Iosr Journal Of Economics And Finance (Iosr-Jef)
E-Issn: 2321-5933,P-Issn: 2321-5925.Volume 15, Issue 3 Ser.3 (May. – June. 2024),Pp 40-47
www.Iosrjournals.Org

Influence Of Money Market Investments On Financial Performance Of Commercial Banks In Kenya

Hilary Makanga Majale
Tobias Olweny
Msc Student, Jomo Kenyatta University Of Agriculture And Technology
Senior Lecturer, Jomo Kenyatta University Of Agriculture And Technology

Abstract
Commercial banks in Kenya have boosted their stakes in various money market products such as corporate bonds, commercial papers, and government securities. These investments are made with the expectation that the banks' liquidity management and overall financial performance would improve. The general goal of the study was to investigate how commercial banks in Kenya fare financially in light of their money market investing strategies. Treasury bills, repurchase agreements, commercial paper, and certificate of deposits served as the four independent variables in this analysis. This research used as its dependent variable the financial health of Kenya's commercial banks. The research centered mostly on Kenya's thirty-eight commercial banks. As part of the study, information was collected from each of Kenya's thirty-eight commercial banks. Starting in 2018, and running through 2022, a descriptive research approach to examine the variables of interest was utilized. The public financial statements and annual reports of the thirty-eight commercial banks were used to compile secondary data for the institutions. Data analysis was achieved through conducting inferential statistics as well as descriptive statistics. Inferential statistics entailed regression analysis together with correlation analysis. The results obtained were then summarized using tables and charts. The study found that treasury bill investment, repurchase agreements investment, commercial paper investment and certificate of deposits investment explains 31.42% of financial performance of the commercial banks. Treasury bill investment, commercial paper investment and certificate of deposits investment have a positive significant effect on financial performance of the commercial banks. Repurchase agreements investment was found have positive insignificant effect on financial performance of the commercial banks. The study concludes that treasury bill investment is important to the performance of commercial banks. Commercial paper investment and certificate of deposits investment are also essential money market investments that impact performance of commercial banks. The study therefore recommends the importance of strategic decision-making in aligning investment portfolios with the specific dynamics of the Kenyan financial landscape. Regular assessments, adaptability to market changes, and a diversified approach will be essential for commercial banks to navigate the complexities of the financial environment and optimize their overall financial performance.

Keywords: *Money market investments, financial performance, treasury bills, repurchase agreements, commercial paper, and certificate of deposits*

Date of Submission: 27-05-2024 Date of acceptance: 07-06-2024

I. Introduction

Financial performance is important in a commercial bank, as it is a key measure of the bank's overall health and ability to sustain its operations and fulfill its responsibilities to customers and shareholders (Nzyuko, Jagongo & Kenyanya, 2018). Volatility has characterized today's market environment, uncertainty, complexity and ambiguity and as such, businesses are finding it difficult to confidently predict their future (Alam, Bhowmik & Bhowmik, 2020). Economic alterations, political change, technological changes, social changes, and legal changes have all been predicted to contribute to the dynamism of the business environment. These alterations are causing business entities to be concerned about their stability and sustainability in their performance, consequently developing a need for strategy development in order to continue maintaining competitive capacity in order to perform in such a changing environment (Bhaskaran, Sujit & Mongia, 2023).

Money market investments are short-term, low-risk financial instruments that provide liquidity to banks and other financial institutions. Money market investments are typically made in highly liquid, low-risk securities such as government bonds, certificates of deposit, and commercial paper (Allen, Baig & Winters, 2023). These investments provide a steady stream of income to banks, which can boost their earnings and help them meet their financial obligations. Moreover, money market investments can also serve as a source of funding for commercial banks. When banks invest in money market instruments, they are essentially lending money to the issuers of those instruments. As a result, banks can earn interest on their investments while also having access to cash when they need it (Wang, Tomlins & Tiwari, 2023).

