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Effect of Bank Size on Earnings Retention for Investment by Commercial Banks in Kenya

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Abstract

The Kenyan economy has continued to register dismal performances in the last few years and banks can play a facilitative function because of their intermediary role. The study sought to find out if the size of a commercial bank has any influence on its level of earnings retention for investment. The retention of earnings by a bank each financial year can have critical importance because it provides a source of funds for investment. The findings of the study are helpful to the management of commercial banks in education to shareholders. The study was anchored on the pecking order theory. The bank size parameters were cash at Central Bank of Kenya and property assets, net borrowed funds, investor funds, and the paid dividend. Though the total banks' population was 39, the study involved 36 banks as units of analysis. To test the impact of size on earnings retention in commercial banks in Kenya, a linear regression model was run. Analysis of the data revealed that 83 % of banks' earnings retention is influenced by cash at CBK and property assets, net borrowed funds, investor funds, and paid dividends. The results pointed out that, cash at CBK and Property assets, net borrowed funds, and investors' funds have a positive significant impact on earnings retention while paid dividends have an insignificant impact on earnings retention. Any commercial bank intending to expand its operations by use of retained earnings should work towards increasing variables with significant positive influence or decreasing the parameters with significant negative influence. By this, the commercial banks in Kenya will maximize utilization of the cheapest source of funds for investment and this will also lead to increased earnings due to reduced expenses related to capital acquirement from other sources.

Keywords: *Bank Size, Earnings Retention for Investment, Commercial Banks*

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1.0 Introduction

For banks to play a facilitative role in growth of the economy, they need to grow retained earnings to enable them to offer financial services and to build a pool of resources that will be utilized in their investment. Banks exist to play financial intermediary role of giving services to other sectors. To achieve that purpose, every bank needs to build a pool of investments that can also be tapped by other sectors of the economy. In Kenya, these sectors include the agricultural, manufacturing, and transportation sectors which in the last few years have not been doing well. Every sector needs finances and finances are provided by financial institutions

To pool up the investments, a bank needs to retain earnings to be utilized in its expansion. According to Yakubu, Kapusuzoglu, and Ceylan (2021) retained earnings should be considered first before any other source of finances for a firm. This is because retained earnings provide a cheap source of funds for investment, they are readily available, have no issuing cost, and do not lead to ownership dilution hence once used by a bank it spurs growth than any other source of funds for investment as explained by Zani, Macagnan & Portal (2014). Those factors make earning retention crucial in banks' operations.

For speedy growth to take place in a company, retention of earnings should be given priority. This is according to Oketah & Ekweronu (2020) in their study on what determines retained earnings for quoted manufacturing companies in Nigeria. Due to this, firms should work on increasing the items that lead to increased retained earnings because it will spur growth.

According to International Monetary Fund (IMF) disclosures on Kenya (2023), half of commercial banks in Kenya were relying on central bank of Kenya for liquidity support. This was brought to light by the Kenyan Business Daily where it was reported that 20 out of 39 commercial banks in Kenya were accessing the CBKs discount window a facility that supports banks with liquidity challenges.

In Kenya, commercial banks as grouped by Central Bank of Kenya (CBK), size is determined by four parameters namely the bank assets, customer deposits, shareholders' funds, and the number of bank units. The bank assets are composed of cash and bank balances due from Central Bank of Kenya, Property plant and equipment, loans and advances, and investments. Customer deposits are composed of balances due to CBK, customer funds, borrowed funds, and deposits due to other banks. The shareholders' funds refer to the share capital, Minority interest ownership, share premium, and the reserves while the total number of customer accounts and the number of loans from the banks' units.

Potentially, the capacity of commercial banks to increase their retained earnings is determined by their size. According to Schildbach and Schneider (2017), bank size is the capacity of a bank to provide financing services. This is determined by the revenues of a bank, the equity capital, total assets, and market capitalization. Gauging the size of a bank is very important since banks play key functions in every country's financial system. Beck, Colciago, and Pfajfar (2014) explain the role of banks as financial intermediaries which is matching up lenders and borrowers. Lenders have excess money but they don't know who the borrowers are. Banks bring the two in one platform and hence funds deposited by customers end up in the hands of borrowers as loans.

1.1 Problem Statement

The primary objective of a firm is to maximize profits. The earnings made are utilized in firm growth by re-investing it (retained earnings) or shared with shareholders (dividends). The best source of funds for investment of a firm is the retained earnings because they are readily available, do not have issuing costs, and do not lead to ownership dilution. In every bank, there are very many variables that need to be studied to find out which one influences retained earnings for investment.

