

## **WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF LISTED CONSUMER GOODS FIRMS IN NIGERIA**

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### **Abstract**

The objective of this study is to investigate the effect of working capital management on profitability of listed consumer goods firms in Nigeria. Current ratio and quick ratio were used as the independent variables while profitability was used as the dependent variable measures by Return on Assets. The study covers a period of ten years from 2013 to 2022 using a population of twenty-one (21) consumer goods companies and sample of thirteen (13) companies. Data for the study were obtained through secondary sources using annual financial reports of the listed companies on the Nigerian Exchange Group for the period. The data was analyzed using Ordinary Least Squares Regression. Findings revealed that current ratio has positive but insignificant effect on Return on Assets while quick ratio has negative but significant effect on return on assets. It was recommended that the companies should keep optimum level of liquidity to generate more profit and reduce liquidity risks.

*Keywords:* working capital management, profitability, listed consumer goods firms, Nigeria

### **1. Introduction**

In the dynamic landscape of the global economy, businesses across industries continually seek strategies to enhance their financial performance and achieve sustainable growth (Porter, 1980). Among the essential elements in this pursuit is the effective management of working capital, which plays a pivotal role in a company's financial health and profitability (Deloof, 2003). Working capital, often viewed to as the "lifeblood" of a business, encompasses the resources required for day-to-day operations (Weston et al., 2014). It represents the capital available to a company to meet its short-term obligations and invest in growth opportunities. Effective working capital management involves striking a balance between maintaining sufficient liquidity to cover short-term liabilities and optimizing asset utilization to maximize profitability (Smith, 2018).

The effective management of working capital is crucial for several reasons. It directly impacts a company's liquidity and ability to meet its short-term obligations (Smith, 1980). By maintaining a healthy level of working capital, a company can ensure that it has the necessary funds to cover its operational expenses and avoid financial distress. In contrast, inadequate working capital can lead to liquidity problems and potentially insolvency. The working capital management influences a company's profitability. Efficient management can lead to reduced financing costs and increased profitability



(Mishra & Sahoo, 2012). For example, by optimizing the management of accounts receivable and accounts payable, a company can minimize the cost of carrying excess working capital or the cost of financing a shortfall.

Additionally, effective working capital management has implications for a company's overall financial health. It can influence credit ratings and a company's ability to secure loans at favorable terms (Cunat & Garicano, 2009). Sound working capital management can signal to creditors and investors that the company is well-run and capable of meeting its obligations. Furthermore, working capital management is closely tied to a company's growth prospects. By efficiently managing working capital, a company can free up cash that can be reinvested in the business, thus supporting expansion and investment in long-term projects (Padachi, 2006).

In Nigeria, the consumer goods sector has been a pivotal driver of economic growth, leveraging the nation's large and diverse population. This industry encompasses a wide array of products, including food and beverages, personal care items, household goods, and more. Companies within this sector operate in a competitive environment characterized by changing consumer preferences, economic fluctuations, and regulatory challenges. Efficient working capital management is, therefore, imperative for these firms to navigate through the intricacies of their operating environment. The inability of listed consumer goods companies in Nigeria to effectively manage their working capital is resulting in reduced profitability, thereby hindering their long-term sustainability and competitiveness in the industry.

The main objective of the study is to investigate the effect of working capital management on profitability of listed consumer goods in Nigeria. The specific objectives are to:

- (i) Investigate the effect of current ratio on profitability of listed consumer goods firms in Nigeria.
- (ii) Investigate the effect of quick ratio on profitability of listed consumer goods firms in Nigeria.