The Kenyan government has delegated the creation of and oversight of the country's money market to the Central Bank of Kenya. The issuance and trading of money market instruments are governed by the rules and regulations established by this body. Commercial paper, interbank loans, Treasury bills and bonds are only some of the many financial instruments that may be traded in the Kenyan money market (Odongo, 2021). Kenya's commercial banks use money market instruments to manage their liquidity and generate profits. By investing in money markets, banks can earn interest on their investments while also having access to cash when they need it. Furthermore, investing in money markets can also help commercial banks to diversify their portfolios and manage their risk exposure (Ng'ang'a & Njenga, 2021).

Globally, the financial performance of commercial banks in developed economies has been influenced by several trends in the money market. One trend has been the persistent low interest rate environment that has prevailed in many developed economies, which has put pressure on banks' profitability and returns on investments (Trinh, 2022). In response to this environment, commercial banks in some developed economies have increased their exposure to riskier assets in search of higher yields, including longer-term securities and high-yield bonds. This has helped to improve their financial performance in the short term, but it also increases their risk exposure and vulnerability to potential market shocks (Ivan, Banti & Kellard, 2022).

Money market investments in China and the influence such investments have had on the financial performance of commercial banks have been impacted by a variety of variables, including policies implemented by the Chinese government, market circumstances, and regulatory frameworks (Hu & Wang, 2022). China's central government has taken many steps in recent years to boost the country's financial sector. These measures include the liberalization of interest rates on bank deposits and the development of a trading market for interbank lending. Because of these regulations, the money market has expanded, and commercial banks now have easier access to more financing options. In addition, Chinese regulators have implemented measures to enhance the stability and safety of the money (Azimi, 2022).

Malaysian commercial banks have increased their investments in money market instruments, including government bonds, treasury bills, and commercial papers. These investments have helped to boost the banks' income streams and improve their liquidity management. Moreover, the Malaysian government has implemented policies aimed at promoting the development of the country's money market, such as the establishment of a short-term money market and a discount house, and the issuance of Islamic money market instruments such as Islamic Treasury bills and sukuk. These policies have facilitated the growth of the money market and increased the availability of funding sources for commercial banks (Li, Liu & Shrestha, 2022).

Money market investments and commercial banks' financial performance in Africa have been affected by government policies, market conditions, and regulatory frameworks. Money market instruments including treasury bills, commercial papers, and bank placements have expanded Nigerian commercial banks' investments. These investments have helped to boost the banks' income streams and improve their liquidity management (Oyedele & Olowe, 2020). Additionally, the Nigerian Central Bank has implemented measures to enhance the stability and safety of the money market. For instance, the Central Bank introduced the Nigerian Treasury Bills and Certificates of Deposit market, which allows banks to purchase government securities as a means of managing their liquidity and investment portfolios (Adeoye, Salau & Adeoye, 2019).

South African Reserve Bank has implemented measures to enhance the stability and safety of the money market. For instance, the Reserve Bank introduced the Standing Facility, which enables commercial banks to obtain overnight funding from the Reserve Bank to meet any short-term liquidity needs. However, the South African money market is also susceptible to dangers and problems, including the aforementioned pandemic's effects, political instability, and fluctuations in exchange rates. Kunjal (2022) argues that commercial banks' capacity to make money and their involvement in the money market may be affected by these factors.

Egypt's commercial banks have amassed a sizable stockpile of government bonds, treasury bills, commercial papers, and other money market instruments. The Egyptian government has passed a variety of measures meant to encourage the development of the country's financial markets. Policies like issuing treasury bonds and creating a secondary market for government assets are under the spotlight. These rules have helped the money market expand, giving commercial banks more ways to raise money. The Central Bank established a standing facility to meet the overnight borrowing needs of commercial banks (Kordy, Bassiouny, & Tooma, 2020). This step was done in anticipation of possible cash flow requirements in the near future.

