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LIQUIDITY AND PROFITABILITY RATIOS ON GROWTH OF PROFITS OF LISTED OIL AND GAS FIRMS IN NIGERIA

Appah Ebimobowei, Onowu Joseph Uche and Tonye Young-Arney

Department of Accounting, Ignatius Ajuru University of Education, Rumuolumeni P.M.B. 5047, Port Harcourt.

appahebimobowei@yahoo.com; uchejoseph@rocketmail.com

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ABSTRACT: *This study empirically examined liquidity and profitability ratios on the growth of profit of listed oil and gas firms in Nigeria. The study employed ex-post facto and correlational design and the data was obtained from the annual reports of sample companies for the period 2014 to 2019. The secondary data obtained from the published financial statements of the sampled firms were analysed with descriptive, correlation matrix and multiple regression. The results obtained from the multivariate analysis suggested that current ratio, acid test ratio, gross profit ratio, net profit ratio, net working capital, return on assets, return on equity and return on capital employed do positively and significantly affect the growth of profit of listed oil and gas firms in Nigeria. The study concluded that liquidity and profitability ratios influence the growth of companies. The study therefore made the following recommendations amongst others that firms should use financial ratios to measure the level of corporate profit growth to comprehend the conditions of firms which may eventually affect the investment decisions.*

KEYWORDS: Liquidity ratios, Profitability ratio, Profit growth

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INTRODUCTION

Financial Analysis is the process of assessing the financial position of a company by analyzing its stability, viability and profitability. One of the primary objectives of financial analysis is to recognize changes in financial trends, to help measure the progress made by an enterprise and identify a relationship to draw a logical conclusion on the performance of the company. Another major aspect of a financial analysis is comparing the performance of the company with its competitors (Appah, 2018). Profitability and financial performance could be defined as a measurement of the results of a firm's policies and operations in monetary terms. In assessing the overall financial condition of a company, the income statement and the balance sheet are important reports, as the income statement captures the company's operating performance and the balance sheet shows its net worth (Appah & Odogu, 2016)

Financial performance could be assessed using the following key measures which are important to assess the current financial position and performance. These are descriptive and analytical measures of financial position and performance. That includes current assets, current liabilities, total assets, stockholders' equity, total revenues, total expenses and net income. And analytical measures of financial position and performance could include profitability measures (Chechet & Olayiwola, 2014). Financial ratios allow for comparisons and, therefore, are intertwined with the process of benchmarking, comparing one's business to that of others or of the same company at a different point in time. In many cases, benchmarking involves comparisons of one company to the best companies in a comparable peer group or the average in that peer group or industry.

Financial ratios help investors and other users of the financial statement to better understand and gauge the performance of the entity. Liquidity ratio gives an insight of the ability of the firm to meet its maturing current obligation and pay off creditors as the loan matures and is essential for the firm's existence. Liquidity impacts financial cost, growth, risk level and is a determinant of the market value of the firm. The effects of liquidity on the performance of the firm can lead to false conclusion that it is the determinant of the level of profitability and growth of the firm. This conception has motivated myriads of theoretical and empirical studies to unravel the impact of liquidity on a firm's profitability. The extent of influence of profitability and liquidity on the growth and performance of the firm has been controversial and no census has been reached. There are mixed results as to the influence of these factors to the success or failure of the firm. The relationship between liquidity and profitability is controversial. The findings of some studies draw the conclusion that liquidity and profitability are negatively related while others assert a positive relationship.