In line with the objectives, the following hypothesis are formulated:

**H<sub>01</sub>:** Current ratio has no significant effect on the profitability of listed consumer goods in Nigeria.

**H<sub>02</sub>:** Quick ratio has no significant effect on the profitability of listed consumer goods in Nigeria.

The study covers thirteen (13) out of the twenty-one (21) consumer goods companies listed on the Nigerian Exchange Group as at 31<sup>st</sup> December, 2022. The study covers a period of ten years from 2013 to 2022. The period was appropriate because of the challenges faced by the industry within the period including Covid-19 pandemic. Therefore, the findings of this study will be of interest to investors, academic circle, and stakeholders of consumer goods firms.

## **2. Literature Review**

### **Conceptual Review**

#### **Current Ratio**

The importance of current ratio in financial management cannot be over emphasized as it establishes relationship between current assets and current liabilities. Current ratio refers to the ability of firm convert current assets into cash to pay off its short-



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term debts or those due within a year. The current assets which are assets that can be easily converted into cash include but not limited to accounts receivable; inventory; marketable securities; cash and cash equivalents; prepaid expenses (Halim, 2009). Current ratio informs shareholders and other users how a company can maximize current assets on balance sheet for meeting current liabilities and other payables. Current ratio connotes the solvency position of firms. High level of current ratio of current assets when compared to the firm's current liabilities indicates that the firm is able to use its current assets in taking care of its current liabilities (Sofyan, 2009). It is calculated by dividing current assets with current liabilities (Halim, 2009).

### **Quick Ratio**

Ability of a firm to maximize its current liquid assets which is converted into cash to pay off debts due within three months is quick ratio and it's also referred to as acid-test ratio (Warrad, 2014). The current liquid assets which can be quickly converted into cash include cash and cash equivalents such as marketable securities, account receivables stock market investment. That is; excluding inventories and prepaid expenses which are included in determining current ratio rather than quick ratio because they are neither cash nor cash equivalents. Quick ratio is calculated by dividing cash and cash equivalents by current liabilities (Warrad, 2014). By this division of liquid assets by the current liabilities, one gets an idea as to how many times the firm can more easily cover its short-term debts (Leeds, 2021).

### **Empirical Review**

#### **Current Ratio and Profitability.**

Waswa et al. (2018) investigate the effect of liquidity management on firm performance using a sample of five sugar firms in Kenya for a period of 12 years from 2005 to 2016, using liquidity position and firm size as proxies for liquidity management. The study estimates a random effects regression model and findings revealed that there is a negative relationship between liquidity management and firm performance. It is recommended that the firms carefully consider and plans for funding liquidity management which is the only way to financial performance and that the sugar industry should increase their operating cash flow in order to influence their financial performance positively.

Ologbenla (2018) investigates the impact of liquidity management on financial performance of insurance companies in Nigeria between 2003 and 2012. The study used liquid asset, equity capital, dividend, working capital, investment, underwriting and size as variables for liquidity management while return on asset was used as variable for financial performance. Panel Regression analysis was adopted to estimate the model. Findings revealed that liquidity management has no significant impact on insurance company's performance while equity management affects long term stability. Investment and working capital have significant positive impact on financial performance of the companies. The study recommended that insurance companies should place more priority on equity capital which is having negative impact on performance.

Dzapasi (2020) measures the impact of effective liquidity management on bank financial performance using liquidity to measure liquidity management and return on equity which measures financial performance. The study used five banks as sample and adopted mixed research methodology; that is both quantitative and qualitative research methodologies. Result reveals strong positive relationship between liquidity management and bank financial performance.



Azeez (2020) examines the impact of liquidity management on the profitability of some selected food and beverage firms in Nigeria adopting a case study research design. The study used current ratio, current assets to total assets and working capital to total assets as proxies for liquidity management while return on capital employed as proxy for profitability. Secondary data was obtained from the annual reports of the selected firms from 2014 to 2018 and analyzed using multiple regression and correlation analyses. Results show that current ratio; current assets to total assets ratio and working capital ratio have no impact on the return on capital employed while the study concludes that changes in the liquidity position exert no positive significant changes in the profitability of the selected firms. Thus, liquidity management has no impact on the profitability of firms in Nigeria. The study recommends that the management of firms in Nigeria and other countries should try to shorten the periods of converting accounts receivables and inventories to cash to improve liquidity.

