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Financial Characteristics and Firm Value of Commercial Banks Listed at Nairobi Securities Exchange, Kenya

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Abstract:
Firm value is not only critical for ascertaining the market value of the firm, but it also enhances industry value and the economy's prosperity. There exists substantial empirical literature in Kenya on the link between a company's value and financial characteristics. However, the studies fail to provide a strong link between value of listed commercial banks and their financial characteristics. Hence, the purpose of the study was to assess the relationship between financial characteristics and firm value of commercial banks listed at Nairobi Securities Exchange, Kenya. The specific objectives were to determine the effect of loan book value, shareholders funding, return on investment and dividend policy on firm value of commercial banks listed at the NSE in Kenya. Positivism philosophy and causal research design were adopted. Eleven publicly listed commercial banks were studied. Panel data was collected from published audited financial statements of the commercial banks studied for year 2014 to year 2018. Data was analyzed using descriptive statistics, Pearson's simple correlation and panel regression analysis. The study found that loan book value had no significant effect on firm value of commercial banks listed at the NSE ($p = 0.462$). Besides, the study found that shareholders had no significant effect on firm value of commercial banks listed at the NSE ($p = 0.988$). Moreover, the study found that dividend policy had no significant effect on firm value of commercial banks listed at the NSE ($p = 0.610$). Further, Return on Investment had a significant positive effect on firm value of commercial banks listed at the NSE ($p < 0.05$). Consequently, the study recommends that commercial banks critically assess return on investment on projects before undertaking them to enhance their value. Moreover, payment of dividends should be considered after the firm has taken up all high yielding investments. In addition, commercial banks should focus more on quality of loan book rather than the size of the loan book.

Keywords: *Firm value, Dividend policy, Loan book value, Shareholders' funding and Return on Investment*

1. Introduction and Background

Firm value is a measure that indicates the fair economic worth of an enterprise (Patrice, 2013). According to Thakor (2014), it is the summation of all the claims of every claimants including shareholders (common and preferred) and creditors (unsecured and secured). In measuring firm value, different approaches are applied when assessing value of private and public companies. Measuring the value of private firms is complicated and is based on a variety of assumptions. Various methods applied in valuing private firms include comparable company analysis, equity valuation metrics and discounted cash flow methods. Conversely, valuation of a public company is easier. Tobin's Q is the most prevalent measure of market value of public companies. This is a ratio of the market value of a publicly listed company to its book value. It is important to establish the factors that influence firm value so as to effectively manage them.

In the US, Tailab (2014) indicate that firm value is dictated by age of the firm, leverage, growth rate and liquidity. Other factors that influence firm value include sales revenue and management efficiency. This was supported by Gharaibeh and Qader (2017) who observes that firm value in Saudi Arabia is affected by the firm's growth opportunities, profitability, firm's solvency and market capitalization. Moreover, Purwohandoko (2017) observed that value of the firm is determined by capital structure, return on investment of the firm's projects and the risk management competence of the firm leadership.

In Indonesia, Purwohandoko (2017) found that for companies listed in the country's stock exchange, firm value was influenced by capital structure, size of the firm, profitability and growth of the company. This was later supported by Sabrina, Witjaksono and Lusianah (2018) who observed that firm value of public companies in Indonesia was largely influenced by capital structure, investment decisions and dividend policy. In Vietnam, Dang, Vu, Ngo and Hoang (2019) indicated that key positive determinants of firm value were profitability and firm size while capital structure (debt-equity ratio) was a negative influencer of firm value.

Ibrahim (2017) observed that in Nigeria, the value of companies quoted in the Nigerian Stock Exchange (NSE) was determined by company size, profitability, leverage and liquidity. Other factors are growth potential, age of the company and asset tangibility. This was associated with factors determining firm value in South Africa. Abata, Migiro, Akande and Layton (2017) established that debt to equity ratio (which was the capital structure proxy) was negatively associated with Tobin's q.