Despite an improved performance over the preceding years, Kenya's commercial banks experienced a notable decline in profitability from 159.1 billion shillings to 112.1 billion shillings in 2021, with profits falling below those reported in 2018 (133.2 billion shillings) and 2019 (152.7 billion shillings). Moreover, the sector witnessed the closure of institutions like National Bank, Chase Bank, and Imperial Bank due to performance challenges (CBK, 2021). Compounding the issue, the non-performing loans (NPLs) ratio increased to 14.7% in June 2022 from 13.6% in June 2021. With commercial banks facing exposure to interest rate and foreign exchange risks, effective management of money market investments becomes crucial for enhancing profitability and overall financial performance.

Commercial banks heavily rely on money market investments to earn interest income, manage liquidity, and diversify investment portfolios (Ng'ang'a & Njenga, 2021). However, existing research on the connection between money market investments and economic growth, such as studies by Waweru and Kibet (2017), Odongo and Otieno (2017), and Gathoga and Njeru (2020), often lack a specific focus on how these investments directly impact the financial performance of Kenyan commercial banks. Furthermore, there is a scarcity of data to determine the optimal allocation of assets across different money market instruments.

Therefore, this study sought to bridge these gaps by examining the direct relationship between money market investments and the financial performance of Kenya's commercial banks. Specifically, the study focused on four key independent variables: treasury bill investments, repurchase agreements, commercial paper investments, and certificate of deposits investments. These independent variables were tied to the dependent variable, return on investments, which served as a measure of the financial health of Kenyan commercial banks.

II. Literature Review

The empirical studies conducted on the effect of treasury bills, repurchase agreements, commercial paper, and certificate of deposits on financial performance provide valuable insights into the impact of these money market investments on different financial institutions. However, there are some limitations to the existing studies. One limitation of these studies is that they tend to focus on a specific country or region, which may limit the generalizability of the findings. For instance, the research that was conducted by Ahmed, Ahmed, and Khan (2021) looked at the effect that investments in repurchase agreements had on the overall financial performance of Islamic banks in Pakistan. The results are beneficial to Islamic banks in Pakistan; however, it is possible that they are not relevant to other kinds of banks located in other nations. In a similar vein, Patel and Raval (2020) conducted research to investigate how Indian banks' levels of investment in commercial paper impacted their overall financial performance. It is possible that the conclusions of this research cannot be generalized to other nations due to the differences in their regulatory frameworks and financial systems.

These studies often make use of a single theoretical framework, which may not be enough to reflect the complexity of the link between money market investments and financial performance. This is still another shortcoming of these research. For instance, the research conducted by Lee and Cho (2020) made use of the agency theory in order to investigate the effect that investing in commercial paper has on the overall financial performance of Korean banks. While agency theory provides a useful lens to analyze the relationship between principals and agents in organizations, it may not capture other important factors such as market conditions and macroeconomic variables. The study by Akhtar and Waqar (2021) was anchored on the trade-off theory. This theory may not be adequate to cover the interrelationships between money market investments and performance.

Furthermore, some studies have limitations in their research design and data analysis. Chen (2019), Chien (2019), Kargi and Tas (2021), and Nikolaev and Bosch (2020), to name a few, performed a simple regression analysis to examine the effect of money market investments on a business's bottom line. While this study does provide some background on how money market investments relate to financial success, it does not account for other variables that may affect financial outcomes, such as the size of the bank or the state of the economy. Consequently, it does not provide a complete picture.

In conclusion, while the existing empirical studies on the effect of money market investments on financial performance provide valuable insights, there are limitations to these studies. Future research should aim to address these limitations by using multiple theoretical frameworks, employing more rigorous research designs and data analysis techniques, and utilizing more comprehensive data collection methods.

The empirical evaluation demonstrates that there are holes in the existing studies. This section provides an explanation of the research gaps that currently exist based on the aims of the study. This study's primary aim was to analyze the effect of treasury bill investments on the bottom lines of Kenya's commercial banks. This was the subject of the research of Ng'ang'a and Njenga (2021), however their methodology was flawed since they failed to account for the fact that the data they utilized came from panels. In the present investigation, panel regression analysis was used.