Commercial banks in Kenya operate in the same industry environment and the same economy, but literature reviewed shows that the level of earnings retained by banks in the same peer group differs across these banks. Due to slow rise of the growth parameters which are the cash at CBK and property, net borrowed funds, Investors' funds, or dividends paid some banks are unable to win the confidence of the international corporations thus being a problem in the industry since it leads to reduced businesses.

Since there is no set percentage of earnings that every bank should retain in relation to these parameters, the bank management must determine what percentage of earnings shall go to shareholders in form of dividends and what percentage shall be plowed back for investment depending on the bank size parameters. Over the years, this decision by management has had both positive and adverse effects on commercial banks and their operations.

An empirical study comparing bank size parameters and the pattern of bank retained earnings over several years may shed light on what could be the main variables leading to earnings retention for commercial banks in Kenya that will enhance the growth of specific bank size parameters. This will enable banks to make policies to retain earnings enough to spur growth which will be relative to its cash and property, net borrowed funds, Investors' funds, and dividends paid.

1.2 Objectives of the study

i. To establish the effect of Cash at Central Bank of Kenya and properties on earnings retention for investment by commercial banks in Kenya.
ii. To determine the effect of Net borrowed funds on earnings retention for investment by commercial banks in Kenya.
iii. To estimate the effect of Investors' funds on earnings retention for investment by commercial banks in Kenya.
iv. To find out the effect of Dividend paid on earnings retention for investment by commercial banks in Kenya.

2.0 Literature Review

2.1 Theoretical Review

The pecking order theory by Myers & Majluf (1984 as cited in Chaklader & Padmapriya 2021) states that companies follow an established fixed arrangement when raising funds for the firm. It advocates for use of all retained earnings available before raising any capital by debt or equity. The second priority according to this theory goes to issuance of debt as a source of funds to finance the firm's investments while equity is the last resort when all the other two options have been exhausted. The justification for this theory is that retained earnings have no issue cost as they are readily available to the company. Raising capital by debt has moderate cost while the use of equity as a source of capital has high cost implications and thence they should be picked in that order which minimizes time and expenses.

The existence of asymmetrical information between firm managers and outsiders forms the basis for why outsiders demand more returns for the funds they invest to counter the risk they have taken. Pecking order theory emphasizes that a firm should utilize retained earnings first and this should be understood by both managers and shareholders. The study will shed light on how the firm size influences retention decisions.

2.2 Empirical Review

2.2.1 Cash at CBK and Property assets and earnings retention

A study done by Paulo (2018) revealed that the firm's asset has a positive relationship with retained earnings. According to the study, firms with bigger assets retain more while firms with smaller assets retain less of their earning. In the study, data was collected from fifty countries within the globe with consideration of emerging versus developed countries, those operating

under civil law, and those under common law, and the analyses of a data were done by panel regression method.

Fixed assets significantly influence earnings retention in profitable steel companies. This is according to research done by Masood (2018) on twenty-seven Indian steel companies listed on Bombay Stock Exchange. Judgmental sampling was done and the sixteen-year secondary data obtained from Centre for Monitoring of Indian Economy (CMIE) was analyzed by application of multiple linear regression using version 19 of Statistical Package for the Social Sciences (SPSS)

Offor (2023) sought to know what determines retained earnings in banks which are in Nigeria. Data for banks from 2010 to 2019 was collected and analyzed using the data analysis, total assets and total deposits have a strong and positive relationship with retained earnings. This implies that total assets and total deposits can be used to predict the retained earnings of deposit money banks in Nigeria.

2.2.2 Net borrowed funds and earnings retention

A study done by Theresa (2015) on the effect of borrowed funds on retained earnings for oil and gas industry in Nigeria revealed that borrowed funds have a significant positive impact on earnings retention. Secondary data collected from 2002 to 2011 was analyzed by use of ANOVA and regression. In his recommendations, the researcher advises more borrowing for a company that is willing to increase its retained earnings made for investment.

To understand what determines retained earnings in pharmaceutical companies in India, Sohaib (2019) did a study that analyzed data from sixteen years for 24 pharmaceutical companies using a multiple linear regression model. From the findings, he concluded that borrowed funds have no significant impact on retained earnings in pharmaceutical firms.

The debt level has a negative significant impact on retained earnings. This is according to the study done by Yusof & Ismail (2016) on public companies which are listed in Malaysia. From the annual reports of 147 listed companies, data was obtained and analyzed using fixed and random effects, least squares model as well as random effects model.