In Kenya, few studies focus on factors influencing value of commercial banks. Most of the studies focus on factors influencing financial performance, dividend policy and capital structure of commercial banks (Muhindi & Ngaba, 2018). Further, Ayako and Wamalwa (2015) established that market capitalization, cashflows, dividend pay-out ratio, capital structure and assets were the key internal factors influencing value of commercial banks. The study did not focus on key factors such as loan book value, shareholders funding, return on investment and bank classification which will be considered in this study. According to Simon (2014) financial characteristics of commercial banks focusses on sources and uses of funds of the commercial banks. These include aspects such as returns from the bank's investments, shareholders' funds, value of the loan book and dividend pay-out. Moreover, Messbacher (2014) indicates financial features to be the firms' current ratio, profits per share, dividend pay-out ratio or equity of a firm.

The Kenyan banking sector history dates back to pre-independence period (Ogola, 2014). According to Kenya National Bureau of Statistics (2015), by the end of 2014, there were 43 operational commercial banks. Thirty of them were majority owned by local investors whereas 13 are foreign owned (Kenya Bankers Association, KBA, 2016). The locally owned commercial banks comprise of three banks with public shareholding and 27 are owned by private investors (NSE, 2016). The Kenyan commercial banking sector is vital for the economy (Muasa, 2014). The key role of commercial banks in Kenya is financial intermediation and deepening (Muhindi & Ngaba, 2018). Commercial banks get finance from surplus units and provide loanable funds to deficit units. This enables those with surplus funds to provide investment and consumption capital to those with deficit. The Kenyan banking sector has reported much progress in the past 10 years (2010 – 2019). In the period from 2002 to December 2014, the banking sector recorded considerable development amongst them: net assets increased to KES 2.35 trillion from KES 456.7 billion; deposits grew to KES 1.76 trillion from KES 360.6 billion; transactions online improved to KES 1.27 trillion from KES 222.8 billion; Profit gross of KES 5.8 billion boosted to KES 107 billion; The variety of financial institution accounts has improved to 17.6 million from 1.9 million accounts, and also; deposit insurance has progressed to cover completely 94% of the overall bank account (KBA, 2016).
This phenomenal development has actually been supported by the growth of financial institutions into brand-new market sections, sensible risk management and also enhanced economic potential customers underpinned by a secure macroeconomic setting (Reserve bank of Kenya, CBK, 2016). There is expectation that the banking market will certainly proceed on this growth trajectory (IMF, 2017). Ongoing reforms as well as efforts by the Kenyan Government and also CBK serve to more propel the banking sector to brand-new frontiers of monetary addition for more Kenyans to access these services (IMF, 2017). This is anticipated to push the financial institutions to more growth and enhanced efficiency.

2. Statement of the Problem

Market capitalization in the global banking sector has increased from 5.6 trillion Euros in 2016, to 6.3 trillion euros in 2018 (Dang et al., 2019). In Kenya, market capitalization of the listed banks improved from KES 625 billion in 2014 to KES 669.5 billion in 2018 (Cytonn, 2019). This is just an increase of seven percent within 5 years. Company value of any kind of company not just plays the role of establishing the market value of that firm, but additionally leads in the direction of enabling growth of the whole sector which eventually leads towards the general success of the economy. Return on investment (ROI), loan book, shareholders funding and dividend policy among others are some of the vital characteristics in the banking sector. Chen and Hambrick (2014), and Mintzberg (2013) provide a summary and overview of the importance of financial characteristics.

There exists substantial empirical literature in Kenya on the association between value of the firm and financial characteristics. However, the studies fail to provide a strong link between value of quoted commercial banks and their financial characteristics. For instance, Mehrjardi (2015) studied the how bank specific features influenced value of Kenyan commercial banks for a period of 5 years (2011 to 2015) and found a strong association between firm size and ROE. However, the study did not consider loan book value, shareholders funding, return on investment, dividend policy, nor the moderating influence of bank classification which the current study focusses on. Mbogo (2014) did not find a significant relationship between portfolio size and firm value. The findings cannot be generalised since this was a case study.