The second objective of this research was to investigate the effect that Kenyan commercial banks' involvement in repurchase agreements had on their overall financial performance. Saif (2019), Yuksel (2020), and Ahmed (2019) all do research in this area. The bulk of research on the impact of buyback agreements on a company's financial performance has been on commercial banks in other nations. However, investments in repurchase agreements' effect on Kenyan banks' financial performance has not been given nearly as much attention as it deserves. Research into this area is certainly necessary to fill this knowledge gap and provide relevant data on the effects of repurchase agreement investments on the financial performance of Kenyan banks.

The third aim was to look at the effects that commercial paper investments had on the financial results of Kenyan commercial banks. Several studies in the recent past have looked at the effect that commercial paper investments have on a company's bottom line (Akhtar & Waqar, 2021; Choi & Kim, 2021; Patel & Ravel, 2020). However, the vast majority of these investigations have solely focused on offshore banking institutions. However, there hasn't been nearly enough study of the impact of commercial paper investments on Kenyan banks' bottom lines. This information vacuum has to be filled, hence studies on the issue of commercial paper investments and their effect on Kenyan banks' financial performance are necessary.

III. Research Methodology

A descriptive research design was adopted. The population was the 40 commercial banks in Kenya operating as of the 31st of December 2022. With the small population, all the banks were used in the study hence no sampling was required. The data source for the study was the published annual financials of the banks from the CBK and individual reports from the companies' reports for the period January 2018 to December 2022 and other secondary data captured in a data collection sheet. The 5 year period was considered long enough to provide adequate data for robust regression analysis.

Data analysis was accomplished using STATA software version 18. The quantitative findings were then presented by the researcher through the use of graphs and tables. The findings were then summarized using descriptive statistics. Frequencies, measures of central tendency, percentages and dispersion were used to report the findings which were illustrated in form of tables. Inferential were the; Pearson correlation, multiple regressions, ANOVA and coefficient of determination. To test the relationship between study variables, a panel regression model was used:

$Y_{it} = \beta_o + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$ .... (i)

Representing; $Y = f(X_1, X_2, X_3, X_4)$

Y = Dependent variable was financial performance of commercial banks in Kenya (Measured using both ROA and Risk-adjusted return on investment).

X_1.........X_4 =Represents the independent variables representing the determinants of financial performance of commercial banks in Kenya.

β = is the beta.

ε = error term

The following empirical model was used to test the hypothesis that the numerous independent variables selected have a correlation with the profitability of Kenya's commercial banks.

$Y_{it} = \beta_o + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$ .... (ii)

Where:

Y_{it} = Financial performance for firm i in period t

β_0 = Constant

X_{1it} = Treasury bills for firm i in period t

X_{2it} = Repurchase agreements for firm i in period t

X_{3it} = Commercial paper for firm i in period t

X_{4it} = Certificate of deposits for firm i in period t

ε_{it} = the error term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression Coefficients for Independent Variables representing the determinants of financial performance of commercial banks in Kenya.

IV. Research Findings And Discussions

The mean, minimum, and maximum values of variables, as well as standard This section analysed descriptive statistics where each study variable gave mean and standard deviations. The descriptive results provide valuable insights into the financial dynamics of Kenya's commercial banks over the study period from 2018 to 2022. Complete data was obtained from 38 licensed commercial banks in Kenya. Therefore, there were 190 units of observation (38 banks*5 years).

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Investments	190	.110006	.0851226	.0015	.3650
Treasury bill investment	190	.287645	.1234540	.0200	.4075
Repurchase agreements investment	190	.096789	.0930649	.0000	.5700

Commercial paper investment	190	.229436	.1342852	.2300	.3950
Certificate of deposits investment	190	.212480	.1363306	.0514	.3771

Source: Author (2024)

From the results presented in Table 1, the average return on investments for the commercial banks in Kenya over the five-year period was 11.00%, with a standard deviation of 8.51%. This indicates a moderate level of variability in the banks' performance. The return on investments ranged from a minimum of 0.15% to a maximum of 36.50%, highlighting diversity in financial outcomes among the banks.

