competitiveness is not significant as presumed. The rationale for the diversification of the commercial banks in different ways is by expanding deeper into their existing markets and increasing their competitiveness (Mwara & Okello, 2016). Diversification of the income leads to direct favourable impacts on profitability (Nguyen, 2018) and a considerable beneficial effect both for the ROA and the ROE (Hamdi et al., 2017). When it comes to implementing it, the diversification of funding leads to reductions in expenses resulting from savings achieved (Nguyen 2018, Hailu and Tassew, 2018; Wanjiru & Nzulwa, 2018). However, there are limited studies in Kenya assessing the effect of the three types of diversification of the commercial banks on the bank's competitiveness, hence the need to address the said gap in the literature.

II. Literature Review

Geographic Diversification and Commercial Banks Competitiveness

Mulwa and Kosgei (2016) established that geographic diversification influences both ROA and ROE substantially and positively. This means the regional variety is clearly relevant and advantageous to the competitiveness of banks. In support, Ndungu and Muturi (2019) performed an effect assessment research on the performance of Kenya's trade banks. The research aims were specifically to assess the impact on the financial performance of competitiveness-related commercial banks of Kenya on income diversification, geographical diversification and product diversification. The research utilised secondary data, which consisted of commercial banks' annual information over the period 2013-2017. The study investigated all the commercial banks in Kenya. Data analysis was performed using descriptive and inferential statistics, and data presented in tables and figures. Fixed and random effects were used to estimate the long-run specifications, while the short-run model was forecasted using the Generalised Method of Estimates (GMM). Geographical diversification and commercial bank performance were also positively and significantly related. The study results by Ndungu and Muturi (2019) showed that diversification leads to the excellent performance of banks and competitiveness in all domains. Thus, they recommended that all commercial banks should improve income, geographical and product diversification formulation and implementation. However, the study was extensive, which made it challenging to focus the findings on each sub-theme of diversification. In support of geographical diversification as competitiveness boosters' findings by Ndungu and Muturi (2019), Doerr and Schaz (2019) studied the effects on the international union loan portfolio of geographic differentiation in the context of banks competitiveness. The authors analysed data on international trade union loans. The results showed that diversified banks have benefitted from the provision of bigger loans to borrower nationals throughout the financial crisis. The substantial lending availability has enabled banks to act even more competitively. The study results generally suggested that the most stable source of financing during financial turmoil were diverse banks. The impact on international banks, however, was bigger. Diversification also impacted banks in exchange for extending their benefits to countries suffering financial turmoil by lowering their portfolio risks. It may be deduced from the foregoing facts that diversity influences the bank loans provision, which consequently affects their competitiveness.

In comparison, other scholars such as Turkmen and Yigit (2012). discovered a negative influence on banking diversification and its effect on the performance of banking. The survey by Turkmen and Yigit (2012) was conducted in Turkey. The aim was to study the effects of industry and geographical diversification on Turkish bank performances. The study also aimed to demonstrate the effects on bank performance of diversity. The data was obtained from the Banks Association of Turkey (BAT) and the Istanbul Stock Exchange (ISE) on the performance of 50 Turkish banks over the five years between 2007 and 2011. Banks that had lately been involved in prevalent fusions and purchases were then excluded. Performance was monitored by ROA (Return on Assets) and Return on Equity (ROE) financial metrics. Herfindahl Index (HI) was used to measure the diversification of banks. The results showed a significant negative performance effect between Turkish banks and regional diversity (Turkmen & Yigit, 2012). This showed that the banks concentrate rather than broaden their operations in the original region. The resulting greater cost of running the new branches was related to the negative impact. The expense is included in the revenue basis, which reduces the banks' ROA and ROE. This sustainability also has a negative impact on competitiveness. In a different study, Meslier-Crouzille et al. (2016) found that geographic diversification reduced bank risks that could lead to operational failure. Those diversification benefits, according to the results, were spread across the different bank sizes. It also emerged in their study that the economic disparities condition measured by unemployment dispersion rates either across counties or states impacted the competitiveness of the banks. Moreover, in the context of the financial problems of business banking, Mochabo et al. (2017) conducted a relatively comparable analysis. Their study considered the environmental dynamics in which commercial banks operate individually to get a competitive edge in the enterprise. The table data for the study spanned over a period of 10 years (2006 to 2015). The results implied that when a bank opens branches far from the headquarters, the chances of financial difficulties are enhanced. Thus a negative influence on the competitiveness of the bank due to outlying branches that diminish operating efficiency.

