

How Working Capital Affects the Profitability of Commercial Banks: Case of Afriland Cameroon

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Abstract

This study seeks to assess the effect of working capital management on the profitability of Afriland First Bank Cameroon. Time series data from 2002 to 2013 was extracted from the financial statement of the bank, Correlation analysis and ordinary least square regression was used to determine how working capital affect profitability. The findings of this study show that working capital management effectively influences the performance of Afriland First Bank. The analysis show that customer deposits, the size of the bank, outstanding expenditure and return on assets all have a positive impact on bank profitability and are statistically significant, however, an increase in reserves leads to a reduction of profitability while other factors such as leverage have a positive effect on bank profitability.

Keywords: Profitability; Working capital management; Return on assets

Introduction

Proper management is required in order to make good use of opportunities and minimize risks. Among the assets of a company we have working capital. With growing research on how to increase profitability of firms, working capital management have emerged as one of the important factors that determines the profitability of businesses worldwide and in the banking sector in particular. Rational decisions have to be taken in order to get maximum returns from capital employed (long term investment and working capital). Conventional analysis of the contribution of capital to profitability of firms dwelled more on how long term investment affect profitability, little attention is given on how the management of the daily income and expenditure of the firms affects its profitability, very little research on how working capital management affects the profitability of banks have been empirically verified [1], this paper seeks to fill this void.

Working capital simply means the resources which a firm has at hand to run its daily operations. The successful management of working capital requires a well-designed policy and daily follow-up. Brigham and Houston [2], highlights that working capital management involves both setting working capital policy and carrying out that policy in the day-to-day operations. It equally involves making appropriate investments decisions in cash, receivables and inventories as well as the level and mix of short-term financing. Robert Alain H [3] defines working capital as a company's surplus of current assets over current liabilities which measure the extent to which it can finance any increase in turnover from other fund sources. The desire to maintain an optimal balance of each of the components of working capital is mandatory for any profit maximising firm, by ensuring that firms operate with sufficient fund (cash flows) that will service their long term debt and satisfy both maturing short term obligation and upcoming operational expenses.

Working capital has become an important element in investment decisions since the amount and day to day management has become an important determinant of profitability [4]. However, significant consideration is not often made of working capital when financing decisions are made by firms because it involves investment and financing in the short term. Companies often desire to maintain liquidity and operational efficiency by minimizing their investment in working capital [5].

Firms make short term financial decisions just about every day like where to borrow? Where to invest cash? How much liquidity to have in hand? How to manage liquidity? [6]. The problem comes at the level where the question as concerns the impact of such decisions is asked. This extends also to the impact on the solvency of a firm in the long run. Solvency is the relative excess of value of assets over the liabilities of a firm. This is crucial because if the firm is profitable, then it will have resources to meet up with its liabilities and thus will be solvent. But if the company is not profitable there will be an excess of liabilities over assets and thus the firm will be insolvent due to the inability of the firm to meet up with its liabilities when they come due. This situation if not solved may further lead to an eventual bankruptcy of the firm.

Planning and controlling current assets and current liabilities such that the risk of short term default is avoided and over holding of excess liquidity with high opportunity cost are the objectives of efficient working capital management [7]. Working capital management has as objective to contribute to the firm's goal of value maximization by managing current assets so that marginal returns on investment in these assets is equal to or greater than the cost of capital utilized to finance them [8]. Working capital decisions can and should be made in such a way as to maximize shareholder wealth [6]. The management of working capital tends to be neglected because employers (managers) and employees have in mind that working capital has little to contribute to organizational performance but rather tend to focus on profitability.

Working capital is linked with both the liquidity and profitability of a company [9]. Working capital ascertains a company's ability to continue its operations without endangering liquidity. Making profits is no doubt one of the main objectives but it must not be at the expense of liquidity which is the life of a company. It is important to note that

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liquidity in the banking sector is more specific, banks have as principal objective to give out money as loans and receive interests in return, holding money in liquid form does not give banks any revenue, so holding a lot of liquidity would lead to a reduction in profitability while holding very small quantity of liquidity can lead to a bankruptcy problem, thus an efficient management of liquidity is imperative.

However, inefficient management of working capital may damage business profitability. A company that does not make efficient use of its short term assets turn to receive sub-optimal returns from these assets and thus sub optimal profits, when such a company does not manage its short term liabilities well she may run into debts that could affect its performance in the long run and may not be able to meet its obligations when they come due [7]. It is in line with this that this research is out to study the effect of working capital management on profitability in the banking sector. This study seeks to answer the following questions: Do customer deposits affect profitability? How does loans portfolio effect on profitability? What is the effect of reserves on profitability?

