

PERCEIVED INFLUENCE OF FINANCIAL RATIOS ON THE PERFORMANCE OF AGRO-ALLIED INDUSTRIES IN AKWA IBOM STATE, NIGERIA

Anthonia Uju Uzuagu¹ & Edionsenyene Akpan Ekanem^{2*}

^{1&2}Department of Business Education, University of Nigeria, Nsukka, Nigeria.

Email: ekanemedionsenyene@gmail.com

***Corresponding Author: -**

ekanemedionsenyene@gmail.com

Abstract: -

This research work investigated the perceived influence of financial ratios on the performance of agro-allied industries in Akwa Ibom State. Three research questions were developed and answered by the study; three hypotheses were also formulated and tested at 0.05 level of significance. The study adopted survey research design. The population for the study was 196, comprising 111 managers and 85 accountants in listed agro-allied industries in Akwa Ibom State. No sampling was carried out because of the small and manageable size of the population. A 19-item questionnaire was used as the instrument for data collection for the study. Cronbach Alpha reliability method was used to determine the internal consistency of the questionnaire items. The overall reliability coefficient of the instrument was 0.92 indicating that it was highly reliable. The data for the study were collected with the help of research assistants and were analysed using mean and standard deviation for answering the research questions, while t-test statistic was used to test all the null hypotheses at 0.05 level of significance. The findings obtained included that liquidity ratios, leverage ratios and profitability ratios influence the performance of agro-allied industries in Akwa Ibom State. Based on the findings, it was recommended among others that accountants in agro-allied industries should always analyse the firm's financial ratios at the end of every financial year, to enable them to know the firm's profitability, its ability to generate cash to pay off creditors, and the relationship between various sources of funds available to the firm making it possible for management to make informed decisions towards the improvement of the firm's performance.

Keywords: - Financial ratios; Liquidity; Leverage; Profitability; Performance; Agro-allied industries; Agriculture; Financial Statement.

1. INTRODUCTION

The survival of any nation is highly dependent on the viability of the industrial sectors that constitutes that nation's economy. Agriculture is one of the sectors that sustain Nigeria's economy. Agriculture, otherwise known as farming is the art and science of cultivating soil, growing crops and raising livestock (Mendonca, 2021). It is commonly known to be the most important source of food for man. However, agriculture's importance extends beyond the production of food for humans and animal feeds to the provision of fundamental raw materials for industrial purposes, so that other goods that are not directly utilized can be turned into useable materials (Ocholi & Evelyn, 2018). According to Okereke and Onyeabor (2011), agriculture provides a substantial amount of fibre and raw materials utilised by the agro-allied industries for the production of secondary goods and processed food items.

Agro-allied industries depend on agriculture for raw materials for the production of finished goods. An industry is a collection of businesses that are associated with their core business activities (Peters, 2021). An allied industry refers to different industries that work together in some way, usually by providing goods or a service to other industries or being dependent on another industry (Solomon, Tomii & Dick, 2019). The agro-allied industry according to Jelilov and Bahago (2017), is a group of businesses that manufacture, process and package food and other goods using modern technology and procedures. Solomon et al. (2019), defined agro-allied industries as corporate entities working in full symbiosis relationship with other agricultural industries by providing or deriving goods or a service from agriculture. Furthermore, Salawu, Salman, Ibrahim, Rufai, Sodeeq and Lamidi (2017) posits that agro-allied industries are kinds of industries that specialize in the processing of agricultural produce to finished goods which is ready for market and consumers.

In the opinion of Ibrahim in Ocholi and Evelyn (2018), most economic sectors will not stand without the practice of agriculture. Agriculture and agro-allied industries depend on each other for survival. If there is no agriculture to provide raw materials the existence of agro-allied industries will be irrelevant. In the same vein, if there are no agro-allied industries to add value or use goods produced by agriculture, the use of agriculture will be limited; crops and animals gotten from agriculture will be used and traded in their natural forms without converting to other consumable forms with the use of technological tools and methods. Agro-allied industries are critical in encouraging agricultural development, increasing the degree of self-reliance of emerging nations, including Nigeria, and speeding economic growth and long-term progress toward disparity eradication (Adesiyani, 2015). So the existence of agriculture gives relevance to the existence of agro-allied industries.