The study of Umobong (2015) found a relationship between liquidity and profitability ratios on profit growth of pharmaceutical firms in Nigeria. Supriati, et al., (2019) conducted research on 11 food and beverage firms of Indonesia, results of the study showed a significant and positive effect of liquidity towards profitability, study also concluded that liquidity is the most significant factor of profitability and financial performance. Studies of Malik, et al., (2016) and Charmlet, et al., (2018) also concluded that liquidity ratios have positive and significant impact on profitability of the banking industry. Their results indicate that liquidity is positively associated with return on assets using both measures of bank liquidity, and about return on equity, there is a weak positive relationship between the ratios of liquid assets to total assets. These results are consistent with many previous studies (Sarwat 2017; Paliwal & Chouhan 2017; Ibrahim 2017; Abdullah & Jahan 2014; Khidmat & Rehman 2014; Ruziqa 2013;

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Balasundaram & Priya 2013; Ajanthan 2013). Mahmud & Akhter (2014) in their research concluded that there is no significant relationship between current ratio and return on assets while Noor & Lodhi (2015) found a negative impact of liquidity on a firm's profitability (return on assets and return on equity). Mustafa et al (2019) investigation disclosed that liquidity (quick ratio) positively affects profitability; return on assets (ROA). However, there is a negative relationship between liquidity (current ratio and cash ratio) with return on asset. Therefore, the main objective of this study is to empirically investigate the effects of liquidity and profitability ratios on growth of profits of listed oil and gas firms in Nigeria. The specific objectives are as follows:

1. to investigate the relationship between current ratio and growth of profit of listed oil and gas firms in Nigeria;
2. to investigate the relationship between acid test ratio and growth of profit of listed oil and gas firms in Nigeria;
3. to investigate the relationship between gross profit percentage and growth of profit of listed oil and gas firms in Nigeria;
4. to investigate the relationship between net profit percentage and growth of profit of listed oil and gas firms in Nigeria;
5. to investigate the relationship between net working capital ratio and growth of profit of listed oil and gas firms in Nigeria;
6. to investigate the relationship between return on assets and growth of profit of listed oil and gas firms in Nigeria;
7. to investigate the relationship between return on equity and growth of profit of listed oil and gas firms in Nigeria;
8. to investigate the relationship between return on capital employed and growth of profit of listed oil and gas firms in Nigeria.

This study is guided by the following research questions:

1. What is the effect of the current ratio on the growth of profit of listed oil and gas firms in Nigeria?
2. What is the effect of acid test ratio on the growth of profit of listed oil and gas firms in Nigeria?
3. What is the effect of on gross profit percentage on the growth of profit of listed oil and gas firms in Nigeria?
4. What is the effect of net profit percentage on the growth of profit of listed oil and gas firms in Nigeria?
5. What is the effect of net working capital ratio on the growth of profit of listed oil and gas firms in Nigeria?

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6. What is the effect of return on assets on the growth of profit of listed oil and gas firms in Nigeria?
7. What is the effect of return on equity on the growth of profit of listed oil and gas firms in Nigeria?
8. What is the effect of return on capital employed and growth of profit of listed oil and gas firms in Nigeria?

The following null hypotheses guided the study:

$H0_1$: There is no significant relationship between current ratio and growth of profit of listed oil and gas firms in Nigeria;

$H0_2$: There is no significant relationship between acid test ratio and growth of profit of listed oil and gas firms in Nigeria;

$H0_3$: There is no significant relationship between gross profit percentage and growth of profit of listed oil and gas firms in Nigeria;

$H0_4$: There is no significant relationship between net profit percentage and growth of profit of listed oil and gas firms in Nigeria;

$H0_5$: There is no significant relationship between net working capital ratio and growth of profit of listed oil and gas firms in Nigeria;

$H0_6$: There is no significant relationship between return on assets and growth of profit of listed oil and gas firms in Nigeria;

$H0_7$: There is no significant relationship between return on equity and growth of profit of listed oil and gas firms in Nigeria;

$H0_8$: There is no significant relationship between return on capital employed and growth of profit of listed oil and gas firms in Nigeria;

LITERATURE REVIEW

Conceptual Review

Concept of Accounting Ratio

According to Appah (2017), financial ratio are the mathematical expression of a quantitative relationship between two or more items or group of items having mutual cause and effect relationship, taken from income statement or Statement of Financial Position or both, which the financial analyst may use to make a quantitative judgement about the various aspects of the financial position and performance of a going concern. Every firm is most concerned with its profitability and performance. One of the most frequently used tools of financial ratio analysis is profitability ratios which show a company's overall efficiency and performance. Profitability measures are important to a company's internal and external users such as managers and owners

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alike. If a business has outside investors who have put their own money into the company, the primary owner certainly has to show profitability to those equity investors.