Conceptual Framework and Literature Review

Concept of working capital

Just as working capital has several meanings, firms use it in many ways. Thus, the most crucial use of working capital is providing the ongoing investment in short-term assets that a company needs to operate.

Working capital refers to investment in current assets which are required to carry out the operations of a business [10]. Working capital also called circulating capital or short term capital is capital which is needed for investing in current assets. Von Horne and John H [11] define working capital as “the amount of current assets that have not been supplied by current short term creditors”. Kaveri [12] refers to working capital as the difference between current assets and current liabilities. Hence the concept of working capital can be explained through two major angles as demonstrated below (Figure 1). From the value point of view, working capital can be seen as gross working capital and net working capital as explained.

Gross working capital: It refers to a company’s investment in current assets. Current assets are those assets which could be converted into cash within an accounting year. Current assets include trade debtors, prepayments, cash balances just to name a few. Khan and Jain [13] defines gross working capital as the amount of funds invested in current assets that are employed in business and focuses attention on how to optimise investment in current assets and how current assets are financed.

Net working capital: It is the difference between current assets are those assets that can be converted into cash within a year and claims that are expected to mature for payment within an accounting year, thus the difference between current assets and current liabilities. Current liabilities include bill payable, accruals, trade creditors, short term loans, outstanding expenses. A positive working capital means that the company is able to pay off its short term obligations while a negative working capital means that the company is not able to meet its long term obligations. From the time perspective, the term working capital can be divided into permanent and temporary as explained.

Permanent working capital: It refers to the hard core working capital. It is equally called fixed working capital; it is the minimum level of investment in the current assets of a business to carry out its minimum level of activities [2]. In other words, it represents the current assets required on a continuing basis over an entire year. Working capital has a limited life which usually does not exceed a year and in practice some parts of investment is always permanent.

Temporary working capital: It is the amount of capital required to take care of fluctuating business activities, Fabozzi and Peterson [14] define it as a rise of working capital from seasonal fluctuation in a firm’s business. In other words it represents additional current assets required at different times during an operating year.

Determinants of working capital

In banks working capital is basically concerned with the liquidity management. Many factors affect working capital in banks which are categorised as internal or external factors explained below:

Internal factors

Lending policy: Great quantity for long term investments needs high liquidity and if short term loan policy, low liquidity.

Management capacity: If management is ready and efficient to bear risk then there will be low liquidity.

External factors

Prevailing interest rate: If interest rate is high, cash demand is low hence low liquidity.

Saving and investment situation: If income and the saving scale of people is high then liquidity will be low.

Demand for working capital

Working capital is maintained at bank by current saving and fixed deposit collection specially to grant loans or to pay cheques, creditors

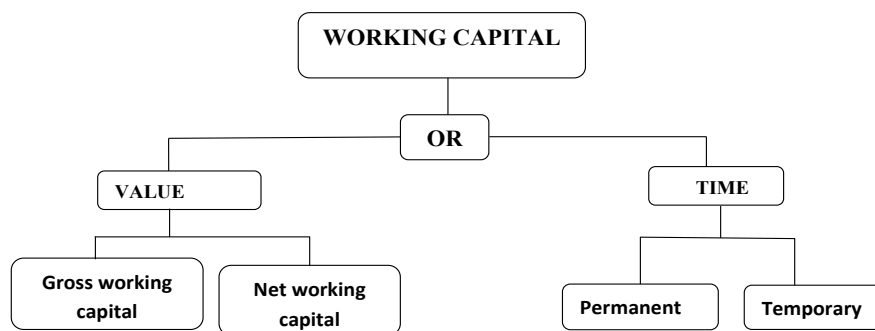


Figure 1: Concept of working capital.

and account holders when they demand liquidity. Generally, banks need liquidity for maintaining their transactionary motive, security motive and speculative motive.

Financing working capital

A company's resources are usually invested in capital investments like machinery, plant and equipment as well as short term investments (working capital). These investments are financed by a company depending on its capital structure. In case net working capital is positive, it will be financed by long term capital but if net working capital is negative, it is financed by short term capital. Adequate and appropriate working capital financing ensures that a firm has sufficient cash flow to pay its payables.