### **Quick Ratio and Profitability**

Nabeel and Hussain (2017) examine the effect of liquidity management on profitability in the banking sector of Pakistan using quick ratio, current ratio, capital adequacy, cash ratio, interest coverage ratio was used to measure liquidity management while return on assets, return on equity and earnings per share were used to measure profitability. Secondary data were obtained from published annual report of ten banks for a period of ten years from 2006 to 2015. Findings from the study shows that interest coverage ratio, quick ratio and capital adequacy have positive while cash and current ratio have negative relationship with banks profitability.

Yameen et al. (2019) examined the impact of liquidity on firm's performance of pharmaceutical companies listed on Bombay Stock Exchange (BSE), India. The analysis was done using a balanced panel data of 82 pharmaceutical companies for the period of 10 years from 2008 to 2017. Acid-test ratio (Quick Ratio) and Current liquidity ratio were used to measure liquidity while return on assets was used to measure performance. Leverage, firm size, and age were adopted as control variables. Findings revealed that the independent variables have a positive and significant impact on the profitability of pharmaceutical companies while the control variables have a negative impact on the profitability of the companies.

### **Theoretical Framework**

Trade-off theory is relevant to working capital management and Profitability.

#### **Trade-Off Theory**

The trade-off theory assumes that holding of liquidity does not create value and does not destroy value as well under perfect capital market assumptions. Whenever funds are required, firm can raise it from capital markets with absence of transaction cost and can be raised at a fair price because the assumption is that capital markets are well informed about the prospects of the firm (Owolabi & Obida, 2012). The scholars further stated that the trade-off theory suggests that firms target an optimal level of liquidity to balance the benefit and cost of holding cash.

The cost of holding cash includes low rate of return of these assets because of liquidity premium and possibly tax disadvantage while benefits that emanates from holding liquidity according to Sebastian (2010) are; the ability of a firm to carry out its transactions with the enough liquid assets which saves firm on transaction cost it could have incurred to liquidate its long-term assets, enables the firm to have low cost investment funds when



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other sources of funds proved to be expensive or not available. The theory explains how current ratio may affect performance of the firm by providing a link through which holding of highly liquid current assets can influence the financial performance of the firm. The trade-off theory is important in this study as it further explains how firms with high liquid positions may have low returns from the liquid assets but have reduced risk as they can finance their short-term obligations without stress.

### **3. Methodology**

This research employs a correlational research approach, utilizing multiple regression analysis to examine the relationships between variables and predict the outcome of interest. The working capital management which is the independent variable was measured by current ratio and quick ratio. The dependent variable which is the profitability of listed consumer goods companies was measured using return on assets. The study covers thirteen (13) out of the twenty- one (21) consumer goods companies listed on the Nigerian Stock Exchange as at 31<sup>st</sup> December, 2022. The study covers a period of ten years from 2013 to 2022.

The following is the model used to empirically test the hypothesis of the study as formulated, as adapted from Akhtar, *et al* (2019):

$$ROA_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 QR_{it} + \epsilon_{it}$$

Where: ROA = Return on Assets; CR = Current Ratio; QR = Quick Ratio;  $\beta_0$  = Constant/Intercept

$\beta_1 - \beta_2$  = Coefficient of Independent Variables; i = Firm; T = Period;  $\epsilon$  = Error Term

### **Variables Definitions and Measurements**

**Table 1**

*Variable Definitions and Measurements*

| S/N | Variables                             | Measurements                                                                |
|-----|---------------------------------------|-----------------------------------------------------------------------------|
| 1   | Return on Assets (Dependent Variable) | <u>Profit Before Interest and Taxes</u><br>Total Assets<br>(Abubakar, 2020) |
| 2   | Current Ratio (Independent Variable)  | <u>Current Assets</u><br>Current Liabilities<br>Azeez, 2020)                |
| 3   | Quick Ratio (Independent Variable)    | <u>Current Assets - Inventory</u><br>Current Liabilities<br>(Abdu, 2014)    |

**Source: Developed by the Researcher, 2025**

### **4. Result and Discussion of Findings**

The descriptive statistics of variables under study were analyzed. The description of mean, standard deviation, minimum and maximum of dependent and independent variables were computed using STATA 13.



