CREDIT MANAGEMENT POLICY AND FIRMS' PROFITABILITY: EVIDENCE FROM INFANT MANUFACTURING FIRMS IN SOUTHWEST, NIGERIA

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Abstract: Credit management policy concerns managing debtors and financing debts. The higher the amount of debts not collected over a period of time, the higher the maintenance costs incurred which invariably impact on profitability. This study assessed the relationship between credit management policy initiatives and profitability among infant manufacturing firms in Southwest, Nigeria. The study adopted a descriptive research design. The convenience sampling technique was used to select ten (10) infant manufacturing firms and secondary data were extracted from annual reports of the selected firms over a period of ten (10) years (2009-2018). The data collected were analysed using descriptive and inferential statistics. The results of the study showed that there was an insignificant, positive relationship between Current Ratio (CR) and profitability at P>0.05; also, there exists an insignificant, positive relationship between Creditor's Payment Period (CPP) and profitability at P>0.05. However, Debtor's Collection Period (DCP) and profitability showed a significant, negative relationship at P<0.05. The study concluded that a favourable debtor's collection period is a precondition for improved profitability position. Therefore, it is recommended that a slightly tight debtor's collection strategy and procedure should be established as documented in this study so as to minimize the problem of cash flow and bad debt among infant manufacturing firms in Nigeria.

Keywords: Credit Management, Profitability, Debtors' Collection Period, Current Ratio, Creditors' Payment Period.

JEL Classification: G32, G21.

1. Introduction

It is a common occurrence among business organisations in the modern day to allow customers to buy products now, and pay at a later date; infant manufacturing firms are not left out. When a firm sells its products and does not receive cash for it immediately, the firm is said to have granted credit to its customers. This improves patronage which may boost profits in the long run.

Managing credit transactions is an important issue in any organisation as it remains a credible source of finance which enhances business operations. Brigham and Houston (2003) observed that a large portion of a typical financial manager's time is devoted to managing the firm's credit affairs. Credit management policy is concerned primarily with managing debtors and financing debts. The higher the amount of debts not yet collected and their age, the higher the finance costs incurred to maintain them. If these debts were not collected as at when due, cash requirements may necessitate borrowing fund which ultimately affects firms profitability. It is equally important to minimize potential credit default, as high default rate may lead to decreased cash flows and cause financial distress. However, a significant prerequisite for effective credit management is the ability of firms to logically and professionally manage customer credit lines. The importance of credit management policy therefore to any business organization cannot be overemphasized.

A company's credit management policy refers to the steps taken by a business to allow, monitor, and collect the payments yet to be made on credit transactions. Every credit management policy initiative set by an organization seeks to achieve liquidity for enhancing firms' continued operation. Business transaction modes, as well as customers, nowadays differ significantly when compared with previous dispensations. Therefore, credit management policy requires a periodical review to enhance organizations' successful operations. The present study examines credit policy and its impact on infant manufacturing firms' profitability in Southwest, Nigeria.

The survival of any firm to continue in business is contingent on profitability and infant manufacturing firms do rely on good credit policy. Thus, bad debts and poor credit management policy erode the profitability of infant manufacturing firms.

A growing body of literature in this aspect of financial management is available in the developed countries but relatively few in developing countries, especially in Nigeria with special reference to infant manufacturing firms. Due to different methodologies, particularly in definition of proxies used as surrogates for credit management policy, mixed results were produced by prior studies. The present study attempts to lessen the above inadequacies in the literature by adopting ten infant manufacturing firms in Southwest Nigerian business environment to establish the relationship between the two variables.

Despite Nigerian government efforts to grow and encourage infant firms in the country being a veritable engine of economic growth, inadequate finance still bedevils continued survival and profitable operations as many of these firms are being forced out of business at gestation stages. Myers and Brealey (2003) described credit management as methods and strategies adopted by firms to ensure that they maintain an optimal level of credit and its effective management. However, the inadequate finance may possibly be linked with lack of effective credit management policy by firms' operators, hence this study.