Muriithi (2013) investigated the relationship between market valuation and firm value of investment banks in Kenya and found a significant relationship between the two variables. However, the study failed to consider other financial aspects such as loan book value and return on investments. Kipkurui (2012) studied the relationship between shareholders funding and firm value of insurance companies in Kenya and did not find any strong relationship between the two variables of interest. The study did not focus on commercial banks but focused on the insurance forms. Moreover, Mutie (2013) studied the relationship between value of the firm and prior period dividends of publicly listed NSE firms using descriptive research design and found no significant association between dividends and firm value. Gichura (2014) assessed the determinants of firm value of five micro-finance institutions in Kenya and the findings documented management efficiency, macro economic factors and liquidity. Despite this empirical evidence, the studies fail to document how value of commercial banks quoted in the NSE in Kenya is affected by significance and nature of effect of the key financial characteristics.

There exist methodological gaps in the studies reviewed. For instance, most of the studies reviewed, such as, Mehrjardi (2015), Gichura (2014) and Chen and Hambrick (2014) used pooled regression analysis methods despite using panel data. In analysing panel data, panel data model is more appropriate that pooled regression analysis. Hence, this

study applied panel data analysis method to answer the question; what is the effect of loan book, shareholders' funding, return on investment and dividend policy on firm value of listed commercial banks at the Nairobi Securities Exchange in Kenya? Therefore, the study sought to evaluate the effect of financial characteristics (loan book, shareholders' funding, return on investment and dividend policy) on firm value of commercial banks listed at the Nairobi Securities Exchange in Kenya.

*Null hypotheses were formulated and tested at a significance level of 0.05.

3. Review of Literature

3.1. Theoretical Review

This study was based on the loanable funds theory, financial intermediary theory, stakeholder theory and transaction cost theory. Swedish economist Knut Wicksell (1926) developed the loanable funds theory. According to this theory, interest rate is figured out by the need for and also supply of loanable funds (Harvey, 2014). This concept presumes that need for loanable funds develops for three objectives; Financial investment, hoarding as well as dissaving. The major source of need for loanable funds is the demand for financial investment (Thomson, 2013). The rate of interest determines the cost of acquiring such funds for investment purposes (Ceaser, 2014). If the interest rate is reduced, the demand for loanable funds for financial investment functions will certainly be high and vice- versa (Mason, 2015). The loanable funds theory was used in the study as it connects finances issued by a commercial bank to its market price (Shipho, 2014). Here, loan providers again do not have to abstain from usage as well as not also from holding cash since they create new credit. According to loanable theory, the act of conserving is not identical with an act of giving cash. Saving is an economic unit's increase in total assets, i.e. a rise in its net financial properties (financial conserving) or its tangible assets (devices, residences among others) (Ngila, 2014).

Financial intermediary theory by Allen and Santomero (1996) is based on transaction costs and asymmetric information. According to Allen and Santomero, an intermediary act as a middle entity between two parties in an economic transaction. These could include commercial banks, investment financial institutions, mutual funds and also pension plan funds. Fundamentally, economic intermediation is regarding tempting financiers to get securities supported by financial funds whose threats the investors can not entirely examine (Diamond, 2014). Financial intermediation theory explains the result of company's finances, the returns on its investments and also the rewards it receives through its ability to provide economic intermediation services. As growths in information innovation, deregulation, deepening of monetary markets, amongst others tend to reduce purchase expenses, commercial banks are able to give intermediation much better (Leland, 2014).

Transaction cost theory (TCT) is part of corporate governance and agency theory (Miller, 2013). It is based on the principle that costs will arise when a firm or individual contracts another firm to do something on their behalf (Williamson, 2014). This theory serves in this research study as it links return on investment to firm value. When a firm is able to manage expenses in its financial investments, it is able to boost its ROI. These presumptions clarify why firms might encounter superior costs for market-based purchases as well as why firms might be reasonably extra effective than markets at arranging deals. The company will pick the investments from the various options among the organizational options that decreases expenses and costs of manufacturing (Allan, 2016).