On average, commercial banks allocated approximately 28.76% of their total investments to treasury bills. The standard deviation of 12.35% suggests a considerable variation in the extent to which banks engaged in treasury bill investments. The observed range of treasury bill investments spans from a minimum of 2.00% to a maximum of 40.75%, reflecting diversity in strategic preferences among the banks.

The study found that, on average, commercial banks allocated around 9.68% of their total investments to repurchase agreements. The standard deviation of 9.31% indicates a notable variability in the banks' engagement in repurchase agreements. The range of repurchase agreement investments varied widely, from a minimum of 0.00% to a maximum of 57.00%, showcasing differing levels of involvement in this financial instrument among the banks.

Commercial banks, on average, invested approximately 22.94% of their total funds in commercial paper. The standard deviation of 13.43% highlights a significant diversity in the extent to which banks utilized commercial paper as part of their investment portfolio. The range of commercial paper investments ranged from 23.00% to 39.50%, indicating varying preferences and risk appetites among the banks.

The study revealed that commercial banks allocated, on average, 21.25% of their total investments to certificates of deposits. The standard deviation of 13.63% suggests considerable diversity in the extent of engagement with certificates of deposits. The observed range of certificate of deposits investments spans from a minimum of 5.14% to a maximum of 37.71%, indicating differing strategies and risk preferences among the banks.

From the correlation results presented in Table 2, there is a positive correlation of 0.319 between ROI and treasury bill investment, suggesting a moderate relationship. This implies that as commercial banks increase their investments in treasury bills, there tends to be a corresponding increase in their return on investments. The statistically significant correlation ($p = 0.006$) strengthens the evidence that treasury bill investments may play a role in influencing the overall financial performance of the banks. The findings concur with the findings of Ng'ang'a and Njenga (2021) in the study on impact of treasury bill investment on fnancial performance of Kenyan commercial banks who indicated that treasury bill investment has a positive and significant relationship with ROI.

Table 2: Correlation Analysis

Variable	ROI	Treasury bill	Repos	Commercial paper	Certificate of deposits
ROI	1.000				
Treasury bill	0.319	1.000			
	0.006				
Repos	0.232	0.027	1.000		
	0.050	0.824			
Commercial paper	0.265	0.194	0.237	1.000	
	0.025	0.102	0.045		
Certificate of deposits	0.406	0.234	0.183	0.097	1.000
	0.000	0.048	0.124	0.418	

Source: Author (2024)

The correlation coefficient between ROI and Repurchase Agreements (Repos) is 0.232, indicating a positive but relatively weaker relationship. The p-value of 0.050 suggests marginal significance, implying that there might be a modest impact of repos on the return on investments. While the correlation is positive, it's essential to note that the relationship is not as strong as observed with treasury bills. The correlation results concur with the results of Ahmed, Ahmed, and Khan (2021) who did a study on the effect of repurchase agreements investment on financial performance of Islamic banks in Pakistan and found out that Repos has a positive and statistically significant relationship with ROE.

The correlation coefficient of 0.265 between ROI and Commercial Paper investment signifies a positive association. This suggests that an increase in commercial paper investments is moderately associated with higher return on investments for commercial banks. The correlation is statistically significant (p = 0.025), indicating that commercial paper may be a noteworthy factor influencing financial performance. These correlation results are in tandem with the findings of Choi and Kim (2021) who did a study on commercial paper investment and financial performance of Chinese banks and found that the commercial paper investment measures have a substantial positive effect on financial performance.

There is a relatively strong positive correlation of 0.406 between ROI and Certificate of Deposits investment. This suggests that as commercial banks increase their investments in certificates of deposits, there tends to be a substantial increase in their return on investments. The correlation is statistically significant with a p-value of 0.000, providing robust evidence of the impact of certificate of deposits on the financial health of commercial banks. These results concur with the findings of Green and Brown (2023) on a study to investigate the effect of certificate of deposits investments on the returns of U.S. mutual funds. The findings of the study indicated that certificate of deposits investment had a substantial negative impact on returns of U.S. mutual funds.

Table 3 presents the results of the pooled OLS model analysis.

