



Liquidity Management and Financial Performance of Selected Quoted Chemical and Paints Manufacturing Industries in Delta State

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Abstract

The success of every organization depends on her financial capacity, thus financial performance plays a fundamental role in the production. In recent time, poor financial capacity among industries in the Nigerian productive sector has resulted into poor liquidity monitoring. Consequently, this study investigated liquidity monitoring of selected listed companies in Delta State, Nigeria. A cross-sectional survey design research design was adopted. The estimated workers' population of all respondents selected were 1,204 (as at 2020) the target population for this study were comprised of all employees from six (6) selected quoted chemical & paints manufacturing companies. Three Senatorial Districts were identified in Delta State. Two Local Governments Areas (LGAs) were randomly selected from each of the Senatorial Districts. One hundred (100) respondents were selected to represent 50% of the total population in each company. The selection was done through a simple random sampling technique. Simple percentages was used to answer research questions while Pearson Product Moment Correlation Coefficient Analysis was employed to test the three hypotheses at 0.05 level of significance. The results revealed that there was a significant positive relationship existed between liquidity monitoring levels and asset quality ($r = 0.150$; $p < 0.05$; $df = 598$), there was a significant positive relationship between liquidity monitoring levels and macro-economic factor ($r = 0.20$; $p < 0.05$; $df = 598$) and positive relationship between liquidity monitoring levels and capital structure ($r = 0.20$; $p < 0.05$; $df = 598$) of listed companies in Delta State, Nigeria. Based on the findings of this study, it is recommended that governments should promote industrial financial policies that would encourage sustainability of

companies, Nigerian Industrial Development Bank (NIDB) should be a link of support to companies to encourage industrial continued existence, and government should ensure that industries abide with industrial financial policy for economic growth and development.

Keywords: Liquidity monitoring, Asset quality, Macro-economic factor, Capital

I. Introduction

Among the four major factors/components of production is capital (Financial factor). Based on this premise, finance is very germane factor of operation without which organization can survive. In the same vein, liquidity is a bank's ability to meet its cash and security duties without earning deplorable losses. Sufficient liquidity is reliant upon the institution's capacity to resourcefully meet anticipated and unpredicted cash flows and collateral needs without negatively affecting either day to day operations or the financial state of the institution. So, liquidity management entails the supply/withdrawal from the market the quantity of liquidity dependable with the desired level of short-term interest rates or reserve money. It is the capacity of an organization to meet demands for funds thereby ensuring that such organization maintain adequate cash and liquid assets to satisfy the demand of client for loans and savings withdrawals and then meet its expected expenses (Owolabi, & Obida, 2017).

According to Sandhar, & Janglani (2015) it is frequently observed that on every occasion a monetary examination of firms is carried out; critical attention is given on the financial performance (gains) of the business instead of its liquidity. This is very clear that the most significant economic aim of any business entity is to make



gains. Therefore, the directors place emphasis for financial performance of the business. Liquidity monitoring, therefore, entails the amount of investments in liquid assets to meet the short-term maturing obligation of creditors and others. Basically, the liquidity monitoring levels is to evaluate the requirements for capital to make sure that the enough cash is available to meet the needs at the appropriate time by organizing the different ways of capital accessible to the companies under either usual and tense circumstances.

Thus, liquidity is lifeblood of a business organization. Agénor, Aizenman, and Hoffmaister (2017), Aspachs, Nier, and Tiesset (2015), Nier, & Kean (2015) opined that the aim of liquidity monitoring is to propel organizations for a financial point that makes them meet their financial requirements accordingly. As opined by Delechat et'al (2016), management of a business organization's funds to make best use of money available and interest revenue on any idle capital is a responsibility of liquidity monitoring. Cash remains the most liquid asset. Another types of current assets which is liquidity concept has two faces which are time and risk (Raheman,& Nasr, 2017). It equally facilitates in planning the settlement to creditors timely to avert bad name to the organization and confidence of the clients and to prevent bankruptcy (Eljelly, 2017). If responsibilities are met without any delay, creditors or clients and all others will have repose of confidence in the financial capability of the company and this will make the organization stand tall in the sight of its customers (DeYoung, & Jang, 2016).

According to Diamond (2017) liquidity plays a crucial role in the successful functioning of an organization. A company should make sure that it doesn't suffer from lack-of or excess liquidity to meet its short-term obligations. A study of liquidity is of major significance to both the internal and the external analysts simply because of its close relationship with daily operations of a business. The lower the liquidity ratios are the better for the organization and this will reduce pressure from customers and creditors that make them meet their obligations. Liquidity is stated in relation to liquidity percentages namely current ratio, quick (acid test) ratio and monetary ratio (Diamond & Dybvig 2017). Submitted that quick (acid test) is a sign of firm's short term liquidity and is planned as current resources net of inventories distributed by current liabilities. It tests a firm's capability to meet its short-term commitments with its most liquid assets thus not including inventories. The quick

ratio examines the naira amount of liquid assets for each naira available of current liabilities.