The primary objective of this present study is to empirically examine the relationship between credit management policy and profitability of Nigerian infant manufacturing firms.

The specific objectives of the study are to:

i. assess the statistically significant relationship between Current Ratio (CR) and profitability of infant manufacturing firms in Nigeria;

ii. ascertain the significant relationship between Creditor's Payment Period (CPP) and profitability of infant manufacturing firms in Nigeria; and

iii. identify relationship between Debtor's Collection Period (DCP) and profitability of listed manufacturing firms in Nigeria.

Research Hypotheses

The following hypotheses were stated to guide this study:

i. H_0 : There is no statistically significant relationship between Current Ratio (CR) and profitability of listed manufacturing firms in Nigeria.

ii. $H_{0:}$ There is no significant relationship between Creditor's Payment Period (CPP) and profitability of listed manufacturing firms in Nigeria.

iii. H_{0:} There is no significant relationship between Debtor's Collection Period (DCP) and profitability of listed manufacturing firms in Nigeria.

Significance of the Study

This study will serve as a source of information to companies granting credit with respect to the policies and procedures to be adopted. The general public will equally

benefit because it will serve as a reference material when adopting any credit policy. Also, firms' operators will find the results the study relevant to their day to day business decisions especially among the infant manufacturing firms. The study will contribute to literature on effective credit management policy among infant manufacturing firms in Nigeria.

2. Literature Review Conceptual Review

We reviewed relevant literature that examined the associations between current ratio, creditors' payment period and debtors' collection period and profitability adopting data sets ranging from panel, cross-sectional and time series. The term credit originated from *credere* or *creditum* which means trust. The word implies that any credit activity must be based on trust. The economic value that would be obtained by debtor and creditor should be agreed at the outset without prejudice to either party. According to Firdaus and Ariyanti (2003) credit is a financial system to facilitate the transfer of capital from the owner to the user with the hope of gain. Loans granted by the trust to another person who gave it to the borrower's ability and honesty.

Credit management is the application of a set of policies and procedures to ensure working capital is not unnecessarily tied down, thereby minimizing the occurrence of bad debts. Business capital exposure to bad debts will be minimized to the barest minimum. Hence, effective credit management enhances the financial stability of the business. Credit policies are simply guidelines with which credit is executed. Such guidelines are essential for credit to achieve its purpose. It is noteworthy that all the parties involved in credit transaction, as well as their employees should work assiduously to make credit management achieve its aim. Trade credit has become a veritable instrument that cannot be dissociated from daily business operations. It boosts the amount of sales made because individuals and organizations alike are allowed to pay at a later date items supplied now. Flannery and Ragan (2002) opined that a credit policy boosts asset quality; create a set of minimum standards, and gives rise to measurement and reporting of non-performing assets.

The process of credit management begins with accurate assessment of the creditworthiness of the owner of business. This is particularly important if the business chooses to extend credit facilities to certain customers. Hence, effective credit management is setting specific measures that a customer must meet before receiving the proposed credit arrangement. As part of the evaluation process, credit management entails determining the total credit line that will be extended to a particular business.

Several factors are used as part of the credit management process to evaluate and qualify a customer for the receipt of some form of commercial credit. This includes gathering data on the potential customer's current financial condition, including the current credit track record that discloses the character of a customer in meeting obligations as well as collateral value. The current ratio between income and outstanding financial obligations will also be taken into consideration. Competent credit management seeks not only to protect the infant manufacturing firms from possible losses, but also protect the customer from creating more debt obligations that cannot be settled on time.