Stakeholder theory is concerned about how supervisors and stakeholders actually behave and also exactly how they see their activities and duties (Friedman, 2006). The theory manages how supervisors must act if they want to flavour as well as help their own interests (Preston, 2012). In some literature the very own rate of interest is conceived as the passions of the organization, which is typically to maximize earnings or to maximize investor value. This implies if supervisors deal with stakeholders in accordance with the stakeholder concept the company will be a lot more effective in the lengthy run (Donaldson, 2011). This theory supported this study since the shareholders make the decisions of the management and have control through their voting rights. The theory hence links shareholder funding and dividend policy to firm value as these two are means of ensuring that the interest of shareholders as the main stakeholders are taken care of for the firm to enhance its value.

3.2. Empirical Review

Empirical studies on financial characteristics and firm value were reviewed with the objective of documenting research gaps. Uchendu (2013) examined the influence of loan book value on value of Nigerian commercial banks. Findings from the study established significant association between loan book value and bank value. However, this contradicted the findings of Chun (2011) who established that loan book value had no significant influence on firm value of commercial banks.

Kim and Bae (2016) assessed the relationship between company's qualities, such as loan book value, on company value. The findings show that the predisposition towards loan book value comes to be stronger as the financial obligation ratio rises, as well as the loan proportion reduces. These findings concur with the findings of Hong (2016) who interrogated the association between loan equilibrium from financial statements and corporate value. the study established that companies with high loan book values conducted conventional audit procedures. The outcomes of the study further revealed that the loan value had a significant influence on the corporate value.

Kane and Unal (2014) investigated the architectural and temporal variant that could be applied to assess loan book value and performance of financial companies. In their version, they attempted to capture the concealed reserves of United States financial firms. Kane and Unal, observed that concealed capital (un-booked funding) exists whenever the bookkeeping practices of a company's total assets splits from its financial value. That concealed capital can emanate from

off balance-sheet and on-balance-sheet sources. Kane and Unal argued that the book value or accounting value of a financial institution's resources and loan value had a significant effect on its corporate or market value.

Onaolapo (2014) utilized CAMEL score system and established that shareholders financing boosted the firm value of the banks. This finding was collaborated by Sani (2014). Making use of a regression analysis, Sani discovered a favourable and also substantial relationship between investors funding policy and financial development in Nigeria. these findings were similar to the ones in South Africa by Imala (2016) which revealed that investors' funds have actually reinforced the deposit money financial institutions and also stimulated the company value of South African economy. Similarly, the effect of shareholder funding on firm value remains a key issue in the banking sector (Berle & Meansi, 2014). Concentrated ownership is positive for firm value maximization (Nakamura, 2014). However, the association between shareholder funding and firm value is not undisputed. Thomsen (2013) found a negative association between firm value and block holder ownership in Europe.

Nyong (2014) assessed various return on investment indicators and revealed that ROI exerted positive and statistically considerable influence on the company value of financial institutions in Nigeria. There were contradicting findings by Shanab (2015). The study by Shanab (2015) focussed on the influence of return on investment and the risks associated with the firm on the value of shares for a sample of 38 industrial public businesses in Jordan that had been quoted on Amman Securities Exchange for the duration of 2000 to 2007. The results of the research study indicate that return on investment has no effect on market value of the firms quoted in Amman Securities Exchange.

Neeley and Wheelock (2013) investigated the factors that influence ROI of commercial banks and further assessed how return on investment affects market value or share value of the commercial bask. The findings indicated that ROI positively influenced market value of commercial banks. Similar findings can be found in Asimakopoulos, Samitas and Papadogonas (2013) that companies' return on investment is positively related to the market value of the firms. Further, the findings by Bathroom (2014) support the outcome of positive relationship between ROI and firm value.