Agro-allied industries significantly impact economic development and poverty reduction, both in urban and rural communities (Carlos, Doyle, Andrew, Chakib & Sergio, 2009). However, Nigeria is yet to realise the full potential of the agro-allied industries as an engine for economic development hence the mass importation of agricultural produces for conversion into finished goods. For agro-allied industries to realize their full potential, they need to have a high and consistent level of business performance. The long term survival of agro-allied industries is highly dependent on the good performance of business activities. A firm's performance is the measure of the attainment of organizational objectives such as sales growth, profit, brand equity, and the likes (Agarwal, Erramilli & Chekitan in Adesiyani, 2015). Business performance is tied to a company's ability to maintain operations, grow, and compete. Businesses need to perform efficiently, effectively, and profitably as well as be ahead of competitors to be sustained. The financial condition of a business which is a reflection of its business performance, enables the business to gain the trust of stakeholders such as creditors and investors. The performance of any business can be evaluated through the use of financial ratios.

Financial ratios are used in analysing financial statements. A financial statement is a declaration of the financial position of an enterprise, communicated in monetary units (Williams, Haka, Bettner, & Carcello, 2015). Like other business organisations, financial statements are required from agro-allied industries at the end of every financial year. Financial statements provide stockholders with a solid understanding of the business's financial future and allow them to decide if the firm is worth investing in. Banks also need financial statements from businesses before deciding whether to lend to them. Financial statements reflect the financial position of firms such as agro-allied firms. The financial statements required by law are the income statement, statement of financial position and cash flow statement. These financial statements provide data for carrying out financial ratio analysis.

Financial ratios are the most frequently used accounting formulas with regard to business analysis. They indicate the association between two numbers extracted from the financial statements of firms. The performance of firms can be assessed with the use of financial ratios over an accounting period or accounting periods. It can also be used to compare the performance of one firm to the other or performances of more than two firms together. Generally, a financial ratio simply constitutes one item divided by another in the financial statement (Feng & Wang, 2000). Financial ratios are calculated by integrating numerical data from financial statements to acquire pertinent information about a company (Corporate Finance Institute [CFI], 2020). Financial ratios are generally broken into different categories according to the information they provide. This study considered three of them which are: liquidity ratios, leverage ratios, and profitability ratios.

Liquidity ratios are financial ratios that assess a company's capacity to repay short-term debts (CFI, 2020). Liquidity refers to the readiness of assets to be converted to cash (Spiceland, Sepe & Nelson, 2013). Liquidity ratios are used to determine a company's ability to pay its debts, usually by comparing current obligations and liquid assets (D'Angelo, 2020). This determines how likely it is that ones' business will be able to pay off short term debts. The common liquidity ratios include current ratio, acid test (quick) ratio, cash ratio, cash flow liquidity ratio, accounts payable turnover ratio and days payable outstanding. Another type of financial ratio is the leverage ratios.

Leverage ratios measure the amount of capital derived through debt (CFI, 2020). In other words, leverage ratios are used to assess a company's debt level. According to D'Angelo (2020), a leverage ratio is a means to easily evaluate how much of a firm's capital is financed by debt and how probable it is that the company will satisfy its financial obligations. Leverage ratios are similar to liquidity ratios, except that leverage ratios take totals into account, whereas liquidity ratios just look at current assets and liabilities. Leverage ratios are also referred to as solvency ratios or financing ratios. A firm is solvent if and only if the firm can pay its debt, as and when they become due and payable (Werrels in Adesiyan, 2015). The common leverage ratios include debt ratio, debt-equity ratio, long term debt-assets ratio, long term debt-equity ratio, and interest coverage ratio. Another group of financial ratios is known as profitability ratios.

Profitability ratios are financial ratios that try to assess a company's capacity to produce a sufficient return compared to sales or operational resources (Spiceland et al., 2013). Profitability ratios are used to measure a business' earnings versus its expenses. Profit is important to a firm because it is a signal to the financial markets and investors that the firm is worthy of funding either through debt or equity capital (Adesiyan, 2015). According to Pirog in Adesiyan (2015), firms that persistently make less than acceptable profits are prone to slow growth, stagnation, and, eventually, collapse. The common profitability ratios include: gross margin ratio, operating margin ratio, net profit margin, return on assets ratio, return on equity ratio, return on capital employed, operating cash flow margin, and basic earnings power ratio.