When the process of credit management functions efficiently, everyone involved benefits from the effort. The financial institution such as banks has a reasonable amount of assurance that loans granted to a client will be paid back within terms, or that regular minimum payments will be received on credit account balances. Customers have the opportunity to build a strong rapport with the creditor and thus create a solid credit reference. In order to be effective, credit policies must be communicated throughout the organization, implemented through appropriate procedures, monitored and periodically revised to take into account changing internal and external circumstances. Economic conditions and the firm's credit policies are the principal influences on the level of a firm's account receivable. Economic conditions, of course, are largely beyond the control of the financial manager. As with other current assets, however, the manager can vary the level of receivables in keeping with the tradeoff between profitability and risk. Lowering quality standards may stimulate demand, which, in turn, lead to higher receivables, as well as a greater risk of bad debt.

The credit and collection policy of one firm are not independent of those of other firms. If product and capital markets are reasonably competitive, the credit and collection practices of one company will be influenced by what other companies are doing. Such practice related to the pricing of the product or service and must be viewed as part of the overall competitive process. The examination of certain policy variables implies that the competitive process is accounted for in the specification of the demand function as well as in the opportunity cost associated with taking on additional receivables. The policy variables include the quality of the trade accounts accepted; the length of the credit period, the cash discount, any special terms such as seasonal dating and the collection program of the firm. Together, these elements largely determine the average collection period and the proportion of bad debt losses (Horne, 1995).

Good credit management involves optimizing cash flow to ensure stability and provide maximum potential for growth. Credit arises when a firm sells its products or services on credit and does not receive cash immediately. It is an essential marketing tool, acting as a bridge for the movement of goods through production and distribution stages to customers. A firm grants trade credit to protect its sales from the competitors and to attract the potential customers to buy its products at favourable terms. Trade credit creates receivable or book debts which the firm is expected to collect in the near future.

For Michael (2007), good credit management is an essential component and a fundamental part of the modern commercial strategy. Michael (1997) consented that extending credit to customers is an aid to sales and all staff should be involved. Michael blended sensible control of credit management and customer satisfaction with profitability. Steve (1997) pointed out that the objective of Association of Credit Professionals (ACP) is to ensure that good credit management provides customer satisfaction and profit. Steve (1997) agreed with Michael's assertion who contended that satisfied customers are more likely to pay promptly than buyers who feel they are not getting a good deal. Indeed, if revenue is the energy that powers company, credit management is the engine that keeps it flowing. The credit management engine acts as a heart, driving revenue and motivation to every part of the company. As credit management apparatus becomes more refined and efficient, so the company becomes more productive and profitable.

Credit management Policy is viewed as written guidelines that set the terms and conditions for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. This term can also be referred to as collection policy. It is also the guidelines that spell out how to decide which goods are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts.

Debtor management policy means the process of decisions relating to the investment in business debtors. In credit sales, it is certain that we have to pay the cost of getting money from debtors and to take some risk of loss due to bad debts. To minimize the loss due to not receiving money from debtors is the main aim of debtor management.

Economic conditions and firms credit policies are the chief influence on the level of a firm's account receivable (James, 2002). The trade-off between increase in the market share through credit sales and the collectability of the account receivable affects firm's liquidity and its eventual profitability. A firm may report large profit and still suffer liquidity problem if bulk of its transactions are in account receivable and collection policy in not effective. Credit and collection policies encompasses the quality of accounts accepted, the credit period extended, the cash discount given, certain special terms and the level of collection expenditure. In each case, the credit decision involves a trade-off between the additional profitability and the cost resulting from a change in any of these elements.

Receivable management begins with the decision of whether of whether or not to grant credit. Where goods are sold on credit, a monitoring system is important, because without it, receivable will built up to excessive levels, cash flow (liquidity) will decline and bad debts will offset the profit on sales. Corrective action is often needed and the only way to know whether the situation is getting out of hand is to set up and then follow a good receivable control system (Eugene, 1992).