## **Descriptive Result**

**Table 2**

*Descriptive Statistics*

| <b>Variable</b> | <b>Obs</b> | <b>Mean</b> | <b>Std. Dev.</b> | <b>Min</b> | <b>Max</b> |
|-----------------|------------|-------------|------------------|------------|------------|
| <b>ROA</b>      | 130        | 0.2725      | 0.3152374        | -0.87      | 0.98       |
| <b>CR</b>       | 130        | 1.216406    | 0.3149622        | 0.12       | 1.92       |
| <b>QR</b>       | 130        | 0.9048438   | 0.3755968        | 0.1        | 1.84       |

**Source: STATA 13 Output**

From table 2, the mean return on assets (ROA) of 0.2725 indicates that the consumer goods companies in Nigeria had an average return of 27.25% on their assets. The standard deviation of 0.3152374 suggests that the ROA varied widely across the sample of 64 companies, with some companies having negative ROA (-0.87) and others having a maximum ROE of 0.98. The mean current ratio (CR) of 1.216406 implies that the average consumer goods company in Nigeria had 1.22 times more current assets than current liabilities. The standard deviation of 0.3149622 shows that the CR varied significantly across the sample of 64 companies, ranging from as low as 0.12 to as high as 1.92. Nevertheless, the mean quick ratio (QR) of 0.9048438 indicates that the average consumer goods company in Nigeria had 0.90 times more quick assets than current liabilities. The standard deviation of 0.3755968 shows that the QR varied widely across the sample of 64 companies, ranging from as low as 0.1 to as high as 1.84.

## **Correlation Matrix Result**

**Table 3**

**Correlation Result**

|            | <b>ROA</b> | <b>CR</b> | <b>QR</b> |
|------------|------------|-----------|-----------|
| <b>ROA</b> | 1.0000     |           |           |
| <b>CR</b>  | -0.0853    | 1.0000    |           |
| <b>QR</b>  | -0.3490    | 0.1603    | 1.0000    |

**Source: Stata 13, 2025**

The table reveals that all the variables are negatively correlated with return on assets. But Current ratio and Quick ratio are found to be positively related with each other.

## **Regression Diagnostic and Robustness Tests**

There exists a prerequisite which is conducting diagnostic test or reliability and validity test (Okoth, 2017). The first pre-diagnostic test was normality test. This was to find out whether the data were normally distributed or not, then multicollinearity test which tested the presence or absence of multicollinearity among the independent variables and heteroskedasticity. The result has shown from table 4 that the data is not normally distributed; hence necessitated the use of robust standard error in the subsequent regression tests in order to take care of normality problems. The result of the diagnostic test has equally shown absence of heteroscedasticity and multicollinearity while result of Breusch and Pagan Langrangian Multiplier Test showed that Ordinary Least Squares regression is the appropriate regression to use in analysing the regression.



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**Table 4**  
*Regression Result*

| Variables | Coefficient | Z-Value | P- Value |
|-----------|-------------|---------|----------|
| CR        | 0.0086155   | 0.10    | 0.919    |
| QR        | -0.2578613  | -2.85   | 0.006    |
| _cons     | 0.2872234   | 1.31    | 0.195    |
| F Stat    |             | 3.00    |          |
| R-squared |             | 0.1512  |          |
| Prob >F   |             | 0.0374  |          |

**Source: Stata 13 Output, 2025**

The findings of the study in table 4 were conducted using robust standard error instead of the normal standard error as a result of the outcome of the normality test. This was to take care of the normality problems in the data. The result shows that the model explained 15.12% of the total variation in the dependent variable, that is, 84.88% of the variation in the dependent variable is explained by factors not captured in the model. According to Cohen (1988), an R-Squared value of 0.13-0.26 is considered moderate and acceptable.