H_{01}: Geographic diversification has no significant effect on the competitiveness of commercial banks in Kenya.

Income and Commercial Banks Competitiveness

Lim and Pao's (2016) examined the relationship between the revenue diversification efforts of universal banks and the commercial banks of the Philippines and their non-interest revenue activities. Nine universal banks operating between 2004 and 2014 were sampled. The data was analysed via regression analysis on income diversification and non-interest incomes to evaluate the diversification of income, trading and derivative income, net fees and charges. Lim and Pao (2016) used net interest revenue and non-interest revenues to evaluate non-interest income operations. They discovered a positive association between income diversification and non-interest income activity, verifying the theory that an increase in both interest and non-interest income significantly upscales banks' operational revenues. This is the cornerstone of the competitiveness of commercial banks. In support, Ismail et al. (2014) investigated commercial banks in Pakistan to determine if "Blessing" and "Curse" were the income diversification techniques adopted in the banking sector. They utilised panel data for the years 2006 to 2013 from the official commercial banks' annual reports. Similar to Lim and Pao's (2016), Ismail et al. (2014) analysed the data through multiple regression analysis. They observed that diversification of income activities (either interest-based or non-interest-based) increased the likelihood of profitability in the commercial bank. They recommended that, in Pakistan, commercial banks should pursue income diversification techniques to decrease operational risk and seize new opportunities that boost competitiveness.

On the same note, Brahmana, Kontesa and Gilbert (2018) studied revenue diversification and its impact on bank performance using annual data from Malaysian banks from 2005 and 2015 to signal competitiveness. The statistics were selected from 2005 and coincided with Malaysia's recorded diversification phase. Using yearly data from Malaysian banks between the years 2005 and 2015, Brahmana, Kontesa and Gilbert (2018) studied income diversification and its impact on bank performance, a pointer of competitiveness. The data was chosen from the year 2005, coinciding with the recorded period of diversification amongst Malaysian banking institutions. The findings from this study postulated that there was a positive correlation between income diversification and bank performance. The control variables were also found to be positively related to bank performance apart from NPL. The explanations for these findings are that there is an increase in Islamic banks in Malaysia. Pisedtasalasai and Edirisuriya (2020) researched the same jurisdiction to examine the link between income diversification and commercial bank performance, considering Sri Lanka's ownership state. Data collected between the years 2001 and 2016 was obtained from 17 recognised commercial banks. The research established that income diversification and bank performance have a strong relationship, which is a competitive aspect. Their analysis indicated that Sri Lanka was positively affected by bank diversification, which led to higher long-term profits.

Similarly, Lee, Hsieh and Yang (2014) explored the links between income diversification and bank results. The performance of banks depended on whether they were sustained on their competitiveness. The authors studied the effect of financial structures on income diversification and bank performance. The research employed the panel data from a sample of 29 Asia-Pacific (mostly European) nations, from 1995 to 2009, with 2372 banks. Portfolio assumptions demonstrated that the Asia-Pacific banking sector has a beneficial impact on revenue diversification. The findings indicated that diversification could substantially increase bank performance. The survey further proposed that the banks diversify their goods to meet the great demand generated by developing markets, increasing competition and economies of scale due to the current financial deregulation. In support, Trivedi (2015) examined profitability and income stability for Indian banks and their performance and stability. His study was a comparative revenue analysis for various groupings of banks derived from these income streams. The results showed that the category of private and foreign banks was more successful than public sector banks in generating more of their income from other sources that are non-interest and fee-based. The study was conducted over the period 2005 to 2012. In line with the study objectives, he also found out that the extent of income diversification (either from fee-based income or non-interest income) positively impacted profitability. The findings indicated a favourable correlation between non-interest earnings with risk-adjusted returns. The report proposed that Nepal's business banks upsurge their competitiveness by increasingly diversifying into non-interest-based revenues in their businesses. Additionally, Zhou's research (2014) supported the idea that diversity of income has an effect on the competitiveness of commercial banks. He conducted a study to explore the influence of income diversification on bank risk. The panel data of 62 Chinese commercial banks covering the period 1997 to 2012 was analysed quantitatively. The research findings indicated that income diversification and bank risk were not interrelated but that the risk reduction was due to the decrease in the risk of interest income enterprises. The results demonstrated that an increase in non-interest income led to an increase in volatility, resulting in a general increase in risk.