Managing working capital

Working capital management is often viewed in terms of risk and returns trade-offs but Weinraub and Visscher [15] identified three different strategies of managing working capital which are discussed below;

Aggressive strategy: This is a management strategy which focuses on profitability. It is characterized by high risk and high profitability. In this strategy, long term funds are utilized only to finance fixed assets and part of permanent working capital while short term funds are utilized to finance temporary working capital. It saves the interest cost at the cost of high risk.

Hedging or maturity matching strategy: It is a meticulous strategy of managing working capital with moderate risk and profitability. This strategy utilizes long term sources to finance long term assets.

Conservative strategy: As the name suggests, it is a strategy which is characterized by low risk and profitability. It has the lowest liquidity risk at the cost of higher interest.

Importance of working capital management

Working capital refers to the resources of a firm that are used to conduct daily operations. Without cash, bills can't be paid hence the following point explain the importance of working capital management.

Solvency: A business can run smoothly in the presence of adequate working capital. In this situation, short term liabilities can be paid within a short period which helps to strengthen the business solvency position.

Ability to face crisis: A business can naturally face problems like economic depression, currency fluctuation, and strike. The availability of working capital in sufficient volume gives the business the ability to face such problems.

Regular return: The management of working capital helps a firm to pay quick and regular dividends to its investors. Therefore because of adequate working capital, a business does not have to plough back profits thereby providing confidence to its investors.

Smooth operation of businesses: A company with sufficient working capital can smoothly operate a business. With adequate working capital, it can make regular payment of salaries and other daily commitments. By paying expenses at time, employee's morale increases as well as their efficiency.

Theoretical Framework

Fisher's separation theory

According to Hochstein [16], the idea of the Fisher's Separation

theory is "Given perfect and complete financial capital markets, the production decision (investment) is seen as governed solely by an objective market criterion (maximizing wealth) with no regard to the individual's subjective preferences that enter into the consumption decision". The Fisher's separation theory tries to explain that companies should avoid confusion between an investment and financing investments.

It is therefore important for a company to make a distinction how much to invest in working capital and how to finance working capital. Gross working capital is the investment while net working capital is the financing of working capital. This difference between investment and financing working capital can be clearly understood by defining terms like gross working capital and net working capital. Gross working capital or working capital refers to investment in current assets like receivables, inventory and cash while net working capital indicates how much a company has to invest of its long term capital to finance its working capital or in simple terms net working capital refers to the difference between current assets and current liabilities. With this in mind, a company has to attend both factors while optimising working capital and maximizing profitability.

Capital investment is characterised by investment in machinery, plant and equipment and in short term investments. The financing of these investments depends on the structure of the company. The decision to finance the net working capital depends on its sign, if the net working capital is positive (current assets exceeds current liabilities), it will be financed with long term capital such as equity or long term borrowing but should in case the net working capital is negative (current liabilities exceed current assets), it will be financed with short term capital which can increase the cost of borrowing significantly.

Liquidity preference theory

This theory seeks to examine the reasons why people or companies hold money in liquid form, given that it does not yield any revenue. According to the theory, money is the most liquid asset. Liquidity is an attribute to an asset. The more quickly an asset is converted into money, the more liquid the asset. When an asset is easily converted into cash, it provides liquidity for the company in its day-to-day operations, it enables the company to pay its short term obligations and it is used as well to invest in working capital. The demand for liquidity is determined by three motives which are transactionary, speculative and precautionary motives.

Empirical literature

Empirically, numerous studies have been conducted to examine the effect of working capital management on profitability in the different countries of the world and various results were found which let to varying conclusions.

The quest to know if the cause of corporate failure is due to the lack of short term financing or inefficient management of working capital pushed Angelique [17] to examine working capital and financial management in the small firm sector of UK. They made use of quantitative survey method and concluded that for small and growing businesses, an efficient management of working capital is a vital component of success and survival that is both profitability and liquidity. They also highlighted that smaller firms should adopt formal working capital management routines in order to reduce the probability of business failure as well as to enhance business performance. Given these peculiarities, they stressed the efficient management of working

capital and good credit management practice as being pivotal to the health and performance of small firm sector.

Alvarez [18] made use of 101 companies listed on Tehran Stock Exchange (TSE) over the period of 2004-2008 to study the relationship between working capital management and corporate profitability of firms. Using the multivariate regression and Pearson correlation, the finding reveals that the cash conversion cycle which is a key measure of working capital management has a relationship with corporate profitability.

Brigham [19] further examined the effect of working capital management on the profitability of Indian firms. With the use of the ordinary least square regression technique, the study reveals that working capital management and profitability are positively correlated in Indian companies. The study also reveals that inventory days and payables days are negatively correlated with a firm's profitability whereas receivable days and the cash conversion period exhibit a positive relationship with a firm's profitability.