Financial ratio analysis is one of the basic tools of financial analysis. It is an important tool in business planning and decision making as it explores the strengths, weaknesses, opportunities and threats facing the company (B.F Online, 2014). Generally managers use financial ratios to analyze a company's financial performance before making a decision. Financial ratios reveal how a company is financed, how it uses its resources, its ability to pay its debts and its ability to generate profit. Ratios provide a glimpse of a company's position at a particular time, and are most useful when compared across time periods and when comparing companies in the same industry. Ratios alone do not give a complete picture of a company's investment potential, but they are a wise place to start the analysis (Young, 2014).

Liquidity Ratio

Liquidity ratios measure a firm's ability to pay its bills as they come due. Two commonly used liquidity ratios are the current ratio, and the quick ratio. Umobong (2015) stated that Liquidity ratios are broadly classified into Current Ratio , Liquid ratio, Net working capital ratio, It is used to ascertain how liquid a firm is and its potentials in meeting maturing short term obligations. According to Harahap (2013) liquidity ratio is the ability of a company in fulfilling the short term liabilities. The ratio can be calculated through the source of information about working capital consisting of current assets and current liabilities. Analysis of liquidity ratio in this research is focused on current ratio, quick ratio and cash ratio. Current ratio useful for measuring the ability of companies to pay the short term with current assets possessed by the company. Quick ratio indicates the ability of the most liquid current assets to cover the current liabilities. Cash ratio is used to indicate the company's ability to pay liabilities that are due with the available cash in the company (Appah & Odogu, 2016; Appah, 2017).

Current Ratio: The current ratio is found by dividing current assets by current liabilities. A ratio of 1 means the business has just enough current assets to pay current liabilities. Ratios above 1 mean a firm has more current assets than current liabilities; ratios below 1 mean more current liabilities than current assets. Investors typically prefer a lower current ratio because it shows that a firm's assets are working to grow the business. Current Ratio= Current Assets/Current Liabilities (Appah & Odogu, 2016).

Quick Ratio: The quick ratio, also called the acid test, subtracts inventory from current assets before dividing them by current liabilities. The acid test gives a more accurate view of the firm's short-term liquidity than the current ratio because it removes inventory that the firm may not be able to sell from the equation. Quick Ratio= (Current Assets – Inventory)/Current Liabilities Appah & Odogu, 2016).

Profitability Ratio

Profitability ratios can be classified into Returns on capital employed (ROCE), Return on Assets (ROA), Return on Assets (ROA), Return on Total Assets (ROTA), Return on Equity (ROE) Return on sales with the variant of net profit percentage or gross profit percentage. These ratios are used to assess the level of profitability of a firm; it is used by investors in combination with investment ratios to make investment decisions (Umobong, 2015). According to Harahap (2013) profitability ratio describes the ability of a company to gain profit through all the capability and existing resources such as sales activities, cash flow, capital,

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number of employees, how many branches, and others. To be able to sustain life, the company should get a profit. Analysis of the profitability ratio in this research is focused on gross profit margin, return on assets, and return on equity. Gross profit margin indicates how large a percentage of net income earned from any particular sale. Return on assets is used to measure the company's ability in generating profit from assets that are used. While the return on equity shows the company's ability to deliver return on investment to shareholders so it shows what percentage obtained net profits when measured from capital owners.