On the same issue, Senyo, Olivia and Musah (2015) conducted a study in Ghana to examine the association between income diversification and profit. The authors analysed panel data for the ten years from the year 2002 to 2011. The data revealed that commercial banks' interest revenue remained the largest contributor to Ghana's bank profits. Differently, Wanjiru and Nzulwa (2018) conducted a study to investigate the effects of NSE listed Kenyan commercial banks' diversification strategy on the competitive advantage of the NSE. The results showed that the increase in revenues had a beneficial and substantial effect on the Kenyan commercial banks' competitive advantage. This report indicated that banks seeking a competitive advantage raise their revenues instead of depending on the traditional ones. Similarly, Kiweu (2012) examined the effects of income diversification on bank performance and competitiveness. The research aimed to evaluate the extent to which banks have moved towards income-generating operations in Kenya to enhance their results for the years 2000 through 2010. The author obtained data from the Central Bank of Kenya, the Kenya Bankers Association and the think-tank survey. The results showed that diversification of income from typical banking operations is advantageous in terms of competitiveness. Nevertheless, non-interest income benefits did not fully offset losses resulting from tax revenue. A favourable relationship was established between interest revenue and non-interest income. The data also revealed a negative association between loan rates and interest income, which increased the loan rate when interest rates were good.

H_{02}: Income diversification has no significant effect on the competitiveness of commercial banks in Kenya**.**

Asset Diversification and Commercial Banks Competitiveness

The notion of asset diversification has been of interest to scholars in strategic and financial management through studying the favourable impact of asset diversification on the competitiveness of commercial banks. For instance, Pakistan et al. (2020) examined how diversification variables (independent variable) affect bank margins (dependent variable). The study employed secondary data collected from 24 Pakistani planned commercial banks' annual accounts between 2006 and 2017. The authors established that asset variety is a critical determinant of bank margins. On the same note, Wanjiru and Nzulwa (2018) undertook a study that examined the effects of diversification strategies on the competitive advantage of Nairobi-listed commercial banks. An independent variable of the study and its influence on commercial banks' competitive advantage in Kenya was part of the asset diversification strategy. The authors utilised a descriptive research strategy that included all 42 business banks in their target group. Wanjiru and Nzulwa (2018) concluded that the asset diversification approach, among other variables, had a favourable and significant impact on the banks' competitive advantage.

Conversely, Chen, Liang, Yu (2018) research showed that diversity of assets is a decisive factor in the competitiveness of commercial banks. The research was undertaken in three Asian countries: Pakistan, Malaysia and Indonesia. Chen et al. (2018) found the diversification of assets unfavourable in relation to business banks' performance; however, the influence was modest to Islamic banks. The authors also highlighted the effects on profit for conventional banks of asset diversification. The diversification of assets in Islamic banks, however, was neutral. The authors recommended diversification for dual banking countries. The results also were consistent with Mulwa and Kosgei (2016) study, which established that diversification in assets is inversely linked with ROA commercial banks.

H_{03}: Asset diversification has no significant effect on the competitiveness of commercial banks in Kenya.

III. Research Methodology

Expost Facto research design based on a positivist research philosophy approach was used. The study utilised 10-years (2009 to 2018) panel data collected by the Central Bank of Kenya (CBK).

Research Approach and Design

A quantitative research approach was adopted to address the research questions and problem. The approach was appropriate since the study involved collecting and analysing numerical data as opposed to abstract data. In order to understand the level of diversification and its influence on commercial banks' performance and competitiveness, the study adopted the ex-post facto explanatory design. The design was the most appropriate given that the researcher has no immediate manipulator capabilities on the independent variable, given that their respective effects were already occurring before the research question was formulated and that what the researcher intends to do is collect data to clarify these impacts (De'Vaus, 2001). Sekaran & Bogie (2013) also noted that, in this design, the study is conducted without any direct interaction or because independent and dependent factors change.

Study Population

The target population was 42 commercial banks indicated in Appendix 2. A research scientist can opt to choose a representative population sample and deduce the entire population's results to examine the population characteristic and answer the research question. The entire population that is a census study was used in this investigation. No sample was therefore needed because all the variables were examined during a 10-year period from all the banks under study.

Data collection and Procedure

Secondary data was used for this investigation. The research tool used in the collection of data was the document analysis guide in Annex 1. This guide was sufficient since quantitative secondary data was obtained for analysis (Sekaran. and Bougie, 2013). The researcher acquired the information personally. When data collection was completed, the data was audited, reviewed, edited, and coded for analysis. The researcher retrieved a panel data set for all 42 commercial banks in Kenya regulated by CBK over a ten-year period, from 2009 to 2018. Only 36 banks had their data reviewed in the study, resulting in an 85.7 per cent coverage rate after six institutions were eliminated.