Table 3: Pooled OLS Model Results

Source	SS	df	MS Number of obs =			190
			F(4, 185) =			7.67
Model	0.117364	4	.029340969 Prob > F =			0.000
Residual	0.256198	185	.003823853 R-squared =			0.3142
			Adj R-squared =			0.2732
Total	0.373562	189	.005261437 Root MSE =			0.06184
Return on Investments	Coefficients	Std. Err.	t	P>t	[95% Conf. Interval]	
Treasury bill investment	0.832749	0.2635605	3.16	0.005	[.5640764 1.101422]	
Repurchase agreements investment	0.038169	0.032419	1.18	0.243	[-.0265399 0.1028785]	
Commercial paper investment	0.01359	0.005421	2.51	0.015	[-0.0244112 -0.02718]	
Certificate of deposits investment	0.14059	0.052539	2.68	0.009	[-.2454571 -0.035722]	
_constant	0.137888	0.061123	2.26	0.027	[.0158856 0.2598902]	

Source: Author (2024)

From the results presented in Table 3, the variables treasury bill investment, commercial paper investment and certificate of deposits investment are statistically significant. However, from the study findings, repurchase agreements investment is found to be insignificant. The pooled OLS model explain 31.42% (Rsquare=0.3142, p=0.000<0.05) of the total variations on the performance of the commercial banks measured by ROI. The results are statistically significant with a p value of 0.000<0.05. Therefore, the study variables are important in explaining the variations in bank performance. According to the results in Table 3, the predicted equation is;

$Y = 0.1379+0.833X_1+0.038X_2+0.014X_3+0.141X_4$

Where,

Y is Return on Equity

X_1 is Treasury bill investment

X_2 is Repurchase agreements investment

X_3 is Commercial paper investment

X_4 is Certificate of deposits investment

From the regression results presented in Table 3, Treasury bill investment is positively and significantly related to the performance of the listed banks (β=0.8327, P=0.005<0.05). This means that a unit increase in treasury bill investment leads to .833 units increase in the performance of the commercial banks. The repurchase agreements investment is positively and insignificantly related to the performance of the commercial banks measured by ROI (β=0.038, P=0.243>0.05). A unit increase in the repurchase agreements investment leads 0.038 units increase in in the performance of the commercial banks.

The results of the commercial paper investment show that it is positively and significantly related to the performance of the commercial banks (β=0.014, P=0.015<0.05). A unit increase in the commercial paper investment leads to a 0.014 units increase in the performance of the commercial banks. The model results indicate that certificate of deposits investment is positively and significantly related to the performance of the commercial banks (β=0.14059, P=0.009<0.05). A unit increase in the certificate of deposits investment leads to 0.141 units increase in the performance of the commercial banks.

V. Conclusions

The study's first objective aimed to unravel the relationship between treasury bill investment and the financial performance of Kenyan commercial banks. Results showed that banks allocated a significant portion of their investments to treasury bills, and there was a consistent positive correlation between treasury bill investment and return on investments. The regression analysis confirmed this association, suggesting that a higher proportion of treasury bill investments is linked to increased financial health in Kenyan commercial banks.

Contrary to treasury bills, the study's second objective explored the relationship between repurchase agreements (repos) and financial performance. Findings indicated a positive but relatively weaker correlation between repos and return on investments, with the relationship not reaching statistical significance. The regression analysis supported this, revealing that a substantial and statistically significant relationship between repurchase agreements and financial performance is not evident in the context of Kenyan commercial banks.

The third objective centered around commercial paper investment, showing that commercial banks in Kenya invested significantly in this financial instrument. There was a positive and statistically significant correlation between commercial paper investment and return on investments, and the regression analysis reinforced this relationship. These findings suggest that commercial paper investments are associated with increased financial health in Kenyan commercial banks.

The fourth objective investigated the relationship between certificate of deposits investment and financial performance. The study found a substantial allocation of investments to CDs, with a strong positive correlation between CD investment and return on investments. The regression analysis supported this relationship, indicating that certificate of deposits investments are associated with increased financial health in Kenyan commercial banks.