Growth of Profit

The growth of profit is the change in the net income of the current financial year minus the net income of the previous financial year divided by the net income of the previous financial year. According to Coban (2014), the objective of business entities is the maximization of profit in the long run. This objective can only be achieved by maximizing profits in each period due to the decisions taken at a time will not distort the firm in terms of other periods. Olaoye et al (2019) noted that profitability examines the effectiveness and efficiency with which equipment, plant and current assets are modified into profits. The authors further noted that profitability can be ascertained through Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NMP) and Profit after Tax (PAT), means a firm's ability to generate satisfactory return on invested capital through which shareholders are happy and prospective investors are motivated to invest (Salman, et al 2017). To achieve the desired profit level and keep the business going, literature affirmed that the management of working capital components, particularly the cash conversion cycle, is indispensable in that firms' profitability might decrease if the costs of investment in working capital increase faster than the benefits of granting more trade credit to customers or holding more inventories (Gill et al, 2010; Ehiremmen, 2017).

Theoretical Review

This study is anchored on pecking order theory. This theory is popularized by Myers (1984) when he argues that equity is less preferred means to raise capital because when managers (who are assumed to know better about the condition of the firm than investors) issue new equity, investors believe that managers think that the firm is overvalued and managers are taking advantage of this over valuation. As a result, investors will place a lower value to the new equity issuance. The conclusion of Myers and Majulf (1984) is that the market will attach no significance to issuance of new equity resulting in the circumvention by owners by taking recourse to internal financing. Pecking order theory tries to capture the cost of asymmetric information and states that companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance preferring to raise equity as a financing means of 'last resort'. This implies that internal financing is used first; when it is depleted, then debt is issued and when it is no longer sensible to issue more debt, equity is issued. The theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity implies issuing more shares which means bringing external ownership into the firm). Thus, the form of debt a firm a firm chooses can act as a signal of its need for external financing.

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Empirical Review

Umobong (2015) carried out a study of liquidity and profitability ratio on growth of profit in pharmaceutical firms in Nigeria. The study employed correlational and ex-post facto research design for the period 2011 to 2013. The study employed secondary sources of data obtained from the annual reports of sampled firms. The dependent variable was profit growth while the independent variables consisted of acid test, current ratio, net working Capital. Return on assets, returns on capital employed, returns on equity, gross profit ratio and net profit ratio. The data obtained from the published financial statements were analysed with panel random and fixed effect models. The result obtained revealed that acid test has a positive relationship with profit growth; current ratio has a negative and significant relationship with profit growth; gross profit ratio has a positive and significant relationship with profit growth; net profit ratio has a negative and significant relationship with profit growth; net working capital ratio has a positive and significant relationship with profit growth; return on assets has a positive and insignificant relationship with profit growth; return on capital employed also has a positive and significant relationship with profit growth; and return on equity has a negative and significant relationship with profit growth.

Mustafa et al (2019) investigated liquidity ratio and profitability of automobile firms in Pakistan. Liquidity of a firm can be measured through different ratios e.g. current ratio, cash ratio, and quick ratio, whereas profitability or financial performance of a firm can be scaled with the proxies like return on equity and return on assets. Panel data of 5 years of 12 automobile firms listed in PSX is used for the analysis. Fixed effect model and random effect model were used for empirical investigation and the Hausman test was employed to choose an appropriate model between fixed and random effect. The results of the analysis revealed that the liquidity (quick ratio) positively affects profitability; return on assets (ROA). However, there is a negative relationship between liquidity (current ratio and cash ratio) with return on asset.