The prominence of applying good credit management policy has developed over the past decades and many studies have investigated the role and effect of the policy. Ojeka (2012) studied four manufacturing companies in Nigeria and discovered that when a company's credit policy is favourable, liquidity is at a desirable level. Ifurueze (2013) carried out a study that examined the impact of effective management of credit sales on profitability and liquidity of Food and Beverage Industries in Nigeria. The study found out that when credit sales are effectively managed, profitability is at a desirable level. Most widely used credit risk management practices are debt collectors, letter of credit, and credit insurance and factor of debt. When dealing with difficult customers, accounts and future sales may be put on hold till the account is settled. Thus, management needs to put in place sound credit management to prevent late payment by debtors hence an increase in profitability.

This study is anchored on Schwartz (1974) propounded transactions costs theory and stated that suppliers may have an advantage over traditional lenders in inspecting the credit worth of their customers. Suppliers have skill to monitor and force repayment of the credit. Hence, suppliers have cost advantage when juxtaposed with financial institutions. In summary, the transaction cost theory best suit credit management of a small firm because it has supplier-client relationship, on which the supplier is the manufacturing firm granting the credit while the client, is the customers or the debtors of the business. This theory considers the factors before granting credit to its customers which include: the information about the customer's ability to pay on time, the nature of the firm's financial statement which are not expensive to operate.

3. Methodology

Research Design

The study adopted an ex-post facto research design as past data in the form of secondary data were utilized. It is also empiric in nature.

Source of Data

Data for the period of study, 2009-2018, were mainly from secondary source and obtained primarily from published annual reports and accounts of the banks sampled for the study. Secondary data were collected from the annual reports and accounts of the selected infant manufacturing firms under the study.

Population, Sample and Sampling Technique

3.1

Target population for the study as at 31^{st} August, 2018 were 22 infant manufacturing firms out of which 10 firms were selected as sample through judgmental sampling technique (guided by availability of relevant data used for the study).

Variable Description and Measurement

Table 1 presents the study variables and their measurements.

Specification of Model

The general form of panel data analysis for the multiple regression models used in explaining the relationship that exists between credit management policy and performance of infant manufacturing firms is specified in equation 3.1 and 3.2:

ROA = f(CR, CPP, DCP)

Where:

ROA – Return on asset

CR - Current ratio

CPP – Creditor's Payment period

DCP – Debtor's collection period

 β_0 – constant or intercept

 $\beta_1 \cdot \beta_3$ – coefficient of slope parameters

e_{it} is the error term (assumed to have zero mean and independent across time period)

 β is the coefficient of explanatory variable

F_{it} is the explanatory variable

i – ten (10) manufacturing firms

t – time dimension of the variables (10) years

By adopting the economic model as in equation above, the following equation evolves

$$ROA_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 CPP_{it} + \beta_3 DCP_{it} + \varepsilon_{it}$$
3.2

Estimation technique

The study employed Augmented Dickey Fuller (ADF) technique of estimation to test the stationary level of the series. The Granger causality test is used to check for causality between two variables. This is used to test the causal relationship between credit management policy and profitability. The conventional rules show that there is a causal relationship if the probability value is between 0.01 and 0.05. The Breusch Pagan LM approach is employed in estimating the serial correlation model.

Table 1. Measurement of Variables

Symbols	Variables	Variable type	Measurement
ROA	Return on asset	Dependent	Annual earning
			Total assets
CR	Current ratio	Independent	Current asset
			Current liability
CPP	Creditor's	Independent	Average creditors x 365
	payment period		credit purchases
DCP	Debtor's	Independent	Average debtors x 365
	collection period		Credit sales

Source: Own computation (2018)

Validity and Reliability of Data and Research Instrument

Data used in the study were obtained from reliable source- audited financial statements of the selected banks. The financial statements were audited by reputable audit firms and certified for public use by relevant regulatory bodies, such as Securities and Exchange Commission and Financial Reporting Council of Nigeria. The research instrument adopted for this study is consistent with what obtained in prior empirical studies of this nature (Ogbudu and Eze, 2016, Mendoza and Rivera, 2017; Annor and Obeng, 2017).