Financial ratios are useful tools for analysing and monitoring a firm's financial situation and performance. The performance of agro-allied industries has to be evaluated periodically. Financial ratios analysis x-rays the weakness and strengths of the firms making it possible for necessary actions to be taken towards ameliorating the factors responsible for the existence of the weaknesses. Improvements in performance result from addressing these weaknesses, which leads to a decrease in the number of businesses that fail. An analysis of the National Bureau of Statistics' (NBS) Gross Domestic Output figures has shown that Nigeria's agro-allied industry has continuously been on the decline for most of the past thirty-eight years (Olufemi, 2019). The output from the industry has fallen from N5,100 billion in 1981 to N4,598 billion in 2018. These figures show that the capacity of the agro-allied industries to process agricultural produce has been reducing even though agricultural production is increasing. Despite the intervention of the government and other agencies such as the United Nations Industrial Development Organisation (UNIDO), Food and Agricultural Organisation (FAO) and International Fund for Agricultural Development (IFAD), some agro-allied firms are still performing poorly. This reveals that the poor performance is not ultimately a problem of poor funding but also a problem of financial ratios analysis.

2. Purpose of the Study

The general purpose of the study was to investigate the perceived influence of financial ratios on the performance of agro-allied industries in Akwa Ibom State. Specifically, the study sought to determine the perceived influence of:

1. Liquidity ratios on the performance of agro-allied industries.
2. Leverage ratios on the performance of agro-allied industries.
3. Profitability ratios on the performance of agro-allied industries.

3. Research Questions

The following research questions guided the study:

1. What is the perceived influence of liquidity ratios on the performance of agro-allied industries?
2. What is the perceived influence of leverage ratios on the performance of agro-allied industries?
3. What is the perceived influence of profitability ratios on the performance of agro-allied industries?

4. Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference between the mean responses of managers and accountants on the perceived influence of liquidity ratios on the performance of agro-allied industries.
2. There is no significant difference between the mean responses of managers and accountants on the perceived influence of leverage ratios on the performance of agro-allied industries.
3. There is no significant difference between the mean responses of managers and accountants on the perceived influence of profitability ratios on the performance of agro-allied industries.

5. Methodology

Survey research design was adopted for this study. The study was carried out in Akwa Ibom State. The population for the study comprised 196 managers and accountants in listed agro-allied industries in Akwa Ibom State. The population was made up of 111 managers and 85 accountants in the agro-allied industries. The population was obtained from the Raw Materials Research and Development Council (RMRDC), Uyo, Akwa Ibom State. The entire population was studied due to its manageable size.

A 19-item questionnaire titled "Perceived Influence of Financial Ratios on the Performance of Agro-Allied Industries Questionnaire (PIFRPAIQ)" was used for data collection for the study. The questionnaire was divided into two parts (1 and 2). Part 1 contained one item on the personal data of the respondents while Part 2 had three clusters A, B and C. Cluster A with 6 items elicited information on the perceived influence of liquidity ratios on the performance of agro-allied industries; Cluster B with 5 items elicited information on the perceived influence of leverage ratios on the performance of

agro-allied industries; while Cluster C with 8 items elicited information on the perceived influence of profitability ratios on the performance of agro-allied industries. The questionnaire items were structured on a 4-point response scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) with the corresponding values of 4, 3, 2, and 1 respectively.

The structured questionnaire was subjected to face-validation by three experts. Two of the experts were from the Department of Business Education while one was from the Department of Industrial Technical Education, University of Nigeria, Nsukka. The reliability of the instrument was established using Cronbach Alpha reliability method and an overall reliability coefficient of 0.92 was obtained.

Copies of the questionnaire were administered to the respondents with the help of research assistants. A total of 196 copies of the questionnaire were administered to the respondents out of which 181 copies were duly completed and returned. The data collected were analysed using mean, and standard deviation to answer the research questions, while null hypotheses were tested using t-test at 0.05 level of significance at the relevant degree of freedom.

6. Results

The results of the study were presented in line with the research questions and hypotheses. They are presented in Tables 1-6.

Research Question One

What is the perceived influence of liquidity ratios on the performance of agro-allied industries in Akwa Ibom State?

Table 1: Mean and Standard Deviation of the Responses of Respondents on Perceived Influence of Liquidity Ratios on the Performance of Agro-Allied Industries.