Alipour (2011) confirmed a significant relationship between working capital and profitability using multiple regression analysis and Pearson's correlation test, employing data on 1063 companies in Iran. Also, a significant relationship was found between liquidity and profitability for Islamic banks in Qatar (Elsiefy, 2013). On the other hand, Pratheepan (2014) revealed that leverage and liquidity have an insignificant effect on profitability for 55 listed manufacturing companies in Sri Lanka between 2003 and 2012. He however found a significant positive relationship between size and profitability and a significant negative relationship between tangibility and profitability. Meanwhile, Pantea et al (2013) found capital intensity, firm size and number of employees to be positively associated with firm performance in Romania. Based on a sample of 126 listed Romania companies, analyzed using pooled OLS, fixed effects, Random effect and generalized method of moments, Vatavu (2014) found that debt, tangibility, risk, inflation and tax exerted negatively on profitability while size, lagged profit and liquidity impacted positively on profit margin. Khaldun and Muda (2014) carried out an investigation of profitability and liquidity on profit growth in Indonesia for the period 2010 to 2012. The variables examined in the study were current ratio, quick ratio, cash ratio, gross profit margin, return on asset and return on equity as the independent variables and profit growth as the dependent variable. The analysis method used is descriptive and regression. The results of this research indicates that simultantly current ratio (CR), quick ratio (QR), cash ratio, gross profit margin, return on assets, and return on equity have significant influence towards the growth of profit. Partially, all the six independent variables have no significant influence towards the

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growth of profit of manufacturing companies of food and beverages sector listed on Indonesia Stock Exchange during the period 2010-2012.

METHODOLOGY

The methodology of this study consisted of research design, sources and methods of data collection, population and sample of the study, methods of data collection, variables, measurement and model specification.

Research Design: This study was designed to assess liquidity and profitability ratios on profit growth of listed pharmaceutical firms in Nigeria. The study adopted a combination of ex post facto and correlational research design. Ndiyo (2005) observes that ex post facto research design is a systematic empirical study in which the researcher does not in any way control or manipulate independent variables because the situation for study already exists or has already taken place.

Population, Sample and Sampling Technique: Asika (2008) states that a population is a set of large numbers of conceivable observations of any kind of people or events possessing some specified characteristics. Appah (2020) distinguishes between the target population and an accessible population. The target population represents all the members who meet the particular criterion specified for a research investigation. While the accessible population is composed of members of the target population who are willing to participate and will be available at the time of the study. Therefore, the target population consists Anino International, Capital Oil, Caverton Offshore Support Group, Conoil, Eterna, Forte Oil, Mobil, Japaul Oil and Marine Services, MRS Oil Nigeria, O and O, Rak Unity Petroleum, Seplat Petroleum Development and Total Nigeria) quoted in the Nigerian Stock Exchange that were achieve as the close of business on 31 December 2019. The study adopted a purposive sampling technique to arrive at a sample size of six (6) listed oil and gas firms for the purpose of the study.

Methods of Data Collection: The data for this study was sourced from the published annual reports and financial statements of sampled companies for the period 2014 to 2019.

Variable, Measurement and Model Specification: The dependent variable for this study is profit growth and the independent variable consists of current ratio, acid test ratio, gross profit ratio, net profit ratio, net working capital, return on assets, return on equity, return on capital employed. Therefore, the variables for this study were measurement using appropriate proxies on the basis of prior studies as follows:

Table 1: Measurement of Variables

Variables	Type of Variable	Symbol	Measurement	Sources
Profit growth	Dependent	PFG	(Net Income to – Net income $_{t-i}$)/ Net income $_{t-i}$	Khaldun & Muda (2014)
Current ratio	Independent	CUR	Current assets/Current liabilities	Appah (2018)
Acid test ratio	Independent	ATR	(Current Assets – Inventory)/Current Liabilities	Appah (2018)

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Gross profit ratio	Independent	GPR	Gross Profit/Sales X 100	Umobong (2015); Appah (2018)
Net Profit ratio	Independent	NPR	Net profit/Sales X 100	Umobong (2015); Appah (2018)
Net working capital	Independent	NWC	Networking/Total Assets X 100	Umobong (2015)
Return on assets	Independent	ROA	Net Profit After Tax/Average total asset X 100	Umobong (2015); Khaldun & Muda (2014)
Return on equity	Independent	ROE	Net profit after tax/Shareholders fund X 100	Khaldun & Muda (2014)
Return on capital employed	Independent	ROCE	Net Profit After Tax/Total Net Assets X 100%	Umobong (2015)

Source: Authors compilation

The model for this study was developed using multiple regression analysis. Multiple regression analysis shows the variation in the value of the dependent variable on the basis of the variation in the independent and control variables. The assumption is that the dependent variable is a linear function of the independent variables.