IV. Data analysis Results and Discussions

Data Analysis

Once it was obtained, the data was cleaned, modified, and entered into an excel sheet for analysis. EViews, a statistical analysis software, was used to run the research electronically. Computer analysis was chosen due to its applicability in that it allows researchers to analyse data with ease, precision, and thoroughly as noted by Hair et al. (2014). Spearman's rho correlation analysis and regression analysis were performed in that order to test the research hypotheses. Descriptive statistics (mean, standard deviation) were also run to summarise the data meaningfully.

Results

Descriptive Statistics

Table 4.1 summarises the results of the aggregate patterns of variables. Kenyan commercial banks had a competitiveness index of 10.16. Banks were also spread across all three study diversification viewpoints. They had 2.922, 0.315, and 0.451 points of geographical, income, and asset diversification, respectively. The competitiveness index was determined to have standard deviations of 1.329. For income, asset, and geographic diversification, the standard deviations were 0.119, 0.059, and 1.078, in that order.

Table 4.1: Descriptive Statistics of study variables

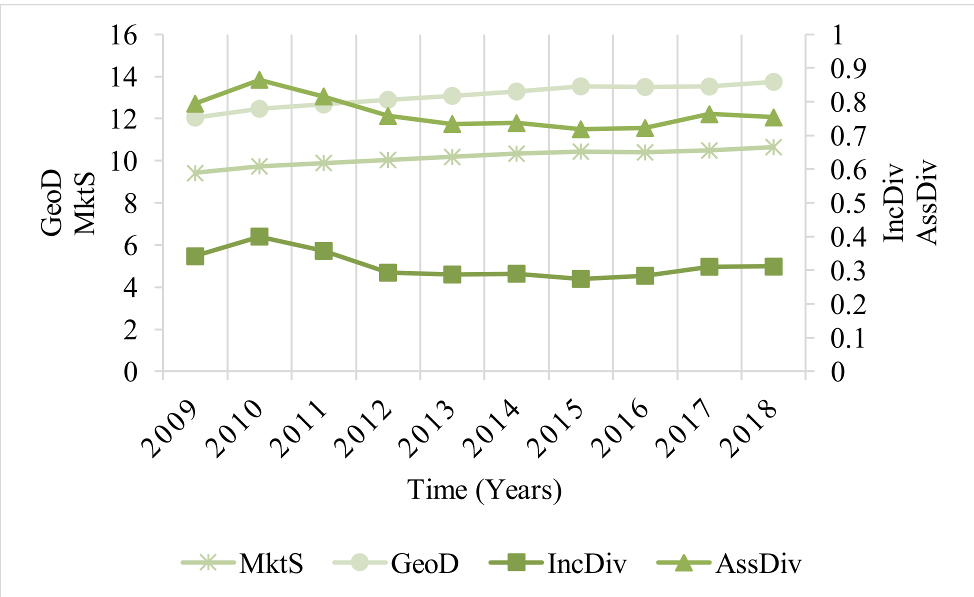
Variable	bs	Mean	Std. Deviation	Max.	Min.
Competitiveness index	360	10.16	1.329	13.095	5.242
Income Diversification	360	0.315	0.119	0.5	-0.075
Asset Diversification	360	0.451	0.059	0.500	0.000
Geographic Diversification	360	2.922	1.078	5.293	0.000

Source: Survey Data, 2020

Trends of the Variables Over the Study Period

The plot presented in figure 4.1 shows the trends of competitiveness index, geographical, asset and income diversification for the ten-year study period from 2009 to 2018

Commercial banks increased their geographic diversification index steadily on average over the first eight years of the study period, up to 2016. Commercial banks increased their geographic diversification index steadily on average over the first eight years of the study period, up to 2016.



Correlation Analysis

Variable		[1]	[2]	[3]	[4]
Competitiveness index	[1]	1.000			
Geographic Diversification	[2]	0.685**	1.000		
Income Diversification	[3]	0.161**	0.293**	1.000	
Asset Diversification	[4]	0.210**	0.026	0.099	1.000

Spearman's Rho correlation was conducted to establish the association between the performance and various dimensions of diversification. All the diversification dimensions (IVs) were positively correlated to the competitiveness index (DV). For instance, there was a strong positive correlation with geographic diversification (rho= 0.685, p<0.01), while the relationship with income and asset was positive and moderate in strength with (rho= 0.161, p<0.01) and (rho= 0.210, p<0.01) respectively and competitiveness index. These associations were significant when measured at p<0.01.