Regarding the role of dividend policy, Thaher (2013) established that dividend pay-out had a positive effect on value of the firm. Likewise, Kale and Noe (2014) determined that the reward policy of a company essentially demonstrates how stable its future earnings are. Similar studies include Thaherv (2013) and Benartzi, Nissim and Ziv (2016). Moreover, Amir and Ziv (2014) established a positive correlation between dividend changes and value of the firm.

Uwalowa and Anijesushola (2015) investigated the influence of dividend pay-out ratio and value of firms listed in the securities exchange in Nigeria. Parameters considered in the study included dividend pay-out ratio, form size and firm ownership. Data for 50 firms for five years was collected and used in the study (2006-2010). The study findings indicate that dividend pay-out ratio had a statistically strong and positive influence on value of the listed of Nigerian firms.

4. Methodology

The study was anchored on positivism philosophy. the study adopted causal research design which concentrates on establishing the cause-effect relationship amongst the study variables. Chandra and Sharma (2013) indicate that causal design enables an investigation to establish the effect of some variables on others. Target population for the study was the 11 publicly listed commercial banks at the NSE. The study was a census of all the 11 listed commercial banks. The study used a secondary data collection sheet to collect the panel secondary data from published audited financial reports of the 11 commercial banks listed at Nairobi securities exchange (Cytonn, (2019). This secondary data collection sheet was structured to collect data for a period of five years from 2014 to 2018.

Panel regression model was used to analyse the collected secondary data. Panel data analysis contributes to improved precision in approximating parameters of the regression model, provides much better evaluation of an event by including individual and also time dimensions (Hsiao, 2003). The basic model was:

$FV_{it} = \beta_0+\beta_1 LBV_{it}+\beta_2 SF_{it}+ \beta_3 ROI_{it}+ \beta_4 DP_{it}+\varepsilon_{it}$

Where:

FV_{it} = Firm Value for Commercial Bank i at time t

$\beta 0$ = Intercept

β_1 - β_4 = Coefficients

LBV_{it} = Value of loan book of bank i at time t

SF_{it} = Shareholders' funding of Bank i at time t

ROI_{it} = Return on Investment of Bank i at time t

DP_{it} = Dividend Policy of Bank i at time t

ε = error term for bank i at time t

To establish which of the two panel models is appropriate for the data, a Haussmann test was conducted. The POLS model was selected. Diagnostics tests conducted for the regression included multicollinearity test, normality test, heteroscedasticity test, stationarity test and autocorrelation test. All the tests were not violated and the assumptions of the tests were met.

5. Results and Findings

The purpose of the study was to establish the effect of financial characteristics on firm value of commercial banks listed in the NSE. First, the descriptive statistics of the variables under study for all the 11 commercial banks are provided in Table 4.1. The average firm value for the commercial banks was 1.2136. This indicates that on average, the market value of the assets owned by the commercial banks was 21.36% higher than the book value. Moreover, the average loan book value (LBV) was 0.8545. This shows that on average, loan book in the commercial banks was 85.45% of the deposits held by the commercial banks. Results also established that average shareholder's funds (SF) was 0.1535 indicating that

shareholders funds were 15.35 percent of the assets owned by the banks on average. Further, average return on investment (ROI) was 0.1659. This indicates that the average returns on shareholder funds was 16.59% in commercial banks. Lastly, the average dividend pay-out (DP) for the commercial banks was 0.3615. This shows that most of the commercial banks paid 36.15% of their profits as dividends.

Variable		Mean	Std. Dev.	Min	Max	Observations	
FV	overall	1.213636	.6183621	.19	2.9	N =	55
	between		.4604605	.412	1.874	n =	11
	within		.431339	.6796364	2.239636	T =	5
LBV	overall	.8544631	.1918918	.4832703	1.407213	N =	55
	between		.1855279	.5728928	1.304673	n =	11
	within		.0703672	.7221227	1.002215	T =	5
SF	overall	.1534525	.0301341	.0607145	.1850876	N =	55
	between		.0285403	.0751266	.1730564	n =	11
	within		.0124036	.1103292	.1776337	T =	5
ROI	overall	.1658982	.0849853	-.1481816	.3225578	N =	55
	between		.0753079	.013263	.2720334	n =	11
	within		.0443995	.0044535	.2611505	T =	5
DP	overall	.3614923	.2517941	0	.9722465	N =	55
	between		.2337178	0	.753797	n =	11
	within		.1132366	-.0184369	.9538095	T =	5