PFG = f (CUR, ATR, GPR, NPR, NWC, ROA, ROE, ROCE) ---------- 1

The multiple regression with an error ($\boldsymbol{\varepsilon}$) is showed below:

$PFG_{it} = \alpha + \beta_1 CUR_{it} + \beta_2 ATR_{it} + \beta_3 GPR_{it} + \beta_4 NPR_{it} + \beta_5 NWC_{it} + \beta_6 ROAit + \beta_7 ROE_{it} + \beta_8 ROCE + \varepsilon$ ---------- 2

Method of data analysis: This study employed a descriptive, correlational and regression analysis model for the purpose of data analysis. SPSS was applied in the analysis of data. SPSS reports p values which can be used as an alternative approach in assessing the significance of regression coefficients. The p value shows what is the smallest level at which we would be able to accept the null hypotheses of a test. The study used a 5% level of significance; hence we conclude that the coefficient is significantly different from zero at the 5% level if the p-values is less than or equal to 0.05. If it is greater than 0.05 then the study cannot reject the null hypothesis that the coefficient is actually zero at our 5% significance level.

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RESULTS AND DISCUSSIONS

Table 1: Descriptive Statistics

Statistic	PFG	CUR	ATR	GPR	NPR	NWC
Mean	20.44000	10.05051	3.707071	1.000000	5.606061	0.616162
Median	17.88000	9.000000	3.000000	1.000000	6.000000	1.000000
Maximum	410.3900	17.00000	12.00000	1.000000	6.000000	1.000000
Minimum	-51.97000	4.000000	1.000000	1.000000	3.000000	0.000000
Std. Dev.	47.29864	2.800779	2.408541	0.000000	0.890061	0.488794
Skewness	5.760055	0.317670	1.038719	NA	-1.937357	-0.477717
Jarque-Bera	8985.019	2.284138	22.19227	NA	80.67769	16.71484
Probability	0.000000	0.319158	0.000015	NA	0.000000	0.000235
Sum	2023.560	995.0000	367.0000	99.00000	555.0000	61.00000
Sum Sq. Dev.	219241.8	768.7475	568.5051	0.000000	77.63636	23.41414
Observations	36	36	36	36	36	36

Statistic	ROA	ROE	ROCE
Mean	32.38123	4.934102	0.516071
Median	0.987000	4.420000	0.310000
Maximum	99.70000	38.81000	15.49000
Minimum	-7.270000	-34.24000	-0.990000
Std. Dev.	38.72236	12.93547	1.550020
Skewness	0.494273	-0.141070	9.230841
Jarque-Bera	14.71187	7.715415	32478.46
Probability	0.000639	0.021116	0.000000
Sum	3205.742	488.4761	51.09100
Sum Sq. Dev.	146943.2	16397.99	235.4511
Observations	36	36	36

Source: Author's computation using e-views

Table 1 presents the descriptive analysis of the time series properties of the variables included in the model. The descriptive statistics were carried out for the variables involved. It shows that the mean value of PFG, CUR, ATR, GPR, NPR, NWC, ROA, ROE, and ROCE are 20.44000, 10.05051, 3.707071, 1.000000, 5.606061, 0.616162, 32.38123, 4.934102, 0.516071, and 9.432364, respectively. The standard deviation of PFG, CUR, ATR, GPR, NPR, NWC, ROA, ROE, and ROCE from their respective long-term mean values every year point at 47.29864, 2.800779, 2.408541, 0.000000, 0.890061, 0.488794, 38.72236, 12.93547, and

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1.550020, respectively. The probability value of Jarque-Bera statistics for all variables shows their distribution level at mean zero and constant variance. It indicated that liquidity and profitability ratios on profit growth of pharmaceutical firms' attributes variables were normally distributed.