4. **Empirical results and discussion Descriptive Statistics**

Table 2 implies that the mean value of Returns on Assets (ROA) is 12.26% over ten (10) year period (2009-2018) for the selected firms in this study with a minimum of -30% and a maximum of 64%. This indicates that the use of total assets to generate earnings is averagely low during this period of study. It also indicates that some firms are generating earnings as low as -30% and can be improved to 64%. The standard deviation stands at 11.20% which means that the value of profitability can deviate from the mean to both sides by 11.20%. The coefficient of skewness 0.5032 implies that the data is positively skewed.

Table 2. Descriptive Analysis					
Specification	ROA	CR	CPP	DCP	
Mean	0.122617	1.457154	60.85966	42.84434	
Median	0.120140	1.112413	55.84972	35.39522	
Maximum	0.637636	7.736757	238.1412	157.7381	
Minimum	-0.303786	0.408655	2.693226	1.808311	
Std. dev.	0.1123030	1.115529	45.89538	32.23442	
Skewness	0.503226	3.452264	1.213883	1.565637	
Kurtosis	10.31667	17.80264	4.939697	5.659400	
JARQUE-BERA	159.0941	778.1397	28.16470	49.22542	
PROBABILITY	0.000000***	0.000000***	0.000001***	0.000000***	
SUM	8.583166	102.0008	4260.176	2999.104	
SUM SQ.DEV.	0.866005	85.86393	145340.6	71694.99	
OBSERVATION	100	100	100	100	

Table 2. Descriptive Analys	51S
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Source: Own computation (2018)

As shown in Table 2, the Current Ratio (CR) shows that on average, infant manufacturing firms keep current assets at 1.46 times to current liabilities with a standard deviation of 1.12. The highest current ratio for a firm in the study period is 7.74, with the lowest at 0.41. The coefficient of skewness 3.452264 implies that the data is positively skewed and kurtosis coefficient of 17.80264. On average, firms wait 61 days to pay for their purchases which indicate that sampled firms selected for this study are able to meet their financial obligation towards their suppliers on the average of 61 days. Its standard deviation for the firms under the study is 46 days which deviates from both sides of the mean value. The account payable period ranges from 3 days to 238 days to pay their credit purchases.

The creditor's payment period is positively skewed with the value 1.213883 and kurtosis coefficient of 4.939697. Firms under the study receive payment on sales average of 43 days and it can vary by 32 days to both side of the mean value. The minimum and maximum debtor's collection period for the sampled firms is 2 and 158 days respectively which means that most listed manufacturing firms in Nigeria have different debtor's collection policies which is shown by the wide variation observed in the Table 2. Debtor's collection period is positively skewed with the value 1.565637 and kurtosis coefficient of 5.659400.

Granger causality test

The causality test result shown in Table 3 reveals that there is no causality between current ratio, debtor collection period and Return on asset while there is causality between creditor payment period and return on asset.

Table 5. 1 all wise Granger Causanty Test					
Direction of	Null hypothesis	F-statistic	5% critical value	Decision	
causality		computed			
Current Ratio to	No Causality	0.9640	0.3081	Accept the null hypothesis	
Return on Assets					
Creditor Payment	There is causality	0.7123	0.0122	Reject the null hypothesis	
Period to Return on					
Asset					
Debtor Collection	No causality	0.8217	0.5506	Accept the null hypothesis	
Period	2			1 71	

Table 3. Pairwise Granger Causality Test

Source: Own computation (2018)



From the result above, The Jarque-Bera test indicates that the residuals are normally distributed since the probability value is less than the 5% significance level. Hence, the hypothesis of normal distribution for the residuals is accepted.

Residual Cross-Section Dependence Test

It is necessary to carry out this test so as to know whether the error term in a particular period is independent of the error term in another period. Breusch Pagan LM is adopted for serial correlation test.