S/N	Items	\bar{x}	SD	Rem.
1	Current ratio is used for comparing all liquid assets with current liabilities.	3.37	0.63	Agree
2	Acid test ratio is used for measuring short-run solvency.	3.51	0.59	Agree
3	Cash ratio is used for measuring total cash and cash equivalents to its current liabilities.	3.55	0.55	Agree
4	Cash flow liquidity ratio is used for measuring the number of times the company can pay off current liabilities with cash generated in the given period.	3.39	0.58	Agree
5	Accounts payable turnover ratio is used for determining the average number of days it takes to pay bills and invoices to trade creditors.	3.06	0.85	Agree
6	Days payable outstanding is used for measuring the rate at which suppliers are paid off.	3.06	0.90	Agree
Cluster Mean and Standard Deviation		3.32	0.68	Agree

Key: x = mean; SD = Standard Deviation; Rem. = Remark; Number of Respondents = 181

The results in Table 1 show that items 1 – 6 have total mean scores above 2.50 set as a criterion for ‘Agree’ and an overall cluster mean of 3.32. This means that all the respondents perceive that liquidity ratios influence the performance of agro-allied industries in Akwa Ibom State. The Table also shows that the standard deviations (SD) of the items are within the range of 0.55 to 0.90 with a cluster standard deviation of 0.68. This indicates that the respondents are not very far from the mean or one another in their responses.

Research Question Two

What is the perceived influence of leverage ratios on the performance of agro-allied industries in Akwa Ibom State?

Table 2: Mean and Standard Deviation of the Responses of Respondents on Perceived Influence of Leverage Ratios on the Performance of Agro-Allied Industries.

S/N	Items	\bar{x}	SD	Rem.
7	Debt ratio is used for measuring the proportion of all assets that are financed with debt.	3.34	0.65	Agree
8	Debt-equity ratio is used for measuring the relationship between total debt capital to owners’ equity.	3.30	0.72	Agree
9	Long-term debt-to-assets ratio is used for determining the percentage of the company’s assets that are financed with long-term debts.	3.28	0.71	Agree
10	Long-term debt-to-equity ratio is used for comparing the total amount of long term debts against owners’ equity of the company.	3.31	0.78	Agree
11	Interest coverage ratio is used for calculating the number of times that net profit before interest and taxes related to the company can cover interest payments.	3.06	0.75	Agree
Cluster Mean and Standard Deviation		3.26	0.72	Agree

Key: x = mean; SD = Standard Deviation; Rem. = Remark; Number of Respondents = 181

The results in Table 2 show that items 7 – 11 have their mean scores above 2.50 set as a criterion for ‘Agree’ and an overall cluster mean of 3.26. This implies that the following leverage ratios are perceived by the respondents to influence the performance of agro-allied industries in Akwa Ibom State. The Table also shows that the standard deviations (SD) of the items are within the range of 0.65 to 0.78 with a cluster standard deviation of 0.72. This indicates that the respondents are not very far from the mean or one another in their responses.

Research Question Three

What is the perceived influence of profitability ratios on the performance of agro-allied industries in Akwa Ibom State?

Table 3: Mean and Standard Deviation of the Responses of Respondents on Perceived Influence of Profitability Ratios on the Performance of Agro-Allied Industries.

S/N	Items	\bar{x}	SD	Rem.
12	Gross profit ratio is used for determining the relationship between gross profit to net sales.	3.16	0.76	Agree
13	Operating profit ratio is used for measuring the company’s ability to generate profit from ordinary operations related to the company.	2.98	0.83	Agree
14	Net profit margin is used for measuring the percentage of net profit that is made from sales.	2.74	0.62	Agree
15	Return on assets is used for measuring how effectively the company’s assets are being used to generate profit.	3.28	0.77	Agree
16	Return on equity is used for measuring the company’s efficiency at generating profit from owners’ capital.	3.23	0.72	Agree
17	Return on capital employed is used for determining the relationship between the company’s profit and capital employed.	3.17	0.79	Agree
18	Operating cash flow margin is used for determining the efficiency at which the company converts sales to cash.	3.03	0.85	Agree
19	Basic earnings power ratio is used for calculating the earning power of the business before the effects of the business’ income taxes and its financial leverages.	2.68	0.63	Agree
Cluster Mean and Standard Deviation		3.03	0.75	Agree