Contrary to Brealey [20], using the Pearson's correlation method Chen [21] noticed that there is a negative relationship between corporate profitability and the different working capital components, they resolved that Tunisian small and medium sized enterprises dealing in exports should shorten their cash conversion cycle by reducing the number of days of receivables and inventories to increase their profitability.

Walker [22] equally used the cash conversion cycle as a determinant of working capital management efficiency and gross operating profitability as an indicator of profitability for Finnish and Swedish public companies. Using regression models and correlation analysis his results show that there is a significant effect of working capital management on corporate profitability, he thus concluded that long conversion cycles have a negative effect on profitability while shorter cash conversion cycle will increase profitability. He highlighted that by effectively managing each part of working capital a company can increase cash flow and thus shareholders wealth.

Fama [23] carried out a research on the impact of working capital management on profitability in UK manufacturing industries using the Pearson's correlation technique. The results show that there is no significant relationship between the working capital components (receivable days, payable days, inventory days, cash conversion cycle) and profitability of the firm. His results suggest that managers need to focus on core business principles to maximize shareholders wealth.

In their study, Gitman [24] carried out a study to find out the effect of working capital management on company profitability. Using the Pearson's correlation and ordinary least square regression analysis, the following findings were made; there exist a positive relationship between the cash conversion cycle and profitability of a firm which means that as the cash conversion cycle increases, company profitability increases; there is a negative relationship between liquidity and profitability showing that as liquidity decreases, profitability increases. The results equally portray the existence of a negative relationship between average collection period and profitability, thus any decrease in the number of days a company receives payment from sales leads to an increase in profitability. On the other hand, the relationship between average payment period and profitability is positive and statistically significant, therefore the longer a company takes to pay its creditors, the more profitable she becomes.

Using the panel data least square method of regression, Grant [25]

examined the effect of working capital management on profitability of selected manufacturing companies in Nigeria, he noticed a significant relationship between working capital and profitability. He equally concluded that working capital management has a significant impact on profitability of manufacturing companies and recommended that companies should manage their cash, receivables, inventories and payables with view of reducing the cash conversion cycle so as to increase their profitability.

Using average collection period to capture working capital, Gallagher [26] examined the impact of working capital management on corporate profitability. He made use of regression analysis; his results show that there is a positive relationship between average collection period and profitability. He concluded that cash collected should be re-invested into short term investment to generate profits and that idle cash or excessive liquidity is costly and does not lead to profitability.

A review of empirical literature shows that the effect of working capital on the profitability of firms have been excessively studied in manufacturing companies. Ordinary least square regression and Pearson correlation was used as technic of analysis but their findings differ. The general trend indicates that effective management of working capital leads to an increase in profitability Richards [27] while Stephens [28], finds contrary results. While carrying out the research, the researcher didn't find directly related research topics carried out in Cameroon. Therefore, the current researcher believed that the problem is almost untouched and that there is a knowledge gap on the area. This implies that lack of proper research study on the area gives limited awareness to Cameroonian company managers in relation to working capital management to increase company profitability. Hence, this study is intended to explore the case of Cameroon.

More so, the researcher realised that a lot of investigation on working capital management has been carried out in manufacturing sector while other sectors like the banking sector has barely been touched. Therefore, the current research will investigate the extent of the effect of working capital management on profitability in the banking sector, thereby filling the gap in literature.

Data and Methodology

The study was carried out in Yaoundé, the capital of Cameroon. The research was done in the banking sector and AFRILAND First Bank was the case study. In terms of period and given that the researcher was using secondary data, the data collected covers a period of 12 years beginning from 2002 to 2013. The period of 12 years was used because it permits the researcher to critically analyse how working capital management affect profitability over the accounting years. As regards the content, the study was limited on the profitability of Afriland First Bank as a dependent variable and working capital management (customer deposit, loan portfolio, reserves, size of the bank, outstanding expenditure and return on assets) as independent variables.

Model specification

In line with the causal research design, we developed the model which is adopted in the banking sector. The aim of this model is to enable us achieve the effect of the independent variables (that is customer deposits, loan portfolio, reserves, size of the bank, outstanding expenditure and return on assets) on the dependent variable (profitability). The selection of the variables was guided by the Fisher's Separation theory and the Pecking Order theory. This model enabled us to capture the individual impact on the dependent variable (Figure 2).