### **Hypothesis Testing**

**H<sub>01</sub>: Current ratio management has no significant influence on the financial performance of listed oil and gas companies in Nigeria**

The study findings indicates that the current ratio (CR) has a positive but insignificant effect on return on assets (ROA) ( $\beta = 0.0086155$ ;  $p > 0.05$ ). The coefficient of 0.0086155 is positive but statistically insignificant. The result indicates that the current ratio maintained by the consumer goods companies did not influence their performance as measured by return on assets (ROA) and that return on equity is insignificantly determined by current ratio, hence in this regard current ratio is less relevant. The result therefore, produces a basis for accepting the null hypothesis which states that current ratio management has no significant influence on the financial performance of listed oil and gas companies in Nigeria. The result was not supported by the agency theory which opines that whenever firms hold high level of liquid assets, there is high probability that the agents (managers) might take advantage to misrepresent their principals (shareholders) by misusing the high liquidity position through misappropriating it which might result in bankruptcy (Jensen & Meckling, 1976). The findings however, indicate that liquidity as represented by current ratio did not significantly affect profitability. This supports the findings of Azeez (2020); Okoro (2016); Thuraisingam (2015) and Qasim and Ramiz (2011) whose findings reveal that current ratio have no significant effect on profitability. The findings also contradict the result of Yameen, Farhan and Tabash (2019) whose study finds that current ratio has a significant effect on profitability.

**H<sub>02</sub>: Quick ratio management has no significant influence on the financial performance of listed oil and gas companies in Nigeria**

The study established that quick ratio (QR) has a negative significant effect on return on assets (ROA) ( $\beta = -0.2578613$ ;  $p < 0.05$ ). The coefficient of -0.2578613 is negative but statistically significant. The result indicates that the quick ratio maintained by the consumer goods companies negatively influenced the performance measured by return



on assets (ROA) but such influence is significant. The result therefore, produces a basis for rejecting the null hypothesis which states that quick ratio management has no significant influence on the financial performance of listed oil and gas companies in Nigeria. The result was in support of the trade-off theory which explains how quick ratio may affect performance of the firm by providing a link through which holding of highly liquid current assets can influence the financial performance of the firm. The finding did significantly affect profitability. The result however, supports findings of Yameen, Farhan and Tabash (2019) whose result reveals significant effect of quick ratio on profitability but contradicts findings of Thuraisingam (2015) that finds an insignificant effect of quick ratio on profitability. The coefficient negativity and significance of the quick ratio is similar to a result obtained by Okoth (2017) where the study reported negative significant effect of a different financial ratio variable on return on equity.

## **5. Conclusion and Recommendation**

From the findings of the study, it is concluded that current ratio has a positive insignificant effect on financial performance of consumer goods company in Nigeria. It is safe to conclusively infer that current ratio do not have any significant influence on financial performance of listed oil and gas companies in Nigeria. Therefore, it is not a major determinant factor of consumer goods companies' performance. Therefore, current ratio maintained by the consumer goods companies did not have any significant implication on the profitability of the companies. The implication of the finding is that having high liquid assets indicated by current ratio did not enhance returns to assets. The study however, concludes that quick ratio has a negative but significant effect on profitability of listed consumer goods companies in Nigeria. This implies that quick ratio negatively influences profitability.

It is recommended therefore that consumer goods companies should ensure that they maintain sufficient optimum current ratio in order to minimize and reduce to barest minimal liquidity risks of the companies. It is also recommended that the companies should continue to keep current liquid assets optimally in order to maintain their ability to pay off their liabilities that are due within three months. It has been indicated by the result of quick ratio that quick ratio negatively influences profitability.