Key: x = mean; SD = Standard Deviation; Rem. = Remark; Number of Respondents = 181

The results in Table 3 show that items 12 – 19 have their mean scores above 2.50 set as a criterion for ‘Agree’ and an overall cluster mean of 3.03. This implies that the profitability ratios are perceived by the respondents to influence the performance of agro-allied industries in Akwa Ibom State. The Table also shows that the standard deviations (SD) of the items are within the range of 0.62 to 0.85 with a cluster standard deviation of 0.75. This indicates that the respondents are not very far from the mean or one another in their responses.

Hypothesis One

There is no significant difference between the mean responses of managers and accountants on the perceived influence of liquidity ratios on the performance of agro-allied industries in Akwa Ibom State.

Table 4: t-test Analysis of the Mean Responses of Managers and Accountants on the Perceived Influence of Liquidity Ratios on the Performance of Agro-Allied Industries.

N= 105 Managers, 76 Accountants; Df= 179						
S/N	Items	Desig.	\bar{x}	SD	t-cal	p-val Rem.
1	Current ratio is used for comparing all liquid assets with current liabilities.	Manager Account.	3.41 3.32	0.65 0.59	1.00	0.32 NS
2	Acid test ratio is used for measuring short-run solvency.	Manager Account.	3.48 3.57	0.61 0.57	-1.00	0.32 NS
3	Cash ratio is used for measuring total cash and cash equivalents to its current liabilities.	Manager Account.	3.56 3.52	0.52 0.60	0.43	0.67 NS
4	Cash flow liquidity ratio is used for measuring the number of times the company can pay off current liabilities with cash generated in the given period.	Manager Account.	3.42 3.34	0.60 0.56	0.88	0.38 NS
5	Accounts payable turnover ratio is used for determining the average number of days it takes to pay bills and invoices to trade creditors.	Manager Account.	3.02 3.11	0.83 0.87	-0.67	0.50 NS
6	Days payable outstanding is used for measuring the rate at which suppliers are paid off.	Manager Account.	3.09 3.03	0.89 0.92	0.44	0.66 NS
Cluster Average					0.18	0.48 NS

Key: N = Number of Respondents; Desig = Designation; Account. = Accountant; x = mean; SD = Standard Deviation; Df = Degree of Freedom; p-val = probability value; NS = Not Significant; Rem. = Remark

Table 4 shows the t-test analysis of the significant difference between the mean responses of managers and accountants on the perceived influence of liquidity ratios on the performance of agro-allied industries in Akwa Ibom State. The result shows a cluster t-cal value of 0.18 at 179 degree of freedom on a p-value of 0.48. Since the p-value of 0.48 is greater than 0.05 set as level of significance, it means that the result is not significant. The null hypothesis is therefore not rejected.

Hypothesis Two

There is no significant difference between the mean responses of managers and accountants on the perceived influence of leverage ratios on the performance of agro-allied industries in Akwa Ibom State.

Table 5: t-test Analysis of the Mean Responses of Managers and Accountants on the Perceived Influence of Leverage Ratios on the Performance of Agro-Allied Industries.

N= 105 Managers, 76 Accountants; Df= 179

S/N	Items	Desig.	\bar{x}	SD	t-cal	p-val	Rem
7	Debt ratio is used for measuring the proportion of all assets that are financed with debt.	Manager	3.28	0.71	-1.48	0.14	NS
		Account.	3.42	0.55			
8	Debt-equity ratio is used for measuring the relationship between total debt capital to owners' equity.	Manager	3.35	0.67	1.20	0.23	NS
		Account.	3.22	0.78			
9	Long-term debt-to-assets ratio is used for determining the percentage of the company's assets that are financed with long-term debts.	Manager	3.33	0.69	1.15	0.25	NS
		Account.	3.21	0.74			
10	Long-term debt-to-equity ratio is used for comparing the total amount of long term debts against owners' equity of the company.	Manager	3.37	0.72	1.27	0.21	NS
		Account.	3.22	0.84			
11	Interest coverage ratio is used for calculating the number of times that net profit before interest and taxes related to the company can cover interest payments.	Manager	2.96	0.82	-2.09	0.04	S
		Account.	3.20	0.63			
Cluster Average					0.01	0.17	NS