Table 1: Descriptive Statistics
Source: Research Data, 2019

The study conducted a correlation analysis to asses the relationship between loan book value (LBV), shareholders funding (SF), ROI, dividend pay-out ratio (DP) and firm value (FV). The study results indicate that loan book value had negative, weak and insignificant relationship with firm value of commercial banks (r = -0.1078, p = 0.4336). The study findings also indicate that shareholders' funding had a moderate and significant relationship with firm value of commercial banks (r = 0.3291, p = 0.0142). Besides, study results showed that ROI had a strong positive relationship with firm value of commercial banks (r = 0.7400, p < 0.01). Further, results show that dividend pay-out rate had a moderate and significant relationship with firm value of commercial banks (r = 0.3395, p = 0.0112).

	LBV	SF	ROI	DP	FV
LBV	1.0000				
SF	0.3523 0.0083	1.0000			
ROI	−0.0461 0.7381	0.4606 0.0004	1.0000		
DP	0.0575 0.6767	0.5081 0.0001	0.4019 0.0024	1.0000	
FV	−0.1078 0.4336	0.3291 0.0142	0.7400 0.0000	0.3395 0.0112	1.0000

Table 2: Correlation Matrix
Source: Research Data, 2019

The POLS model was run with the independent variables being loan book value (LBV), shareholder's funds (SF), return on investment (ROI) and dividend pay-out (DP). The dependent variable was firm value. The results of the model summary are presented in Table 3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.556	.520	. 42831347

Table 3: Model Summary
A. Predictors: (Constant), Loan Book Value, Shareholder's Funds, Return on Investment, Dividend Pay-Out
Source: Research Data, 2019

The results in Table 3 show that that R (correlation coefficient) is 0.745. This is a strong relationship indicating the all the four independent variables jointly had a strong positive relationship with firm value. The implication of these findings is that when all the variables are considered together, they are positively and directly related with firm value. Moreover, the findings show that the adjusted R squared of the model was 0.520. This indicates that the 52% of the change in firm value of the 11 commercial banks included in the study was explained by the four independent variables included in the study (loan book value (LBV), shareholder's funds (SF), return on investment (ROI) and dividend pay-out (DP)). The

remaining 44.4% (unexplained variance) of the change in firm value could be explained by other variables that were not included in the model.

The study derived the analysis of variance (ANOVA) table which shows the fitness of the model. The ANOVA is presented in Table 4.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.475	4	2.869	15.638	.000[b]
	Residual	9.173	50	.183		
	Total	20.648	54			

Table 4: Analysis of Variance
Source: Research Data, 2019
a. Dependent Variable: Firm Value
b. Predictors: (Constant), Loan book value, shareholder's funds, return on investment, dividend pay-out

The study results presented in Table 4 indicate that the model was statistically significant and a good fit to the data ($f = 15.638$, $p < 0.05$). These findings indicate that firm characteristics are a good predictor of firm value of the firms studied.

The study established the significance of the independent variables on the dependent variable. This was derived by establishing the coefficients and p values. The results are presented in Table 5.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.520	.350		1.485	.144
	Loan book value	-.250	.337	-.077	-.741	.462
	Shareholder's funds	-.040	2.623	-.002	-.015	.988
	Return on investment	5.196	.813	.714	6.390	.000
	Dividend pay-out	.142	.277	.058	.513	.610

Table 5: Effect of Financial Characteristics on Firm Value
a. Dependent Variable: Firm Value
Source: Research Data, 2019

The extracted regression function from the results in Table 5 is;