Table 2: Correlation Matrix

	PRG	CUR	ATR	GPR	NPR	NWC	ROA	ROE	ROCE
PRG	1.000								
CUR	0.343	1.000							
ATR	0.147	0.034	1.000						
GPR	0.032	0.047	0.343	1.000					
NPR	0.062	0.485	0.147	0.042	1.000				
NWC	0.015	0.283	0.032	0.013	0.027	1.000			
ROA	0.034	0.182	0.062	0.043	0.049	0.043	1.000		
ROE	0.102	0.283	0.015	0.125	0.052	0.017	0.147	1.000	
ROCE	0.023	0.182	0.348	0.015	0.038	0.032	0.032	0.147	1.000

Source: Authors computation SPSS output

The correlation matrix from table 2 showed the extent of relationship between the dependent variable (PRG) and the independent variables (CUR, ATR, GPR, NPR, NWC, ROA, ROE, ROCE). The correlation coefficient (0.343, 0.147, 0.032, 0.062, 0.015, 0.034, 0.102, 0.023) shows positive correlation between PRG and all the independent variables. This implies that the independent variable has affected or influenced the dependent variable.

Table 3: Multiple Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.922	14.540		2.471	.014
	CUR	.255	.118	.143	2.161	.044
	ATR	.374	.236	.10	3.040	.031
	GPR	.276	.109	.083	2.532	.046
	NPR	.573	.236	.049	2.427	.027
	NWC	.640	.298	.023	2.147	.045
	ROA	.438	.216	.128	2.027	.038
	ROE	.485	.224	.021	2.165	.037
	ROCE	.748	.345	.374	2.168	.045

Source: SPSS (2021)

Table 3 shows the multiple regression output of the relationship between profit growth and independent variables. The results show a positive and significant relationship between current ratio, acid test ratio, gross profit ratio, net profit ratio, net working capital, return on assets, return on equity, and return on capital employed (0.044, 0.031, 0.046,

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0.0270.045,0.038,0.037, 0.045 < 0.05). Hence there is a significant relationship between Liquidity and profitability ratios on the growth of profit of pharmaceutical firms in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study empirically investigated liquidity and profitability ratios on growth of profit of listed oil and gas firms in Nigeria. The study employed ex post facto and correlational research design and convenience sampling techniques was used to determine a sample size of six companies from the study population. The dependent variable was profit growth while the independent variables consisted of current ratio, acid test ratio, gross profit ratio, net profit ratio, net working capital, return on assets, return on equity, and return on capital employed. The multiple regression analysis revealed that current ratio showed a positive and significant relationship with profit growth; acid test ratio showed a positive and significant relationship with profit growth; gross profit ratio showed a positive and significant relationship with profit growth; net profit ratio showed a positive and significant relationship with profit growth; net working capital showed a positive and significant relationship with profit growth; return on assets showed a positive and significant relationship with profit growth; return on equity showed a positive and significant relationship with profit growth; and return on capital employed showed a positive and significant relationship with profit growth. Therefore, liquidity and profitability ratios influence the growth of profit of pharmaceutical companies in Nigeria. The author concluded that liquidity and profitability ratios do impact on the growth of companies. The following recommendations were provided:

1. The researcher recommends that firms should maintain a moderate level of liquidity that does not threaten their going concern status, and yet allows them to make adequate profits on their investments.

2. The company is advised to use financial ratios to measure the level of corporate profit growth to know the condition of the company which can eventually affect the investors in investing.

3. The investors suggested doing the analysis of the company's financial statements by using financial ratios that related to the growth of profit so it can determine the amount of investment in the future.

4. For further researchers who want to do similar research, it is suggested you should increase the number of samples used, extend the period of time and add others variable independent in order to provide a more accurate conclusion.