Key: N = Number of Respondents; Desig = Designation; Account. = Accountant; \bar{x} = mean; SD = Standard Deviation; Df = Degree of Freedom; p-val = probability value; NS = Not Significant; S = Significant; Rem. = Remark

Table 5 shows the t-test analysis of the significant difference between the mean responses of managers and accountants on the perceived influence of leverage ratios on the performance of agro-allied industries in Akwa Ibom State. The result shows a cluster t-cal value of 0.01 at 179 degree of freedom on a p-value of 0.17. Since the p-value of 0.17 is greater than 0.05 set as level of significance, it means that the result is not significant. The null hypothesis is therefore not rejected.

Hypothesis Three

There is no significant difference between the mean responses of managers and accountants on the perceived influence of profitability ratios on the performance of agro-allied industries in Akwa Ibom State.

Table 6: t-test Analysis of the Mean Responses of Managers and Accountants on the Perceived Influence of Profitability Ratios on the Performance of Agro-Allied Industries.

N= 105 Managers, 76 Accountants; Df= 179

S/N	Items	Desig.	\bar{x}	SD	t-cal	p-val	Rem
12	Gross profit ratio is used for determining the relationship between gross profit to net sales.	Manager	3.20	0.71	0.83	0.41	NS
		Account.	3.11	0.83			
13	Operating profit ratio is used for measuring the company's ability to generate profit from ordinary operations related to the company.	Manager	2.93	0.84	-0.95	0.34	NS
		Account.	3.05	0.83			
14	Net profit margin is used for measuring the percentage of net profit that is made from sales.	Manager	2.78	0.67	1.18	0.24	NS
		Account.	2.67	0.55			
15	Return on assets is used for measuring how effectively the company's assets are being used to generate profit.	Manager	3.23	0.75	-0.98	0.32	NS
		Account.	3.34	0.79			
16	Return on equity is used for measuring the company's efficiency at generating profit from owners' capital.	Manager	3.38	0.66	3.38	0.00	S
		Account.	3.03	0.75			
17	Return on capital employed is used for determining the relationship between the company's profit and capital employed.	Manager	3.19	0.77	0.50	0.62	NS
		Account.	3.13	0.80			
18	Operating cash flow margin is used for determining the efficiency at which the company converts sales to cash.	Manager	3.14	0.89	2.16	0.03	S
		Account.	2.87	0.77			
19	Basic earnings power ratio is used for calculating the earning power of the business before the effects of the business' income taxes and its financial leverages.	Manager	2.79	0.68	3.46	0.00	S
		Account.	2.47	0.50			
Cluster Average					1.18	0.25	NS

Key: N = Number of Respondents; Desig = Designation; Account. = Accountant; \bar{x} = mean; SD = Standard Deviation; Df = Degree of Freedom; p-val = probability value; NS = Not Significant; S = Significant; Rem. = Remark

Table 6 shows the t-test analysis of the significant difference between the mean responses of managers and accountants on the perceived influence of profitability ratios on the performance of agro-allied industries in Akwa Ibom State. The result shows a cluster t-cal value of 1.18 at 179 degree of freedom on a p-value of 0.25 were obtained. Since the p-value

of 0.25 is greater than 0.05 set as level of significance, it means that the result is not significant. The null hypothesis is therefore not rejected.

7. Discussion of Findings

The study found that the respondents agreed that liquidity ratios influence the performance of agro-allied industries in Akwa Ibom State. The following were the influence of liquidity ratios on the performance of agro-allied industries in Akwa Ibom State: current ratio is used for comparing all liquid assets with current liabilities, acid test ratio is used for measuring short-run solvency, cash ratio is used for measuring total cash and cash equivalents to its current liabilities, cash flow liquidity ratio is used for measuring the number of times the company can pay off current liabilities with cash generated in the given period, among others. Furthermore, the finding of the study from the tested hypothesis one showed that there was no significant difference between the mean responses of managers and accountants on the perceived influence of liquidity ratios on the performance of agro-allied industries in Akwa Ibom State.