2.2.3 Investors' funds and earnings retention

Baloch et al. (2015) sought to understand the impact of shareholders' funds on retained earnings. He collected data from financial statements analysis documents provided by the State Bank of Pakistan. The data for twenty-two firms was analyzed through a regression model and the findings showed that the investors' funds have no significant impact on retained earnings

Retention of earnings declines with an increase in foreign investor funds. This was the conclusion of Ezeoha & Okeke (2021) in their study on firm's earnings retention in the continent of Africa. The study employed descriptive and empirical methodology and it involved four hundred and forty-four listed firms. The data used was for the period from 2005 to 2018

The conclusion of the study by Thirumalaisamy (2013) is that there exists a negative association between investors' funds and earnings retention. The study concentrated on 149 low-growth companies profit profit-making companies. The data collected was investigated with the help of correlation and regression. The study argues that, when there pumping of more external funds to the company, level of retention of earnings diminishes.

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2.2.4 Dividend paid and earnings retention

Yusra et al (2019) studied the effect of retained earnings on dividend payout for the companies listed in Indonesia for the period 2012 to 2015. Data samples were obtained using a purposive method of sampling and the data analysis was done using probit and tobit regressions. In conclusion, they argued that dividend payout rate has a significant effect on retention of earnings.

Inyang et al (2020) sought to understand how dividend payout ratio matches up with retained earnings in Nigerian breweries. Their study employed least squares regression to analyze the secondary data that was collected on the Nigerian breweries. The study reviewed that dividend payout ratio did not have a significant relationship with retained earnings. The study finally recommended that businesses strike a balance between payout and retention ratios so that diversification funds can be made available at the same time giving return to shareholders in form of dividends.

Dividend payout ratio has got no relationship with retained earnings. This was the findings of Mulama (2014) in his research on 41 non-financial companies listed on the Nairobi stock exchange. Secondary data from published financial statements covering four years from 2009 to 2012 was collected and analyzed using multiple regression and SPSS. The research employed two research designs, longitudinal and cross-sectional designs.

3.0 Methodology

The study employed a quantitative research design. The population was comprised of all commercial banks in Kenya which totals thirty-nine banks. However, due to the unavailability of data from three banks, the census was conducted for the remaining thirty-six banks, which constituted the population for the analysis. Secondary data was collected from the commercial banks. Analysis was conducted on the financial data obtained from the thirty-six commercial banks in Kenya focusing on exploring the factors associated with bank size in influencing earnings retention decisions based on the available data set from the 36 commercial banks. Multiple regression analysis was conducted to examine the relationship between the independent variables and the dependent variable.

4.0 Results and Discussion

4.1 Descriptive Statistics

Before analysis, the whole data set was standardized by subtracting the mean from each variable value and dividing the solution by each variable's standard deviation. The mean and the standard deviation of the standardized data for each variable are shown in the table below.

Table 1: Mean and standard deviation of standardized data

	Mean	*Standard Deviation*
Cash at CBK and Property Assets	0.7301	0.9057
Net Borrowed Funds	0.3827	0.8291
Investors' Funds	0.4966	0.9084
Paid Dividend	0.1389	0.3458
Earnings Retention Ratio	0.4047	0.8400

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On average, the proportion of cash at the Central Bank and property assets is 73.01% of the total cash at CBK and property assets of the banks in the study, with a relatively high variability (standard deviation of 0.9057), indicating that this proportion varies substantially. The mean proportion of net borrowed funds is 38.27% of the total banks borrowed funds, with a relatively high standard deviation of 0.8291, indicating variability in the extent to which funds are borrowed.

On average, investors' funds represent 49.66% of the total funds, with a standard deviation of 0.9084, indicating variability in the proportion of funds contributed by investors across different periods. The mean proportion of payment of dividends is 13.89%, with a relatively low standard deviation of 0.3458, suggesting less variability in dividend payments across different periods.

The mean earnings retention ratio (proportion of earnings retained) is 40.47%, with a standard deviation of 0.8400, indicating variability in the extent to which earnings are retained for reinvestment or other purposes among different entities or periods. The mean and standard deviation provide insights into the financial composition and management practices of the five different indicators under consideration. The variability indicated by the standard deviations suggests that there may be factors that potentially influence these financial indicators that justify further analysis whose results are presented.

4.2 Empirical Results

Table 2 below indicates the regression results of the estimated model.

Table 2: Regression statistics

	Regression Statistics
Multiple R	0.913225
R Square	0.833979
Adjusted R Square	0.812557
Standard Error	0.368864
Observations	36

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	4	21.18795	5.296988	38.93097412	1.13856E-11
Residual	31	4.217891	0.136061		
Total	35	25.40584			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-0.14815	0.08111	-1.82658	0.077406	-0.314	0.017
Cash at CBK and Property Assets	0.27092	0.09237	2.93294	0.006264	0.083	0.459
Net Borrowed Funds	0.48836	0.08804	5.54704	0.000004	0.309	0.668
Investors' Funds	0.34780	0.08127	4.27950	0.000167	0.182	0.514
Dividend Paid	-0.03309	0.20276	-0.16317	0.871441	-0.447	0.380

The analysis gave an R-squared value of 0.834 which means an estimated 83% of the variation in retained earnings can be explained by variation in Cash at CBK, borrowed funds, Investors' funds, and Paid dividends.