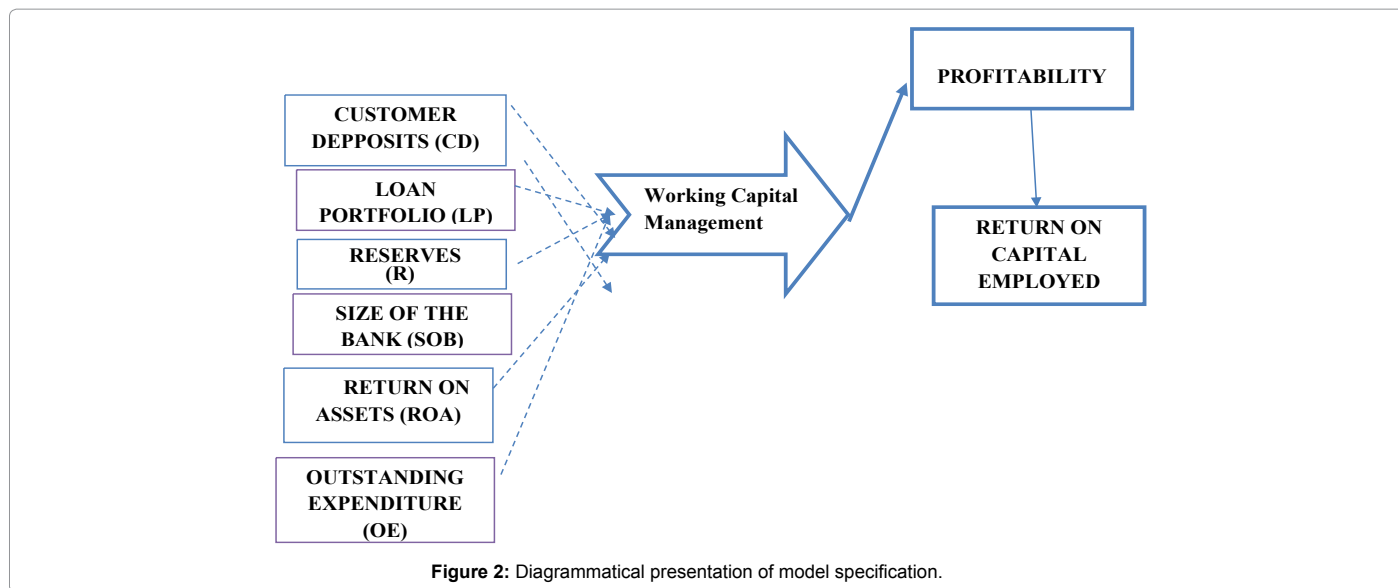


Figure 2: Diagrammatical presentation of model specification.

The model can be expressed mathematically as;

$$P=f(CD; LP; R; SOB; OE; ROA)$$

Where,

P=Profitability

CD=Customer deposits

LP=Loan portfolio

R=Reserves

SOB=Size of the bank

OE=Outstanding expenditures

ROA=Return on assets

Representing this econometrically we have;

$$P=b_0 + b_1CD + b_2LP + b_3R + b_4SOB + b_5OE + b_6ROA + \mu$$

Where,

b_0 =Constant term

$b_1, b_2, b_3, b_4, b_5, b_6$ =Parameter estimates

μ =error term

The a priori; $b_0 = 0$ and $b_1 > 0, b_2 > 0, b_3 > 0, b_4 > 0, b_5 > 0, b_6 > 0$.

Results and Discussion

This section studies the general trend of changes in financial performance over the years of 2002 to 2013.

Descriptive statistics

Table 1 below summarizes the descriptive statistics of the variables included in the regression model as presented. This descriptive statistics was used to describe and discuss the characteristics of the result generally. It represents the variables of Afriland First Bank whose financial results were available for the years 2002 to 2013.

The maximum and minimum values measures the degree of variations in the variables. From the table above, it is observed that

	N	Minimum	Maximum	Mean	Std. Deviation
Customer deposits	12	8.07	8.76	8.4352	0.23538
Loan portfolio	12	0.54	0.91	0.7667	0.11338
Reserves	12	6.11	7.41	6.8337	0.52482
Size of the Bank	12	8.15	8.85	8.5139	0.23062
Outstanding Expenditure	12	6.30	7.52	6.8752	0.34582
Return on assets	12	0.05	0.51	0.3176	0.14469
Valid N (listwise)	12				

Table 1: Descriptive statistics of variables.

customer deposits records a maximum value of 8.76 and a minimum value of 8.07. On average the mean value is 8.43 and the rate of deviation from the mean is 0.23.