The finding is in line with Adesiyan (2015) who researched on the performance of quoted agro-allied industries in Nigeria. Adesiyan stated that one of the most outstanding qualities of a good firm is the strong liquidity position that enables it to meet claims and obligations when there is a liability. Furthermore, the findings are supported by Bem, Predkiewicz, Predkiewicz and Ucieklak-jez, (2014) who researched on determinants of hospital's financial liquidity. The study stated that liquidity ratios determine the firm's ability to meet short-term obligations, and it measures, in general, the level of coverage of current liabilities by liquid assets.

The study also revealed that all the items in Table 2 are influences of leverage ratios on the performance of agro-allied industries in Akwa Ibom State. Some of the influences of leverage ratios on the performance of agro-allied industries in Akwa Ibom State include that: debt ratio is used for measuring the proportion of all assets that are financed with debt, debt-equity ratio is used for measuring the relationship between total debt capital to owners' equity, long-term debt-to-assets ratio is used for determining the percentage of the company's assets that are financed with long-term debts, among others. Furthermore, the finding of the study from the tested hypothesis two showed that there was no significant difference between the mean responses of managers and accountants on the perceived influence of leverage ratios on the performance of agro-allied industries in Akwa Ibom State.

The finding is in line with Aziz and Rahman (2017) who carried out a research on the relationship between solvency ratios and profitability ratios. Aziz and Rahman stated that solvency ratios provide a basic picture of the debts in the company's capital structure, as well as the capacity of cash flows to meet interest charges and fixed costs such as rent payments and leases. Furthermore, the findings are in agreement with Adesiyan (2015) who found out that a firm is solvent if, and only if, the firm can pay all its debts, as and when they become due and payable.

Furthermore, the findings of the study showed that all the items in Table 3 are the influences of profitability ratios on the performance of agro-allied industries in Akwa Ibom State. The following were the influence of profitability ratios on the performance of agro-allied industries in Akwa Ibom State: gross profit ratio is used for determining the relationship between gross profit to net sales, operating profit ratio is used for measuring the company's ability to generate profit from ordinary operations related to the company, net profit margin is used for measuring the percentage of net profit that is made from sales, among others. Furthermore, the finding of the study from the tested hypothesis four showed that there was no significant difference between the mean responses of managers and accountants on the perceived influence of profitability ratios on the performance of agro-allied industries in Akwa Ibom State.

The finding is in line with Otegunrin, Nwanji, Olowookere, Egbide, Fakile, Lawal, Ajayi, Falaye, and Eluyela (2018), who investigated financial ratio analysis and market price of share of selected quoted agriculture and agro-allied firms in Nigeria. The study stated that profit is the ultimate aim of an organisation and such an organisation will not remain a going concern if it fails to make adequate profits to keep it operating as a going concern. Furthermore, the findings are in agreement with Adesiyan (2015) who stated that the capacity of a firm to make a profit is the primary indicator of its success; Firms that continuously produce less-than-adequate profits face delayed development, stagnation, and, eventually, collapse. The findings are also supported by Aziz and Rahman (2017), who posit that profitability ratios, which are measures of a company's financial health and how successfully it manages its assets, reflect the company's success or failure.

8. Conclusion

The purpose of the study was to investigate the perceived influence of liquidity ratios, leverage ratios and profitability ratios on the performance of agro-allied industries in Akwa Ibom State. Based on the findings of the study, it was concluded that: liquidity ratios, leverage ratios and profitability ratios influence the performance of agro-allied industries in Akwa Ibom State. The results imply that agro-allied businesses that use financial ratios to analyse their financial statements tend to improve on their business performance as decisions made using the results of ratios analysis are certain to bring about improved performance.

9. Recommendations

In the light of the findings of the study, the following recommendations are being made:

1. Accountants in agro-allied industries should always analyse the firms' financial ratios at the end of every financial year. This will enable them to know the firm's profitability, its ability to generate cash to pay off creditors and the

relationship between various sources of funds available to the firm, making it possible for management to make informed decisions towards the improvement of the firm's performance.

2. Management of agro-allied industries should update themselves through training and workshops on the relevance, understanding and interpretation of financial ratios to make positive use of financial ratios in making key decisions for the betterment of their firms.
3. Government and financial institutions should make policies that will make the provision of financial accounting statements and results of ratios analysis a prerequisite for accessing government grants and bank loans. This will go a long way to ensure that agro-allied businesses analyse their financial statements periodically.