Regression Analysis

Table 4.3: Regression Model Coefficients

Predictor Variables	Dependent Variable: Competitiveness Index	
	Model 1 (re)	
	Coefficient	Prob.
Constant	7.623	0.000
Income Diversification	-1.059	0.000
Asset Diversification	-0.382	0.406
Geographic Diversification	1.000	0.000

$$Competitiveness = 7.623 - 1.059IncDv - 0.382AssDv + 1.000GeoDv$$

A significant p-value (p<0.05) means that geographic diversification and income diversification have a significant influence on commercial bank competitiveness. With all factors were kept constant, a unit increase in geographic diversification would significantly increase commercial bank competitiveness by 1.000 points. Moreover, a unit increase in income diversification dimension would significantly decrease commercial bank competitiveness by 1.058 points; other factors held constant. However, this would not be the case with asset diversification, where a unit increase would have an insignificant effect on commercial bank competitiveness by decreasing the competitiveness by 0.382 points when other factors are held constant.

V. Discussion

The study's broad objective was to examine the effects of diversification on performance and commercial bank competitiveness. In particular, the study evaluated the effects of geographic, assets, and income diversification on commercial bank competitiveness in Kenya. Results showed that geographic diversification positively and significantly influence commercial bank competitiveness. Previous researches have supported these results. For instance, Meslier-Crouzille et al. (2016) found that geographic diversification reduced bank risks that could lead to operational failure, thus, positively impacting bank risk and return. Those diversification benefits, according to the study results, were spread across the different bank sizes. Meslier-Crouzille et al. (2016) also established that the economic disparities condition measured by unemployment dispersion rates either across counties or states impacted the competitiveness of the banks. Another study conducted in the United States by Goetz et al. (2016) affirmed the current study results by establishing a positive association between BHC risk and the growth of bank activities across MSAs. Goetz et al. (2016) had conducted a comparative study on the benefits of geographical diversification on bank risk mitigation. They established a significant reduction in BHC risk when the bank's branch networks expanded their geographical scope (Goetz et al., 2016). Similar findings were also reported by Njuguna's (2018); the author revealed that regional diversification has a favourable link with company performance when used as a competitive strategy. Likewise, Mulwa and Kosgei (2016) found that regional diversification significantly impacted both ROA and ROE in a study on commercial bank diversity and financial performance. However, the current study findings differed from those by Turkmen and Yigit (2012), who found that regional diversity had a considerable detrimental impact on performance for Turkish banks. In support of Turkmen and Yigit (2012) findings, Mochabo et al. (2017) concluded that geographical diversification is linked to commercial banks' financial difficulties and inhibits their competitiveness.

Additionally, the current study results show that the income diversification dimension would significantly decrease commercial bank competitiveness; the regression analysis results showed coefficient $\beta = -1.059$ with p-Value = 0.000. The results were consistent with those of a geographically intensive analysis spanning countries under the ASEAN umbrella conducted by a study by Nguyen (2018). Their findings showed that income diversification has a detrimental impact on competitiveness metrics such as profit efficiency and cost-efficiency. In Vietnam, Nguyen (2019) observed that when banks diversify their sources of income beyond interest, they expose themselves to new dangers, which undermines their stability. In contrast, Lim and Pao (2016) asserted that income diversification and non-interest income activities have a substantial and positive link, hence verifying the concept that growth in both interest and non-interest income increases bank operational revenue. Ismail et al. (2014) also explored why banks were diversifying their revenue sources to reduce their interest-earning portfolios and enhance profitability. They discovered that diversifying revenue-generating businesses increased the likelihood of a commercial bank's profitability. Similarly, Pisedtasalasai and Edirisuriya (2020) found that income diversifying and bank performance have a strong relationship, which is a competitive aspect. Nepali (2018) discovered that banks with a higher proportion of non-interest income had better competitiveness indexes in a study of 20 commercial banks in Nepal. As a result, they concluded that there was a strong and positive association between franchise value and the income diversification index, implying that there were more benefits of income diversification on commercial bank competitiveness that banks exploit by implementing this initiative. The current study findings also contradicted those by Senyo et al. (2015), which indicated that, while interest income for commercial banks continues to be the largest contributor to bank profits in Ghana, there are years when obvious variations and unpredictable trends occur, interfering with client uptake of loans from banks.