Table Result of Serial Correlation Test			
Test	Coefficient (P-Value)		
Breusch-Pagan-LM	122.4086 (0.0000)		

Source: Own computation (2018)

The probability value for the Breusch Pagan LM test is 0.0000 which is less than 5% level of significance, and as such the null hypothesis that states there is no serial correlation is rejected.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C CR CPP DCP	0.150164 0.008113 0.000432 -0.001532	0.028344 0.011387 0.000324 0.000461	5.297866 0.712448 1.332811 -3.323090	0.0000 0.4787 0.1872 0.0015
R-squared Adjusted R-squared F-statistic Prob (F-statistic)	0.151804 0.113250 3.937403 0.012015	Durbin-Watson	statistic	0.697060

Table 4. Multiple Regression Results

Source: Own computation (2018)

Table 4 shows the result of how each independent variable (current ratio, creditor's payment period and

The equation formula is given as $Y = \beta_0 + \beta \chi_{1+} \beta \chi_{2+} \beta \chi_{3+} \varepsilon_0$ $(ROA_{it}) = 0.150164 + 0.008113CR_{it} + 0.000432CPP_{it} - 0.001532DCP_{it} + \varepsilon_{it}$ [0.028344] [0.0114] [0.0003] [0.0005] (0.0000)(0.4787)(0.1872)(0.0015)

 $R^2 = 0.15$ F-statistic = 3.937403(0.0120) Durbin-Watson stat = 0.70

Regression estimate results

The regression table shows the results, using the Ordinary Least Squares (OLS) estimation technique on the first differenced series in the model, thereby capturing the short run relationships amongst the variables. The result shows that current ratio and creditor payment period though in sync with a priori are not statistically significant in determining profitability at 5%. Though, they are positively related to profitability. This finding is in line with Omar, Durah, Abdul, Rahman, Syed, Ahsan Jamil, Nour, Aldeen, Ghafeer (2016) and consistent with a priori expectations. However, debtor collection period, contrarily, showed to be negatively related to profitability among the infant manufacturing firms in Southwest Nigeria and also discovered to be statistically significant at 5% in the short run. The finding is in line with the studies of Deloof (2003), Lazaridis and Tryfonidis (2006), Raheman and Nasr (2007), Tewodros (2010).

The Durbin-Watson statistic of 0.6971 implied the acceptance of the null hypothesis of no serial correlation, while the low R-squared of 15% reflects the omission of important variables in the model. The R-squared shows that 15% of variation in profitability is explained by explanatory variables captured in the study while the remaining 85% is explained by variables not captured in the model. This is mostly expected since the study merely estimated the relationship between profitability, current ratio, creditor collection payment period and debtor collection period. However, statistically significant F-statistic shows the joint significant of the explanatory variables in explaining the growth in the model. Based on these criteria, it is concluded that the model is well behaved and appropriate for explaining the relationship between the variables of interest in the study.

Discussion of findings

The major objective of this study is to empirically examine the relationship between credit management policy and profitability of Nigerian infant manufacturing firms. In providing answers to research questions, the study discovered that there is no significant relationship between current ratio, creditor payment period and profitability at 5% level of significance. This result showed that current ratio and creditor payment period have no contribution to profitability. This implies that profitability will still improve without much consideration for current ratio and creditor payment period, though the relationships among them are positive which implies that holding other variable constant, an increase in current ratio or creditor payment period will lead to an increase in Return on Asset. This outcome is in line with the studies of (Omar Durah, Abdul, and Ghafeer 2016) and consistent with *a priori* expectations.