VI. Recommendations

Based on the study's findings, it is recommended that Kenyan commercial banks strategically optimize their treasury bill investments. Given the positive correlation and significant impact on financial performance, banks should consider maintaining a balanced portfolio that includes an appropriate allocation to treasury bills. However, it is crucial for banks to continually assess market conditions, interest rate movements, and regulatory changes to ensure an adaptive and responsive approach to treasury bill investments.

In light of the study's results, commercial banks in Kenya may reconsider the extent of their repurchase agreements (repos) strategy. While the correlation between repos and financial performance was positive, it was relatively weaker and statistically insignificant. Banks should assess the cost-benefit analysis of repos and explore alternative investment avenues that may yield more significant returns. Regular monitoring and assessment of the repo market dynamics, liquidity conditions, and associated risks will be essential for informed decision-making in this regard.

The study highlights the positive correlation and significant impact of commercial paper investments on the financial performance of Kenyan commercial banks. Therefore, it is recommended that banks strategically embrace commercial paper as a vital component of their investment portfolio. This may involve further research into diverse commercial paper opportunities, considering different issuers, maturities, and credit ratings. Building expertise in the commercial paper market and adapting investment strategies to capitalize on its potential benefits can contribute to enhancing overall financial health.

Considering the strong positive correlation and significant impact of certificate of deposits investments on financial performance, Kenyan commercial banks are encouraged to adopt a balanced approach to CD investments. While CDs offer stability and a positive influence on financial health, banks should ensure diversification across various investment instruments to manage risks effectively. Regular assessment of interest rate movements and market conditions will be crucial for optimizing CD investments. Additionally, banks should align CD strategies with their overall risk appetite and liquidity requirements for a well-rounded investment approach.

References

[1] Adeoye, A. O., Salau, A. F., & Adeoye, B. W. (2019). Impact Of Treasury Bill Investments On The Profitability Of Deposit Money Banks In Nigeria. Heliyon, 5(9), E02433.

[2] Ahmed, N., Ahmed, Z., & Khan, M. (2021). The Impact Of Repurchase Agreements On The Financial Performance Of Islamic Banks In Pakistan. Journal Of Islamic Accounting And Business Research, 12(5), 965-978.

[3] Alam, M. M., Bhowmik, D., & Bhowmik, D. (2020). The Impact Of Agent Banking On Performance Of Commercial Banks In Bangladesh. Iosr Journal Of Economics And Finance (Iosr-Jef), 11(3), 13-20.

[4] Allen, K. D., Baig, A., & Winters, D. B. (2023). The Response Of Money Market Funds To The Covid-19 Pandemic. Finance Research Letters, 54, 103790.

[5] Azimi, M. N. (2022). Assessing The Asymmetric Effects Of Capital And Money Markets On Economic Growth In China. Heliyon, 8(1), E08794.

[6] Bhaskaran, R. K., Sujit, K. S., & Mongia, S. (2023). Linkage Between Performance And Sustainability Initiatives In Banking Sector–An Empirical Examination. International Journal Of Productivity And Performance Management, 72(1), 200-225.

[7] Choi, X., & Kim, Y. (2021) The Impact Of Commercial Paper Investment On The Financial Performance Of Banks In China. Journal Of Banking And Finance, 125, 105054.

[8] Gathoga, T. N., & Njeru, A. (2020). The Relationship Between Money Market Instruments And Financial Performance Of Commercial Banks In Kenya: A Case Study Of Selected Banks. International Journal Of Economics, Commerce And Management, 8(8), 108-125.

[9] Hu, G. X., & Wang, J. (2022). A Review Of China's Financial Markets. Annual Review Of Financial Economics, 14, 465-507.

[10] Ivan, M. D., Banti, C., & Kellard, N. (2022). Prime Money Market Funds Regulation, Global Liquidity, And The Crude Oil Market. Journal Of International Money And Finance, 127, 102671.