On the other hand, the current study results showed that asset diversification negatively but insignificantly affects the competitiveness of commercial banks; regression analysis results show a coefficient (β) of - 0.382 with a p-value of 0.406. In line with these results, Chen et al. (2018) reported that the diversification of assets was inversely associated with commercial banks' performance. Liu et al. (2013) also held that, apart from not adding to the BHCs' returns from a non-money-centre, asset diversification has unfavourable consequences on the risk. Mochabo et al. (2017) noted that diversification of the asset base in Kenya is connected with financial distress favourably and substantially. This is because the risks associated with other investment channels in commercial bank assets are generally more volatile and hence expose banks to significant investment risks. In contrast to the current results, several studies reported a positive association. For example, Sarwar et al. (2020) recommended that banks in Pakistan be a significant determinant of improved bank margins that improve their competitiveness with regard to the involvement of asset diversification in banking competitiveness. The author stated that the consequence is a satisfied customer when business banks diversify their assets, leading both to retain or an improvement in the competitiveness index over other financial institutions, which makes the commercial banks competitive. Wanjiru and Nzulwa (2018) also asserted that diversification strategy had a positive and considerable impact on the competitive edge of commercial banks, following their study in Kenya. They found that commercial banks must enhance their strategy for asset diversification to obtain a competitive advantage.

VI. Conclusion

Based on the results, the study concludes that there were statistically significant and positive influences of geographical diversification on the competitiveness of commercial banks in Kenya. Notably, the outcome could be due to a wider customer base because commercial banks were brought closer to the customers; thus individuals who could have been unbanked because of the proximity are offered the opportunity. Secondly, the research concludes that there is statistically and negatively important effects of diversification of income in Kenya which was discovered and assessed by the quantity of a client deposit on the competitiveness of business banks. Commercial banks in Kenya must not contemplate diversifying into another source of income to increase their competitiveness, other than from the usual interest. They seem to favour banks in the view of depositors that keep offering credit as the vessel of choice for their savings. Thirdly, the study concludes that the impact of asset diversification among commercial banks of Kenya is statistically insignificant on bank competitiveness. This outcome, therefore, highlighted the strategic necessity of commercial banks' drive to diversify their assets in investing and spreading the same across numerous tools to increase competitiveness.

VII. Recommendations

Kenya Commercial Banks should monitor the market and extend to unbanked market potential in virgin geographical places inside the country. This should be conducted with the understanding of the actual market potential in non-banked areas.

To enhance customer deposits, the practice of income diversification adversely affects a commercial bank's rise in competitiveness index. This may be because depositors may not want to continue to deposit their funds with banks not prepared to meet their lending needs. The study recommends that if a commercial bank seeks to diversify its income to address profitability challenges, a fund basis should be developed to ensure that its depositors continue to offer lending services with priority.

The practice of asset diversification has little effect on increasing consumer deposits. Consumers prefer to deposit monies with banks based on how they spend their assets without re-guarding them. Thus, Banks should diversify their assets in the best way possible, as clients do not care.

VIII. Suggestion for Future studies

Future studies should adopt the same methodology but explore other diversification strategic initiatives as independent variables rather than just income, geographic and asset diversification. Additionally, researchers should conduct a cross-sectional survey and collect primary data to determine the reason behind the continued geographic diversification of the commercial banks in Kenya despite the glaring minimal impact on competitiveness. This will help gather the actual feelings, not just what the markets depict but also what the people feel.

References

[1]. Aluko, O. A, Fapetu, O., & Azeez, B. A., (2018) International portfolio diversification in the Nigerian stock market: A global financial crisis perspective Future Business Journal 4(2), 189–194.

[2]. Bapat, D., & Sagar, M. (2015). Examining relationship of income diversification, asset quality with bank profitability: implication for Indian banks. Editorial Team Editorial Advisory Board, 1.

[3]. Brahmana, R., Kontesa, M., & Gilbert, R. E. (2018). Income diversification and bank performance: evidence from Malaysian banks. Economics Bulletin, 38(2), 799-809

[4]. Chen, N., Liang, Y.H., Yu, M., (2018) Asset diversification and bank performance: Evidence from three Asian countries with a dual banking system, Pacific-Basin Finance Journal https://doi.org/10.1016/j.pacfin.2018.02.007

[5]. De'vaus, D. A., (2001). Research Design in Social Research. Sage Publications London

[6]. Doerr, S., & Schaz, P. (2019). Bank loan supply during crises: the importance of geographic diversification. BIS Working Paper No. 827.

[7]. Goetz M.R., Laeven L., and Levine R., (2013), Identifying the Valuation Effects and Agency Costs of Corporate Diversification: Evidence from the Geographic Diversification of U.S. Banks, The Review of Financial Studies, Vol. 26(7).