However, the results showed that there is a statistical significant relationship between debtors' collection period and Return on Asset (p<0.05). This result rejected the null hypothesis and accepted the alternate hypothesis that there is a significant relationship between debtor collection period and profitability of infant manufacturing firms in Southwest Nigeria. Debtors are organizations or people that owe the business money. The sooner debtors pay the business the better, so a short debtor's collection period is good. If debtors pay quickly, it helps cash flow and reduces the risk of customers not paying the money owed and improves profitability. This result is in line with that of Deloof (2003); Lararidis and Tryfonidis (2006), Raheman and Nasr (2007), Tewodros (2010). The result revealed a negative relationship between debtor's collection period and Return on Asset.

The study established the fact that profitability of infant manufacturing firms over time has not been so much affected by current ratio and creditor payment period and that either delay payment to creditors or not has little or no effect on profitability and so also liquidity position of the firms. However, a comprehensive collection system is critical to keeping infant manufacturing firms solvent. Effective debtors' collection strategy is discovered to be a more customer-focused collections process that turns even hard to find and difficult debtors into valuable customers while increasing recoveries and reducing costs that enhance business profitability.

5. Conclusion and Implication for Practice

Following the result obtained from this study, it is pertinent to state here that credit management in the area of current ratio and creditor's payment period have positive and insignificant relationship with the profitability of infant manufacturing firms in Southwest, Nigeria. However, debtor's collection period has a negative influence and a significant relationship with profitability of infant manufacturing firms investigated. With reference to the findings of the study, we recommend that infant manufacturing firms should try to reduce the amount of idle current assets as much as possible to remain liquid. They need to monitor, review and adjust credit policy from time to time and make it easy to understand.

References

- 1. Adebayo, A.O. and Oluwaremi, F., 2017. Relationship between credit risk management and the performance of money deposit banks in Nigeria. *IOSR Journal of Economics and Finance*, 8(2), pp.38-48.
- 2. Brigham, F. and Houston, F., 2003. *Fundamentals of financial management*. 10th ed. New York: McGraw-Hill Inc.
- 3. Deloof, M., 2003. Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*, 30(3-4), pp.573-588.
- 4. Firdaus, R. and Alshatti, A.S., 2004. Manajemen perkreditan Bank umum. *cetakan kedua. bandung: Alfabeta.*
- 5. Flannerry, M.J. and Rangan, K.P., 2002. Market Forces at Work in the Banking Industry: Evidence from the Capital Buildup of the 1990s. *EFA 2002 Berlin Meetings Presented Paper*. Washington: DC Meetings.
- 6. Ifurueze, M.S., 2013. The impact of effective management of credit sales on profitability and liquidity of food and beverages industries in Nigeria. *Global journal of management and business research*, 2(1), pp.1-11.
- 7. Lazaridis, I. and Tryfonidis, D., 2006. Relationship between working capital management and profitability of listed companies in the Athens stock exchange. *Journal of Financial Management and Analysis*, 19(1), pp.23-31.
- 8. Mathuva, D.M., 2010. The Influence of working capital management components on corporate profitability: A Survey on Kenyan Listed Firms. *Research Journal of Business Management*, 4(1), pp.1-11.
- 9. Myers, C.S. and Brealey, R.A., 2003. *Principles of Corporate Finance*. 3rd ed. New York: McGraw-Hill.
- 10. Ojeka, S.A., 2012. Credit policy and its effects on liquidity: A study of selected manufacturing companies in Nigeria. *The Journal of Commerce*, 3(3), pp.10-19.
- 11. Omar, D., Abdulaziz, A., Syed, A.J. and Nour, A.G., 2016. Explaining the relationship between liquidity ratios and indicators of financial performance: an analytical study on food industrial companies listed in Amman Bursa. *International Journal of Economics and Financial Issues*, 6(1), pp.435-441.
- 12. Rehaman, A. and Nasar, N., 2007. Working Capital Management on Firms *Profitability Evidence from Turkey*. A Research Conducted at the Istanbul University.
- 13. Schwartz, R.A., 1974. An Economic Model of Trade Credit. *Journal of Financial and Quantitative Analysis*, 9(2), pp.643-665.