## **References:**

- Abdu, M. (2014). Effect of liquidity management on corporate profitability. *Kaduna Business and Management Review*, 1(1), 53-7.
- Abdulhamid, A. A. (2019). Impact of corporate governance on the performance of manufacturing firms in Nigeria. *Kaduna Business and Management Review*, 4(1), 128-144.
- Abubakar, A. (2020). Financial leverage and financial performance of oil and gas companies in Nigeria. *Open Journals of Management science (OJMS)*, 1(1), 28-44
- Ajayi, A., & Oke, F. (2017). Oil and gas sector in Nigeria: Current industry issues. *Kgmng Africa Nigerian Oil and Gas Review*, 2(2), 1-5.
- Akenga, G. (2015). Effect of liquidity on financial performance of firms listed at the Nairobi securities exchange, Kenya. *International Journal of Science and Research*, 6(7), 279-285.



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- Akhtar, A., Bakhsh, A., Ali, M., & Kousar, S. (2019). Impact of capital structure on the performance of textile sector in Pakistan: Examining the moderating effect of liquidity. *Journal of Accounting and Finance in Emerging Economies*, 5(1), 1-12.
- Akter, A., & Mahmud, K. (2014). Liquidity-profitability relationship in Bangladesh banking industry. *International Journal of Empirical Finance*, 2(4), 112-134.
- Amenaghawon, J. (2014). Bill aims to improve the health of Nigeria's oil and gas industry. *Open Society Foundation*. Retrieved on 28<sup>th</sup> December, 2020  
<https://www.opensocietyfoundations.org/bill-aims-improve-health-nigeria-s-oil-and-gas-industry>
- Andy, F. (2005). *Discovering statistics using SPSS*, (2<sup>nd</sup> Ed.). SAGE Publications Ltd, 1 Oliver's Yard, 55 City Road, London EC1Y 1SP.
- Ani, W. U., Okwo, I.M., & Ugwunta, D.O. (2012). Effects of working capital management on profitability: Evidence from the top five beer brewery firms in the world. *Asian Economic and Financial Review*, 2(8), 966-982.
- Anthony, D.H., Josephine, O.N. & Kingsley, O.C. (2016). Liquidity management measures and bank performance in Nigeria: an empirical analysis. *European Journal of Business and Management*, 8(17), 24-35.
- Arif, A., & Anees, N. A. (2012). Liquidity risk and performance of banking system. *Journal of Financial Regulation and Compliance*, 20(2), 182-195.
- Aris, N. M, Yusof, S. M, & Wen, L. J. (2019). Analysis of corporate governance and bank performance: empirical evidence from Malaysian banking industry. *Journal of Public Administration and Governance*, 9(3), 82-99.
- Astivia, O.L., & Zumbo, B.D. (2019). Heteroskedasticity in multiple regression analysis: What it is, how to detect it and how to solve it with applications in r and spss. *Practical Assessment, Research and Evaluation*, 24(24), 1-17
- Azeez, O.A. (2020). Impact of liquidity management on profitability of selected companies in Nigeria. *Journal of Economics & Management Research*, 1(3), 1-5.
- Bagh, T., Razzaq, S., Azad, T., Liaqat, I. & Khan, M. A. (2017). The Causative impact of liquidity management on profitability of banks in Pakistan: An empirical investigation. *International Journal of Academic Research in Economics and Management Sciences*, 6(3), 153-170.
- Banks, E. (2005). *Liquidity management risk: managing asset and funding risks*. Houndmills, Basingstoke, Hampshire New York: Palgrave Macmillan.
- Bastis, C. (2020). Ex-Post facto design, retrieved from <https://online-thesis.com/en/ex-post-facto-design/> on 13<sup>th</sup> January, 2021.
- Bhasin, H. (2018). What is sales growth? sales growth explained in detail, retrieved from <https://www.marketing91.com/sales-growth/>
- Bhunia, A., & Bandyopadhyay, P. (2015). Liquidity management of selected crude oil and natural gas companies in India. *American Journal of Business, Economics and Management*, 3(4), 198-213.
- Bhunia, A., Khan, I., & Mukhuti, S. (2011). A study of managing liquidity. *Journal of Management Research*, 3(2), 1-22
- Bodie, Kane & Marcus (2004). *Essentials of investments*, McGraw Hill Irwin, 452