[8]. Hailu, A. A., & Tassew, A. W. (2018). The Impact of Investment Diversification on Financial Performance of Commercial, Financial Studies 22 (3) 41–56.

[9]. Hair, J. F., Black, W. C., Babin, B. J., & Anderson R. E. (2014). Multivariate Data Analysis Pearson Education Limited, England

[10]. Hamdi, H., Hakimi, A., & Zaghdoudi, K. (2017). Diversification, bank performance and risk: have Tunisian banks adopted the new business model? Discussion paper.

[11]. Ismail, A., Hanif, R., Choudhary, S., & Ahmad, N. (2014). Income-diversification in banking sector of Pakistan: a 'Blessing' or 'Curse'? The Journal of Commerce, 7(1), 11–22.

[12]. Kiweu, J. M. (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, No.2

[13]. Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.

[14]. Lee, C. C., Hsieh, M. F., & Yang, S. J. (2014). The relationship between revenue diversification and bank performance: Do financial structures and financial reforms matter? Japan and the World Economy, 29, 18-35.

[15]. Lim, E., & Pao, T., P., (2016), Income Diversification of Selected Universal Banks in the Philippines, 10th Global Business Conference February 13, 2016, De La Salle University, Manila, Philippines.

[16]. Lin S.L., (2010), Bank international diversification on home bias, profitability and risk: Evidence from emerging and industrial countries, Africa Journal of Business Management, Vol. 4(17), pp. 3817-3836.

[17]. Meslier-Crouzille, C., Morgan, D., Samolyk, K. & Tarazi, A. (2016). The Benefits and Costs of Geographic Diversification in Banking. Journal of International Money and Finance. 69.

[18]. Mochabo, I. M., Ombaba, K. B. M., & Ondiek, B. A. O. (2017). Effect of Bank Diversification on the Financial Distress of Commercial Banks Listed at the Nairobi Securities Exchange, Kenya. International Journal of Scientific Research and Management, 5(11), 7329–7343.

[19]. Mulwa, J. M. (2018). Sectoral credit diversification, bank performance and monitoring effectiveness; a cross-country analysis of east African banking industries. Journal of Finance and Investment Analysis, 7(2), 17–36.

[20]. Mulwa, J. M., & Kosgei, D. (2016). Commercial bank diversification and financial performance: The moderating role of risk.

[21]. Mwara, M. N., & Okello, B. (2016). Assessment of Use of Diversification Strategy in Enhancing Competitive Performance at Equity Bank, Kenya Email Address: International Journal of Finance and Banking Research, 2(2), 40–48.

[22]. Mwau Mulwa, J., Tarus, D., & Kosgei, D. (2015). Commercial Bank Diversification.

[23]. Ndungu, J. G., & Muturi, W. (2019). Effect of Diversification on Financial Performance of Commercial Banks in Kenya. International Journal of Current Aspects, 3(V), 267-285.

[24]. Nepali, S., J., (2018). Income Diversification and Bank Risk-Return Trade-Off on the Nepalese Commercial Banks. Asian Economic and Financial Review, Vol. 8, No. 2, pp. 279-293.

[25]. Nguyen, K.N., (2019) Revenue Diversification, Risk and Bank Performance of Vietnamese Commercial Banks, Journal of Risk and Financial Management, 12: 138