Also, the loan portfolio reads a maximum value of 0.91 with a minimum score of 0.54. The table shows that loan portfolio has an average score of 0.76 with the rate of deviation from the mean of 0.1.

The reserve variable shows a minimum value of 6.11 and a maximum value of 7.41. On average, the mean value is 6.83 with a rate of deviation of 0.52 from the mean.

Again, the table shows that the size of the bank has a maximum score of 8.85 and a minimum value of 8.15. The mean value as seen on the table is 8.51 with a standard deviation of 0.23.

The outstanding expenses variable from the table reads a maximum value of 7.52 with a minimum value of 6.50. It is noticed that the mean value is 6.87 and the standard deviation is 0.54.

Lastly, it is observed that return on assets has a maximum value of 0.51 and a minimum value of 0.05. On average, the mean value is 0.31 with the rate of deviation from the mean of 0.14.

Correlation analysis

The Table 2 below shows the Pearson correlation coefficient generated from secondary data for the periods of 2002 to 2013.

If efficient working capital management increases profitability, then one should expect a positive relationship between working capital measures and profitability. The table depicts that there exist a strong

		Customer deposits	Loan portfolio	Reserves	Size of the Bank	Outstanding Expenditure	Return on assets	ROCE
Customer deposits	Pearson Correlation	1	0.929**	0.968**	0.997**	0.491	0.702*	-0.535
	Sig. (2-tailed)		0.000	0.000	0.000	0.105	0.011	0.073
	N	12	12	12	12	12	12	12
Loan portfolio	Pearson Correlation	0.929**	1	0.849**	0.922**	0.544	0.821**	-0.634*
	Sig. (2-tailed)	0.000		0.000	0.000	0.068	0.001	0.027
	N	12	12	12	12	12	12	12
Reserves	Pearson Correlation	0.968**	0.849**	1	0.967**	0.503	-0.591*	-0.448
	Sig. (2-tailed)	0.000	0.000		0.000	0.095	0.043	0.144
	N	12	12	12	12	12	12	12
Size of the Bank	Pearson Correlation	0.997**	0.922**	0.967**	1	0.461	-0.717**	-0.561
	Sig. (2-tailed)	0.000	0.000	0.000		0.132	0.009	0.058
	N	12	12	12	12	12	12	12
Outstanding Expenditure	Pearson Correlation	0.491	0.544	0.503	0.461	1	-0.192	0.033
	Sig. (2-tailed)	0.105	0.068	0.095	0.132		0.551	0.920
	N	12	12	12	12	12	12	12
Return on assets	Pearson Correlation	-0.702*	-0.821**	-0.591*	-0.717**	-0.192	1	0.929**
	Sig. (2-tailed)	0.011	0.001	0.043	0.009	0.551		0.000
	N	12	12	12	12	12	12	12
ROCE	Pearson Correlation	-0.535	-0.634*	-0.448	-0.561	0.033	0.929**	1
	Sig. (2-tailed)	0.073	0.027	0.144	0.058	0.920	0.000	
	N	12	12	12	12	12	12	12

** . Correlation is significant at the 0.01 level (2-tailed)
 * . Correlation is significant at the 0.05 level (2-tailed)

Table 2: Correlation matrix.

significant positive relationship between customer deposits and loan portfolio (r=0.929). This is backed up by the sense that the bank uses customer deposits to grant loans to its customers which in return generates earnings for the bank thereby increasing bank performance.

The table also shows a strong significant positive relationship between customer deposits and reserves (r=0.968) as well as strong significant positive relationship between the size of the bank and customer deposits (r=0.997). This is because as the bank increases in size, its customer deposits increases as well as the reserves the bank will put aside.

The relationship between outstanding expenses and customer deposits is weak (r=0.491) as well as a significant negative relationship between customer deposits and return on assets (r=-0.702). It is also worth noting that the relationship between customer deposits and ROCE is negative (r=-0.535).

It can again be depicted from the Table 3 that there exist a strong significant positive relationship between loan portfolio and reserves (r=0.849) as well as a good significant positive relationship between loan portfolio and the size of the bank (r=0.922). The relationship between loan portfolio and outstanding expenses is weak (r=0.544). The relationship between reserves and the bank size is significantly strongly positive (r=0.967) while that between reserves and outstanding expenses is weak (r=0.503). Nevertheless, the relationship between reserves and ROA (r=-0.591) as well as reserves and return on capital employed are negative (r=-0.448).