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- Borad, S.B. (2019). Debt ratio, retrieved from <https://efinancemanagement.com/financialanalysis/debt-ratio> on 13th January, 2021.
- Brealey, R.A., & Myers, S.C. (1996). *Principles of Corporate Finance* (5<sup>th</sup> ed.). McGraw-Hill/Irwin, New York.
- Brigham E. F. & Houston J.F. (2003). *Fundamentals of Financial Management* (10<sup>th</sup> ed.).
- Brogan, A. (2020). Three steps for managing liquidity in an uncertain oil and gas market, retrieved from [https://www.ey.com/en\\_gl/oil-gas/three-steps-for-managing-liquidity-in-an-uncertain-oil-gas-market](https://www.ey.com/en_gl/oil-gas/three-steps-for-managing-liquidity-in-an-uncertain-oil-gas-market) on 14<sup>th</sup> February, 2021
- Carlson, M. & Matthew, S. (2020). Liquidity requirements, free-riding and the implications for financial stability: Evidence from the early 1900s. *Working Paper* 27912.
- Chandler, G. N., & Jensen, D. A. (1992). Gauging performance in emerging business longitudinal evidence and growth pattern analysis retrieved from <https://www.economicdiscussion.net/profit/top-5-theories-of-profit-explained/6101> on 10<sup>th</sup> March, 2021.
- Charles, D., Ahmed, M. N., & Joshua, O. (2019). Effect of firm characteristics on profitability of listed consumer goods companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(2), 14-31.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2<sup>nd</sup> ed.). New York: Routledge.
- Darmaji, T. F. (2011). Pasar modal di Indonesia pendekatan tanya jawab. edisi pertama, jakarta: salemba empat.
- David, I., Ailemen, I.O., & Chinelo, O. (2016). Effect of liquidity on firms profitability in Nigeria: A study of the oil and gas sector.
- Dovita, Y. G., Rokhmawati, A., & Fathoni, A. F. (2019). The effect of sales growth, capital expenditure and working capital efficiency on Indonesian-listed-consumer-goods firms' financial performance with capital structure as moderating variable. *Indonesian Journal of Economics, Social and Humanities*, 1-15.
- Dutta, N. (2021). Top 5 Theories of Profit, retrieved from financial Management (10<sup>th</sup> ed.).
- Falk, R.F., & Miller, N.B. (1992). AA primer for soft modeling. *University of Akron Press*.
- Falope, O.I., & Ajilore, O.T. (2009). Working capital management and corporate profitability: Evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Business Management*, 3: 73-84.
- Faria, J. (2021). Main oil producing countries in africa 20019, retrieved from <https://www.statista.com/statistics/11758514/main-oil-producing-countries-Africa> on 13th April, 2021.
- Festus, A.F., & Timilehin, A. (2020). Liquidity management and corporate sustainability of listed oil and gas companies: empirical evidence from Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 8(8), 30-72
- Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67, 217-248.



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- Garba, Y. (2020). Effect of liquidity management on profitability of listed manufacturing firms in Nigeria. *International Journal of Management Science and Entrepreneurship*, 19(7), 233-248.
- Gill, A., & Biger, N. (2013). The impact of corporate governance on working capital management efficiency of American manufacturing firms. *Managerial Finance*, 39(2), 116-132.