$FV_{it} = 0.520 - 0.250LBV_{it} - 0.04SF_{it} + 5.196ROI_{it} + 0.142DP_{it}$

Where:

FV_{it} = Firm Value of bank i at time t
LBV_{it} = Value of loan book of bank i at time t
SF_{it} = Shareholders funding of bank i at time t
ROI_{it} = Return on investment of bank i at time t
DP_{it} = Dividend policy of bank i at time t

The results in Table 5 show that loan book value had a negative effect on firm value of commercial banks listed in the NSE ($\beta = -0.2496$). The results further show that loan book value had an insignificant effect on firm value of commercial banks listed in the NSE ($t = -0.74$, $p > 0.05$). These results indicate that change in the loan book value is not expected to have a significant effect in firm value of the commercial banks. The study results (Table 3) indicate that shareholders funds had an insignificant effect on firm value of commercial banks listed in the NSE ($t = -0.02$, $p > 0.05$). These results indicate that change in the shareholder's funds is not expected to have a significant effect on the firm value of the commercial banks.

The findings from the study (Table 5) indicate that return on investment had a significant effect on firm value of commercial banks listed in the NSE ($t = 6.39$, $p < 0.05$). These results indicate that when return on investment of commercial banks changes, firm value of the commercial bank is expected to similarly change significantly. Lastly, the study findings reveal that dividend policy of the commercial banks did not have a significant effect on firm value of commercial banks listed in the NSE ($t = -0.02$, $p > 0.05$). These results indicate that change in the dividend policy of commercial banks is not expected to influence the firm value of the commercial banks significantly.

The study findings indicate that loan book value had no significant relationship with firm value of commercial banks. Moreover, loan book value had no significant effect on firm value of commercial banks listed in the NSE. The findings also indicate that shareholders' funding had a moderate and significant relationship with firm value of commercial banks but had no significant effect on firm value of commercial banks. Further, ROI had a strong positive relationship with firm value of commercial banks while it had a significant effect on firm value of commercia banks. Further, results show that dividend pay-out rate had a moderate and significant relationship with firm value of commercial banks but had no significant effect on firm value of commercial banks.

6. Discussion

The results show that loan book value had a negative but insignificant effect on firm value of commercial banks listed in the Nairobi Securities Exchange. These results do not support loanable funds theory which hypothesizes that when a financial institution has high levels of loanable funds, its interest increases which is expected to have a positive effect on financial performance and firm value. Moreover, the findings contradict the findings by Kim and Bae (2016) that loan book value has a positive effect on firm value of commercial banks. However, the study findings disagree with the findings by Uchendu (2013) who established that loan book value did not have a significant effect on value of Nigerian commercial banks. Besides, the findings agree with the findings by Ahmed et al. (2011) who established that in Pakistan, loan book value do not have a relationship with firm value of microfinance institutions.

On shareholder's funds, the study findings show a negative but insignificant effect on firm value of commercial banks listed in the NSE. These findings contradict the findings by Onaolapo (2014) and Sani (2014) who found a positive effect of shareholder funding on value of commercial banks in Nigeria. However, the study findings concur with the findings by Imala (2016) who studied the effect of shareholder funding on firm value amongst the banks quoted under Johannesburg Stock Exchange and found that shareholder funding did not have any significant influence on value of the commercial banks. Similarly, other studies have found shareholder funding to have no significant effect on firm value. These include studies Berle and Meansi (2014), Nakamura (2014) and Thomsen (2013).

The study results indicate that return on investment (ROI) had a significant positive effect on firm value of commercial banks listed in the NSE. These findings support previous findings by Nyong (2014) and Ahmad (2013) who had established that ROI had a positive effect on value of listed commercial banks in Nigeria. Moreover, the findings support the findings by Shanab (2015) who established that ROI was positively associated with value of listed firms in Jordan that had been quoted on Amman Protection Exchange for the duration of 2000 to 2007. Other studies with similar findings include Neeley and Wheelock (2013), Asimakopoulos et al. (2013), Bathroom (2014), Barucci (2014) and Thygerson (2014). These studies had similar findings indicating that the average ROI of firms was positively associated with firm value of the companies.