The estimated model is as follows;

Earnings Retention (y) = - 0.148 + 0.271*(Cash at CBK and Property Assets) + 0.488 *(Net Borrowed funds) + 0.348*(Investors' funds) – 0.033*(Dividend paid)

The regression equation means that, when commercial banks in Kenya increase cash at CBK and property assets by one shilling, it will lead to a corresponding increase of earnings retention proportion by 0.271. Simultaneously, when commercial banks in Kenya increase borrowed funds by one shilling, this will increase of retained earnings proportion by 0.488. Concurrently, an increase of investor funds by one shilling will lead to an increase in retained earnings proportion by 0.348. Contrary to the other variables in this study, when dividends are paid there is a corresponding drop in retained earnings proportion by 0.033.

At a 5% level of significance, cash at CBK and Property Assets have positive significant positive impact on earnings retention as indicated by a p-value of 0.006. The other variable that matters in influencing retained earnings is the borrowed funds with a p-value of 0.00004. The p-value shows a significant positive influence of borrowed funds on retained earnings.

On investors' funds determinization on earnings retention for investment by commercial banks in Kenya, data findings show that an increase in Investors' funds leads to a significant positive increase in earnings retention as indicated by the p-value of 0.0002. On whether payment of dividends influences bank earnings retention, the study shows that there is an insignificant negative impact of dividend payment on earnings retention with a p-value of 0.87.

4.3 Summary of Findings

From the results, cash at CBK property assets, and the investors' funds were found to have a positive impact on retained earnings. Net borrowed funds and the payment of dividends were found to not affect earnings retention.

The positive significant influence of cash at CBK and property assets on earnings retention is in agreement with the findings of Parlor (2018) on developing countries and Masood (2018) in Nigeria but it differed with the findings of Offor (2023) on his research done in Nigeria and who concluded that total assets have a negative impact on earnings retention.

Net borrowed funds have a positive significant relationship with retained earnings and agree with the research findings of Theresa (2015) which concluded that borrowed funds have a positive impact on earnings retention but it disagrees with the findings of Sohaib (2019) on pharmaceutical companies which found that there exists no relationship between funds which a firm has borrowed and earnings retention. The findings are also in disagreement with the the conclusion of Yusuf and Ismail (2016) in Malaysia which fund that borrowed funds have a negative significant influence on earnings retention.

The finding of the study is that Investor funds have a positive relationship with the earnings retention of commercial banks in Kenya. This is not in agreement with the findings of the research done in Pakistan by Baloch (2015) which concluded that the investors' funds have no significant impact on retained earnings. The findings also differ from the findings of Ezeoha and Okeeke (2021) and the findings of Thirumalaisam (2013) who both found that investors' funds have a negative relationship with earnings retention. For any bank that needs to make more investments from retained earnings, it needs to factor in investors' funds as sources of its finance.

Data analysed in this study revealed that when a bank pays dividends there is a negative insignificant effect on retained earnings. The findings make payment and non-payment of dividends immaterial when it comes to banks' consideration of the factors that can increase earnings retention. Whether dividends are paid or not, earnings retention level will remain the same. The findings are in agreement with the findings of research by Inyang et al (2019) done in Indonesia and Mulama (2014) in Kenya which concluded that whether a company pays dividends or not, there is no significant impact on earnings retention. The findings are in contrast with the findings of Yusra et al. (2019) for research done in Indonesia which deduced that dividend payment has a significant positive effect on retention of earnings.

5.0 Conclusion

The study objectives were to find out, in commercial banks in Kenya, what effect Cash at the Central Bank of Kenya and property assets, Net borrowed, Investors' funds and dividends paid have on retained earnings. In conclusion, the study found that apart from dividend payment which has no relationship with earnings retention the other three parameters have a positive impact on retained earnings. For any bank that needs to use more retained earnings for its expansion in the future, it ought to consider increasing its cash with CBK and property assets, borrowed funds, and the amount investors pump into the business.

6.0 Recommendations

From the findings, the study recommends that regulators and bank managers develop policies that will lead to:

i. Commercial banks in Kenya Increase the cash at CBK and Property Assets because that eventually leads to an increment in earnings retention which will be utilized in their expansion.

ii. Upsizing of net-borrowed funds by commercial banks in Kenya since more borrowed funds leads to more earnings retention.

iii. Expansion of Investors' funds by Commercial banks in Kenya because of its positive effect on earnings retention.

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