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REFERENCES

Abdullah, M., & Jahan, N. (2014). The impact of liquidity on profitability in the banking sector of Bangladesh: A case of Chittagong Stock Exchange. *International Journal of Economic and Business Review.*

Appah, E. & Odogu, I. L. (2016). *Financial Accounting 11,* Ezevin Publishing House.

Appah, E. (2017). *Corporate financial decisions,* Vinson Publishing and Printing.

Appah, E. (2018). *Financial management: Theory, strategy and practice,* Vinson Publishing and Printing.

Balasundaram, D., & Priya K. (2013). Liquidity management and profitability: A case study of listed manufacturing companies in Sri Lanka. *International Journal of Technological Exploration and Learning* (IJTEL), 2(4), 32-46.

Charmler, R., Musah, A., & Akomeah, E. (2018). The impact of liquidity on performance of commercial banks in Ghana. *Academic Journal of Economic Studies,* 4(4), 78-90.

Chechet , I.L. & Olayiwola, A.B., (2014). Capital structure and profitability of Nigerian Quoted Firms: The agency cost theory perspective. *American International Journal of Social Science*, 3 (1) 139-158.

Durrah, O., Aziz, A., Rahman , A., Jamil, S., & Ghafeer, N. (2016). Exploring 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(2), 435-441.

Ehiremmen, O.S. (2017). Impact of working capital on the profitability of manufacturing firms in Nigeria. *Research Journal of Accounting,* 5, 2-9.

Gill, A., Biger, N. & Neil, M. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal,* 10, 12-34. http://astonjournals.com/manuscripts/Vol2010/BEJ-10_Vol2010.pdf

Khaldun, K.I. & Muda, I. (2014). The influence of profitability and liquidity ratios on the growth of profit of manufacturing companies (A study of food and beverages sector companies listed on Indonesia Stock Exchange 2010-2012. *International Journal of Economics, Commerce and Management,* 11(12), 1-17.

Khidmat, W., & Rehman, M. (2014). Impact of liquidity and solvency on profitability of the chemical sector of Pakistan. *Ekonomika Management Invoice,* 6(3), 24-36

Lartey, V., Antwi, S., & Boadi , E. (2013). The relationship between liquidity and profitability of listed banks in Ghana. International Journal of Business and Social Science, 4(3), 12-34

Mahmud, K., & Akhter, A. (2014). Liquidity-profitability relationship in Bangladesh banking industry. *International Journal of Empirical Finance,* 2(4), 143-151.

Malik, M., Awais, M., & Khursheed, A. (2016). Impact of liquidity on profitability: A comprehensive case of Pakistan's private banking sector. *International Journal of Economics and Finance.*

Mustafa, W., Sethar, W.A. & Pitafi, A. (2019). Impact of liquidity ratio on profitability of firms: Empirical evidence from automobile industry of Pakistan. *Research Journal of Finance and Accounting,* 10(22), 136 – 140.

Olaoye, F.O., Adekanbi, J.A. & Oluwadare, O. E. (2019). Working capital management and firms' profitability: Evidence from quoted firms' on the Nigerian Stock Exchange. *Intelligent Information Management*, 11, 43-60.

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Salman, A.Y., Folajin, O. & Oriowo, A.O. (2017). Working capital management and profitability: A study of selected listed manufacturing companies in Nigerian Stock Exchange. *International Journal of Academic Research in Business and Social Sciences*, 4, 287-295. https://doi.org/10.6007/IJARBSS/v4-i8/1097

Supriati, D., Ramaditya, M., & Wardh, N. (2019). Examining the impact of leverage and liquidity on corporate performance (A case study on food and beverage companies in Indonesia). *Advances in Economics, Business and Management Research.*

Umobong, A.A. (2015). Assessing the impact of liquidity and profitability ratios on growth of profit in pharmaceutical firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research,* 3(10), 97-114.

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