The study findings reveal that dividend policy (DP) of the commercial banks had a positive but insignificant effect on firm value of commercial banks listed in the NSE. These findings contradict the findings by Thaher (2013), Kale and Noe (2014), Benartzi et al. (2016), Amir and Ziv (2014) Malcom and Wurgler (2014) and Amidu (2014). All these studies had previously established that dividend policy has an effect on firm value. However, there are other studies with contradicting findings such as Dhananai (2015), Uwalowa and Anijesushola (2015), Abunyang (2015) and Jensen (2014) which had findings that pointed to dividend policy irrelevance in firm value.

7. Conclusion and Recommendations

The study concludes that that loan book value, shareholders funds and dividend policy are not key factors is explaining or determining firm value of commercial banks listed in the NSE. This conclusion raises key questions demonstrates that the capital raised by shareholders in the banks, the size of their loan book and their dividend policies are not essentially pivotal in explaining firm value of the commercial banks. Moreover, the study concludes that return on investment is a key factor in explaining or determining firm value of commercial banks listed in the NSE. Return on Investment (ROI) shows the efficiency of the firm's investment compared to other investment portfolios available in the market. This indicates the value of returns availed to the commercial bank considering its costs of the investments. When the ROI of a commercial bank is high, the net profit of the bank is also expected to be high. This, in turn, is expected to lead to improved value of the commercial bank in the long term.

From the study results the following recommendation are made. First, commercial banks should ensure that they invest in projects that have a good return on investment to ensure that the average return on investment to shareholders is enhanced. Secondly, the commercial banks should ensure that dividends are only paid from free cashflows when the commercial banks have reinvested profits to give more loans or undertake projects with high return on investments. The study also recommends that when issuing new loans, management of commercial banks should ensure that strict credit assessment is conducted to ensure that asset impairment is minimized. Commercial banks should seek for more shareholder funds to invest in any profitable projects they have. Commercial banks should be monitoring the operating environment to scan for any profitable projects and seek funding to undertake such projects which could enhance their firm value.

The study recommends to policymakers such as CBK to closely monitor the financial characteristics of the commercial banks to ensure that they adhere to laid down guidelines and best interests of the shareholders. Besides, NSE should ensure that it remains an efficient market where all shares traded exhibit all the information available about the commercial banks to provide reliable information about the valuation of the commercial banks for shareholders and potential investors. Further, the study recommends to scholars, academicians and researchers to continue in their quest in unearthing financial characteristics that could influence firm value so as to provide more evidence that bank management can use to enhance firm value.

8. Contribution to Knowledge

This study contributed to knowledge through its originality in using panel data regression technique to establish the influence of financial characteristics on firm value of commercial banks. Unlike previous studies, the study also included bank classification as a moderating variable. This informed the role played by bank classification in the relationship between firm value and financial characteristics. Besides, the study supported the dividend irrelevance theory by showing empirically that dividend policy has no effect on firm value of commercial bank. Moreover, the study

underlined the significance of return on investment on firm value. This provides evidence to management in commercial banks on what aspects of financial characteristics they should focus on to enhance the firm value of their commercial banks.

9. Areas for Further Research

Based on the results from this study, the conclusions and the recommendations made, this study indicates two areas for further research. First, the study established that loan book value, shareholder's funding and dividend pay-out did not have an effect on firm value of commercial banks listed in the NSE. A similar study should be conducted to establish the effect of these factors on financial performance of other non-listed commercial banks. Moreover, a study on the effect of shareholder's funding and dividend pay-out should be conducted on non-financial firms listed in the NSE to see how such findings compare to the findings of this study. The study also indicates a further study on the moderating role of bank asset base on the relationship between firm value of the commercial banks and financial characteristics. This study measured bank classification by tier category. A more precise measure would be the assets commanded by the commercial banks. This is the measure used by CBK in classifying the commercial banks into tiers.

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