[26]. Nguyen, T. L. A. (2018). Diversification and bank efficiency in six ASEAN countries. Global Finance Journal, 37, 57–78.
[27]. Obinne U.G., Uchenna A.W., Nonye U.J., & Okelue U, (2012), Impact of Corporate Diversification on the Market Value of Firms: A study of Deposit Money Banks Nigerian, European Journal of Business and Management, Vol. 4(8).
[28]. Pisedtasalasai, A., & Edirisuriya, P., (2020) Diversification and Performance of Sri Lankan Banks Journal of Asian Finance, Economics and Business Vol 7 No 9: 001–010
[29]. Sarwar, B., Muhammad, N., Zaman, N. U., (2020) Diversification, Industry Concentration, and Bank Margins: Empirical Evidence from an Emerging South Asian Economy Journal of Asian Finance, Economics and Business Vol 7 No 7 pages 349 – 360
[30]. Sekaran, U. & Roger Bougie, R. (2013). Research Methods for business, a skill-building Approach, 6th Edition, John Wiley and sons, Chennai, India China.
[31]. Senyo, D. B., Olivia, A., & Musah, A. (2015). Income Diversification and Financial Stability of Banks in Ghana, 6(6), 177–184.
[32]. Shepherd, W. G. 1970. Market power and economic welfare. New York: Random House.
[33]. Tasca, P., & Battiston, S. (2011). Diversification and Financial Stability. SSRN, (10). https://doi.org/10.2139/ssrn.1878596
[34]. Trivedi, S. R., (2015) Banking Innovations and New Income Streams: Impact on Banks' Performance, The Journal of Decision Makers. 40 (1) 28-41.
[35]. Turkmen, S. Y., & Yigit, I. (2012). Diversification in Banking and its Effect on Banks' Performance: Evidence from Turkey. American International Journal of Contemporary Research, 2(12), 111–119.
[36]. Wanjiru, K. W., & Nzulwa, J. (2018). Influence Of Diversification Strategies on Competitive Advantage of Commercial Banks in Kenya. Journal of Business and Strategic Management, 3(1), 67–90
[37]. Zhou, K., (2014) The Effect of Income Diversification on Bank Risk: Evidence from China, Emerging Markets Finance and Trade 50:sup3, 201-213

APPENDIX 1: DOCUMENT ANALYSIS GUIDE

SECTION A: BACKGROUND INFORMATION

1. Name of the commercial bank ___________________________________
2. The year of operation commencement____________________________

SECTION B: Document Analysis

Parameter	**YEARS**									
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Number of Branches										
Total Interest Income (Kshs' 000,000)										
Total Non-Interest Income (Kshs' 000,000)										
Total Income (Kshs' 000,000)										
Total Lending Assets (Kshs' 000,000)										
Total Non-Lending Assets (Kshs' 000,000)										
Total Deposits (Kshs' 000,000)										
Total bank Assets (Kshs' 000,000)										

END

S/No.	**Commercial Bank**	**CBK Peer Group***	**Remarks**
1	Barclays Bank of Kenya Limited	Large	Operational
2	Commercial Bank of Africa Limited	Large	Operational
3	Co-operative Bank of Kenya Limited	Large	Operational
4	Diamond Trust Bank Kenya Limited	Large	Operational
5	Equity Bank (Kenya) Limited	Large	Operational
6	I & M Bank Limited	Large	Operational
7	KCB Bank Kenya Limited	Large	Operational

8	Stanbic Bank Kenya Limited	Large	Operational
9	Standard Chartered Bank Kenya Limited	Large	Operational
10	Chase Bank (K) Limited	Medium	In receivership
11	Imperial Bank Limited	Medium	In receivership
12	Bank of Baroda (K) Limited	Medium	Operational
13	Bank of India	Medium	Operational
14	Citibank N.A Kenya	Medium	Operational
15	Ecobank Kenya Limited	Medium	Operational
16	Family Bank Limited	Medium	Operational
17	I & M Bank Limited	Medium	Operational
18	National Bank of Kenya Limited	Medium	Operational
19	NIC Bank Kenya PLC	Medium	Operational
20	Prime Bank Limited	Medium	Operational
21	African Banking Corporation	Small	Operational
22	Bank of Africa Kenya Limited	Small	Operational
23	Consolidated Bank of Kenya Limited	Small	Operational
24	Credit Bank Limited	Small	Operational
25	Development Bank of Kenya Limited	Small	Operational
26	DIB Bank Kenya	Small	Operational
27	First Community Bank Limited	Small	Operational
28	Guaranty Trust Bank (Kenya) Limited	Small	Operational
29	Guardian Bank Limited	Small	Operational
30	Gulf African Bank Limited	Small	Operational
31	Habib Bank A.G Zurich	Small	Operational
32	Jamii Bora Bank Limited	Small	Operational
32	Mayfair Bank Limited	Small	Operational
33	Middle East Bank (K) Limited	Small	Operational
34	M-Oriental Bank Limited	Small	Operational
35	Paramount Bank Limited	Small	Operational
36	SBM Bank (Kenya) Limited	Small	Operational
37	Sidian Bank Limited	Small	Operational
38	Spire Bank Limited	Small	Operational
39	Transnational Bank Limited	Small	Operational
40	UBA Kenya Bank Limited	Small	Operational
41	Victoria Commercial Bank Limited	Small	Operational
42	Charterhouse Bank Limited	Small	Under Statutory Mgt

APPENDIX 2: Commercial banks in Kenya
CBK Peer Group: This is based on the total amount of protected deposits of the bank*
Source: CBK Bank Supervision Annual Report 2018

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