[11] Kargi, E., & Tas, O. (2021). The Effect Of Money Market Fund Investments On The Financial Performance Of Real Estate Investment Trusts In The United States. Journal Of Real Estate Finance And Economics, 63(4), 664-686.

[12] Kordy, K., Bassiouny, A., & Tooma, E. (2020). Valuation Discrepancies In Money Market Funds During Market Disruptions: Evidence From Egypt. Investment Management & Financial Innovations, 17(3), 97.

[13] Kunjal, D. (2022). Evaluating The Liquidity Response Of South African Exchange-Traded Funds To Country Risk Effects. Economies, 10(6), 130.

[14] Lee, S., & Cho, S. (2020). The Impact Of Commercial Paper Investment On The Financial Performance Of Korean Banks. Journal Of Asian Finance, Economics And Business, 7(6), 47-56.

[15] Li, J., Liu, M. H., & Shrestha, K. (2022). Does The Conventional Money Market Overnight Rate Influence The Investment Rate Of Islamic Deposits? Evidence From Malaysia. International Journal Of Islamic And Middle Eastern Finance And Management, (Ahead-Of-Print).

[16] Ma, Z., Chen, J., & Zhang, Y. (2021). The Impact Of Money Market Funds Investment On The Financial Performance Of Chinese Securities Companies. Journal Of Applied Research In Finance And Economics, 1(1), 1-15.

[17] Mutakyawa, E., & Nkya, A. (2020). The Effect Of Treasury Bills Investment On Financial Performance Of Listed Commercial Banks In Tanzania. European Journal Of Business And Management Research, 5(2), 13-28.

[18] Nikolaev, V. And Bosch, J. (2020). Money Market Funds Investment And The Financial Performance Of Pension Funds In Europe. European Journal Of Finance, 26(6), 575-592.

[19] Ng'ang'a, J. M., & Njenga, A. K. (2021). Effect Of Treasury Bills On The Financial Performance Of Commercial Banks In Kenya. International Journal Of Business And Commerce, 10(1), 14-28.

[20] Nzyuko, J., Jagongo, D., & Kenyanya, H. (2018). Financial Inclusion Innovations And Performance Of Commercial Banks In Kenya. Journal Of Innovations, 5(2), 849-856

[21] Odongo, A. O., & Otieno, R. O. (2017). Money Market Investments And Financial Performance Of Commercial Banks In Kenya. International Journal Of Accounting And Taxation, 5(1), 16-29.

[22] Odongo, T. M. (2021). Effects Of Treasury Bills Investments On Financial Performance Of Commercial Banks In Kenya. International Journal Of Social Sciences And Management, 8(1), 10-22.

[23] Oyedele, O. A., & Olowe, O. I. (2020). The Impact Of Treasury Bills Investment On The Financial Performance Of Commercial Banks In Nigeria. Journal Of Accounting, Finance And Auditing Studies, 6(4), 139-15

[24] Patel, P., & Raval, N. (2020). The Effect Of Commercial Paper Investment On The Financial Performance Of Indian Banks. Journal Of Applied Finance & Banking, 10(5), 27-39.

[25] Saif, M. I. (2019). Impact Of Repurchase Agreement (Repo) Investment On The Financial Performance Of Commercial Banks In Bangladesh. Journal Of Finance And Banking Review, 4(4), 1-9.

[26] Trinh, T. H. (2022). Towards Money Market In General Equilibrium Framework. International Journal Of Financial Studies, 10(1), 12.

[27] Wang, J., Tomlins, M., & Tiwari, P. (2023). Information And Volatility Linkages Between Real Estate, Equity, Bond And Money Markets In Australia. International Journal Of Housing Markets And Analysis, 16(2), 292-317.

[28] Waweru, K., & Kibet, L. K. (2017). Effect Of Government Securities On Financial Performance Of Commercial Banks In Kenya. International Journal Of Economics, Commerce And Management, 5(4), 60-75.

[29] Yüksel, S., & Taşdemir, H. (2020). The Effect Of Repo Investments On Financial Performance Of Commercial Banks In Turkey. Journal Of Business And Economics Review, 5(2), 88-96.