We can also observe that the relationship between the bank size and outstanding expenses is weak (r=0.461) but that between the bank size and return on assets is strongly significantly negative (r=-0.717).

The relationship between outstanding expenses and return on assets is strongly negative (r=-0.192) while that between outstanding expenses and return on capital employed is extremely weak (r=0.033).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.746 ^a	0.706	0.221	0.83615

** . Correlation is significant at the 0.01 level (2-tailed)
 * . Correlation is significant at the 0.05 level (2-tailed)

Table 3: Significant relationship.

Nevertheless there exist a distinguished strong positive significant relationship between return on assets and return on capital employed (r=0.929).

Regression analysis

The Table 4 shows the summary of our model. R square measures the proportion of the variation in the dependent variable explained by the independent variables. This implies that 70.6% of the bank profitability is explained by the independent variables (customer deposits, loan portfolio, reserves, the size of the bank, outstanding expenditures, and return on assets).

ANOVA means analysis of variance. The ANOVA table is a table that looks at the differences of the variances of the variable. It's used to know the significance of your variable. From the table, one can observe that the regression model is significant at 1% that is 0.008 is less than 0.01. This implies that the different independent variables effectively have an effect on the dependent variable

From Table 5 above, the established multiple linear regression equation becomes:

$$ROCE = -0.909 + 0.254CD + 0.098LP - 0.052R - 0.131SOB + 0.022OE + 0.492ROA$$

Table 5 contains B coefficients which are indicators of the predictive powers of independent variables. From the table, we can observe that customer deposits has a positive impact on bank performance. This implies that a unit change in customer deposits will result to a positive

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.909	1.354		-0.672	0.532
	Customer deposits	0.254	0.517	0.992	0.492	0.044
	Loan portfolio	0.098	0.301	0.185	0.327	0.057
	Reserves	-0.052	0.069	-0.450	-0.747	0.489
	Size of the Bank	0.131	0.498	0.499	0.262	0.004
	Outstanding Expenditure	0.022	0.031	0.127	0.716	0.006
	Return on assets	0.492	0.118	1.178	4.174	0.009

a. Dependent Variable: ROCE

Table 4: Model summary.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	0.037	6	0.006	11.636	0.008 ^a
Residual	0.003	5	0.001		
Total	0.040	11			

Predictors: (Constant), Return on assets, Outstanding Expenditure, Reserves, Loan portfolio, Size of the Bank, customer deposits

Table 5: ANOVA.

change in bank profitability. Hence if there is a 1% increase in customer deposits, it will lead to an increase in bank performance by 0.992 units.

Also, the value for loan portfolio is positive which implies that loan portfolio has a positive effect on the bank performance. This is because the more loans the bank grants to its customers, the more earnings it generates hence a unit increase in loan portfolio by 1% will lead to an increase in return on capital employed by 0.098 units.

It can be depicted again that reserves has a negative impact with bank performance. This implies that a unit increase in reserves will lead to a decrease in return on capital employed by -0.052 units.

Again, we can observe that the bank size variable is positive meaning that it has a positive impact on profitability. Specifically, it implies that a unit change in the bank size by 1% will lead to a positive change in the bank performance by 0.131 units. This could be because as the bank increases in size, profitability increases too. This increase in the bank size leads to the birth of different branches (expansion) as well as a variety of operations.

It can be seen from the table that outstanding expenses has a positive impact on bank performance. This could be because, as the bank grows in size it turns to spend more to ensure that operations are carried out smoothly which may increase bank profits. Hence an increase in outstanding expenses will result to an increase in the bank profitability by 0.022 units.

Lastly we can notice that return on assets again has a positive impact on the profitability of the bank performance. This means that a unit change in return on assets results to a positive change in performance by 0.492 units.

It is worth noting that the value for the constant term is -0.909. The constant term generally captures other variables that affect the dependent variable other than the variables included in the model already. Given that the sign is negative, this implies that there are other variables not included in the model that have a negative impact on the dependent variable. This implies therefore that an increase in those other variables not captured in the model will lead to a 0.909 decrease in the dependent variable.