REFERENCES

- [1] Adesiyani, O. F. (2015). The performance of the quoted agro-allied industries in Nigeria. *Research Journal of Finance and Accounting*, 6(9), 200–216.
- [2] Aziz, A., & Rahman, A. A. (2017). The relationship between solvency ratios and profitability ratios: Analytical study in food industrial companies listed in Amman Bursa. *International Journal of Economics and Financial Issues*, 7(2), 86–93.
- [3] Bem, A., Predkiewicz, K., Predkiewicz, P., & Ucieklak-jez, P. (2014). Determinants of hospital's financial liquidity. *Procedia Economics and Finance*, 12, 27–36. [https://doi.org/10.1016/S2212-5671\(14\)00317-7](https://doi.org/10.1016/S2212-5671(14)00317-7)
- [4] Carlos, A., Doyle, B., Andrew, W., Chakib, J., & Sergio, M. (2009). *Agro-industries for development*. Rome: The Food and Agriculture Organisation of the United Nations and the United Nations Industrial Development Organisation.
- [5] Corporate Finance Institute [CFI] (2020). Financial ratios. Retrieved 21st January 2020 from <https://corporatefinanceinstitute.com/resources/knowledge/financial-ratios/>
- [6] D'Angelo, M. (2020). Accounting ratios and formulas: The basics you need to know. Retrieved 22nd January 2020 from <https://www.businessnewsdaily.com/2665-accounting-formulas.html>
- [7] Feng, C., & Wang, R. (2000). Performance evaluation for airlines including the consideration of financial ratios. *Journal of Air Transport Management*, 6, 133–142.
- [8] Jelilov, G., & Bahago, K. A. (2017). Agro-allied industry and its relevance on economic performance : Evidence from Nigeria. *Nile Journal of Business and Economics*, 6(August), 25–32.
- [9] Mendonca, A. E. (2021). Plant quality detection using deep learning. *International Journal of Research in Engineering, Science and Management*, 4(7), 166–168. <http://journals.resaim.com/ijresm/article/view/1018>
- [10] Ocholi, A., & Evelyn, O. (2018). Analysis of the impact of agro-allied industries on the standard of living of rural dwellers in Benue State, Nigeria. *Academy of Agriculture Journal*, 3(6), 461–468.
- [11] Okereke, C. O., & Onyebor, E. N. (2011). Assessing capacity utilization of agro-allied industry in Nigeria. *Continental J. Social. Sciences*, 4(2), 14–22.
- [12] Olufemi, O. (2019). *Nigeria's agro-allied industry: 38 years of neglect and decline*. <https://www.dataphyte.com/agriculture/38-years-of-neglect-and-decline/>
- [13] Otekunrin, A. O., Nwanji, T. I., Olowookere, J. K., Egbide, B.-C., Fakile, S. A., Lawal, A. I., Ajayi, S. A., Falaye, A. J., & Eluyela, D. F. (2018). Financial ratio analysis and market price of share of selected quoted agriculture and agro-allied firms in Nigeria after adoption of international financial reporting standard. *The Journal of Social Sciences Research*, 4(12), 736–744.
- [14] Peters, K. (2021). Industry. Retrieved 14th May 2021 from <https://www.investopedia.com/terms/i/industry.asp>
- [15] Salawu, M. B., Salman, K. K., Ibrahim, A. G., Rufai, A. M., Sodeeq, A. E., & Lamidi, L. O. (2017). Growth and variability of selected agricultural raw materials: panacea for growth in Nigeria agro-allied industries. *The 18th Annual National Conference of the Nigerian Association of Agricultural Economists Held at Federal University of Agriculture, Abeokuta, Nigeria 16th - 19th October, 2017.*, 815–821.
- [16] Solomon, L., Tomii, V. P., & Dick, A. A. (2019). Importance of fungi in the petroleum, agro-allied, agriculture and pharmaceutical industries. *New York Science Journal*, 12(May), 8–15. <https://doi.org/10.7537/marsnys120519.02>
- [17] Spiceland, J., Sepe, J., & Nelson, M. (2013). *Intermediate accounting (7th Edition)*. New York: McGraw-Hill Companies Inc.
- [18] Williams, J., Haka, S., Bettner, M., & Carcello, J. (2015). *Financial and managerial accounting: The basis for business decision (17th Edition)*. New York: McGraw Hill Education