Discussion of results

From the results obtained, it can be depicted that the reserves

variable is negative and is insignificant at 5%. Given that reserves are insignificant, we will accept the null hypothesis. This is consistent with the pecking order theory which says that companies tend rely more on internal funds to finance their working capital rather than external funds. Generally, internal funds mentioned above starts with equity which refers to the amount of money shareholders invested in the business. After equity has been invested, retained earnings are received and these earnings received are plough back into the business which can be considered as reserves. With these reserves, a company is now able to finance its working capital rather than using external funds like debts. This is equally in corroboration with the study of Tiegen [29] who explained that internal source of finance is the most important source of finance to firms in Cameroon. This theory tries to give reasons why companies choose to keep reserves in cash which is to avoid both the lack of resources and the need for external funds. A review of other works show that Alvarez [18] carried out a research in UK manufacturing industries using receivable days, payables days and inventory days as independent variables and found out that there is no significant relationship between these working capital management components and profitability. Also, Warren [30] did a research and found out that the average collection period has a negative relationship with company profitability.

Again, the coefficient of loan portfolio is positive which implies that loan portfolio has a positive effect on the profitability of the bank but it's insignificant at 5% and since it is insignificant we will accept the null hypothesis. This can be explained by the agency theory which says that managers should be able to manage working capital, properly invest in working capital and utilize company assets to generate profits. In banks, the major assets are loans granted to customers which generates profits for the bank through the interest perceived on the loans. With this profits generated through loan granting, managers can use the funds to invest in working capital. In line with the works of Brealey [20], they carried out a study to investigate whether the cause of corporate failure is due to lack of short term loans or inefficient management of working capital in small firms and concluded that efficient management of working capital and good credit management will increase corporate profits.

We can also observe from the results obtained that customer deposits is positive which means that it has a positive effect the bank profitability and its significant at 5%. Given that it is significant we will reject the null hypothesis. This is consistent with the liquidity reference theory which explains that money is the most liquid asset used by a company to carry out its daily operations. With the case of the bank, liquidity is considered as money kept by customers in their various accounts or in simple term customer deposits refers to cash used by the bank in carrying out daily operations. This cash is a component of working capital which the bank uses as a resource to finance its working capital which goes in return to increase bank profitability. It

is also supported by the work of Chen [21] who made an industry wide study in Finnish and Swedish public companies and found a significant effect of working capital management on corporate profitability. He mentioned that there is significant evidence that by effectively managing each part of working capital, a company can increase its cash flow thus adding shareholders value.

Also, the result shows that the coefficient of the size of the bank is positive which means that the size of the bank has a positive impact on the bank performance and is significant at 1%. This shows that as the bank increases in size so as its profits. This is supported by the work of Walker [22] who carried out a research in Nigeria manufacturing industries and his study revealed that there is a significant relationship between working capital components (cash, receivables, payables, inventory) and corporate profitability.

We can as well observe that outstanding expenditure is positive which means that a unit change in it will lead to a positive change in performance and it is significant at 1%. This result can be supported by the works of Fama [23] who made a research in the Tehran Stock Exchange and their findings revealed that there is a significant relationship between the cash conversion cycle which was their key working capital component and profitability.

Lastly, the result reveals that return on assets has a positive impact on bank profitability because its positive and it is significant at 1%. The result is in line with the work of Gitman [24] who carried noticed a reduction in the average collection period will lead to an increase in profitability, his results were statistically significant. It is therefore important for excess cash receivables to be reinvested in the short run so that it can generate more cash inflow and thus increase profits.

Conclusion

The research paper was aimed at filling the gap in literature by extending literature on the effect of working capital management on profitability to the banking sector, in order to achieve this objective; Afriland first bank was chosen as our case, the main results reveal that efficient working capital management is a factor influencing the performance of Afriland First Bank positively. The analysis show that customer deposits, the size of the bank, outstanding expenditure and return on assets all have a positive impact on bank profitability and are statistically significant while loan portfolio has a positive impact on bank performance but is statistically insignificant. On the other hand, reserves have a negative impact on bank profitability. However, other factors like leverage, short term financial assets among others do have an influence on profitability.

Recommendations

From the results obtained, we could make the following recommendations which include;

Afriland First bank should improve their marketing strategies so as to increase their sales and generate more profits for the bank.

Given that loans are a major asset to the bank, we recommend the bank to increase their stringent measures while granting loans which will enable them to recover a larger proportion of loans they grant on their total loans.

Afriland can effectively manage their working capital to enhance profitability by putting in place adequate planning and controls to help them monitor their daily operations thereby maximizing shareholder wealth.

We will also recommend them to invest more on profit generating activities only so as to increase income as well as their reserves. With this high reserves, they will be able to face any risk or crisis efficiently.

Area for Further Research

The research was limited to data collected from a particular bank (Afriland First Bank), however there are other financial institutions where this study could be relevant to or better still who were relevant to the study. Given that the study tested only a bank, other financial institutions should be studied in order to compare the results so as to give a general opinion in the banking sector.

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