The problem of insufficient financial capacity is a major limitation to success of operation. In recent time, the examination of poor connection between liquidity monitoring and the performance of industries in the country called Nigeria demands for concern. The examination of liquidity monitoring in relating to performance becomes necessary owing to Companies Market Review in 2009. The National Insurance Commission (NAICOM) mandates it that it is important to evaluate the monitoring of liquidity of companies in Nigeria. Nevertheless, liquidity risk monitoring is vital in companies as in banks due to interconnection of financial structure leading to money crunch. Secondly, liquidity risk may be too exorbitant to business entrepreneur owing to meeting the rate of liquidity and also impacting the Assets and Liability mismatch. There is a trade-off between liquidity and financial performance; attainment in one ordinarily means losing in some of the others (Holmström, & Tirole, 2017).

Based on previous research findings, past studies failed to focus on the liquidity monitoring most importantly in the companies/ industries. Also, the first-hand evidence revealed inconsistent results with some poor relationships and others showing positive or no relationship. Therefore, there was a clear gap in existence since there was no detailed study on the effects of liquidity monitoring on financial performance of organizations listed at the Nigeria Securities Exchange (NSE). Previous studies majorly concentrated on effect of liquidity and relationship of liquidity and financial strength of viable banks. This study, therefore, focused on the effects of systematic review of financial accounting tools for monitoring liquidity have on financial performance of companies in Delta State, Nigeria.

II. Research Questions

The following research questions were raised and answered in the study:

1. To what extent can liquidity monitoring levels affect Asset Quality of listed Companies in Delta State, Nigeria?
2. How can the use of liquidity monitoring levels be applied to Macro economy Factor of listed companies in Delta State, Nigeria?
3. In what way do the liquidity monitoring and financial performance of selected listed companies in Delta State, Nigeria. ; using the financial performance indicators such as: asset



quality, macro economy factor and capital structure?

III. Methodology

This study employed cross-sectional survey design type. The method is considered the appropriate for this study, because it with intense accuracy at the phenomenon of the moment and prescribes precisely what the survey sees. The geographical scope covered 3 Senatorial Districts in Delta State in Nigeria: Delta North, Delta South and Delta Central. The population consisted of (top, middle, and lower level managers) who were still workers as at 2020. However, the estimated workers' population of all respondents selected were 1,204 (as at 2020) All employees from six (6) selected quoted chemical & paints manufacturing companies in public and private sectors of the Nigerian economy were the target population for this study.

More so, a multi stage sampling technique was adopted in this study as a result of its systematic and openness nature (Agénor, Aizenman, and Hoffmaister, 2017).

The following stages were followed:

Stage1: Three Senatorial Districts were identified in Delta State, these includes Delta North, Delta South and Delta Central.

Stage2: Two Local Governments Areas (LGAs) were randomly selected from each of the Senatorial Districts.

Stage 3: In each LGA, two companies were randomly selected. A total of six companies were used for the study.

Stage 4: From each company, one hundred (100) respondents were selected to represent 50% of the total population in each company. The selection was done through a simple random sampling technique. This provides all the respondents equal opportunity of selection. A total of six hundred respondents were selected for the study.

Two instruments were used for this study.

1. Top Managements Level Responses on Problem of Accounting Tools to Monitor Liquidity Performance of Companies in Nigeria (Questionnaire)

2. Middle Managements Level Responses on Problem of Accounting Tools to Monitor Liquidity Performance of Companies in Nigeria (Questionnaire)

For the validity of instrument, the face and content validity of the instrument were determined via the opinion of the experts in the field, the researcher's supervisor who critically looked at the various items contained in the instrument. Thereafter, modifications were made before administration of the questionnaire (Sandhar, & Janglani, 2015). Reliability of an instrument on the other hand was able to measure whatever it intended to measure repeatedly and consistently Aspachs, Nier, and Tiesset (2015). To confirm the reliability of the instrument, the questionnaire was pre-tested at the two insurance companies using ten (10) participants each from each company. Internal consistency reliability was employed when the researcher wanted to confirm whether items on the test were regular with one another and they capture one dimension or area of interest. A pilot study was conducted to test the reliability of the instrument. It was applied to test-retest method. It was administered in another company that was not part of the study.

The outcome of the test- retest of the instrument helped the researcher to ensure its reliability for the present study. For "Top Managements Responses on Problem of Accounting Tools to Monitor Liquidity Levels of Companies in Nigeria Questionnaire, the reliability co-efficient of 0.75 was obtained which shows the instrument is reliable. The researcher administered the questionnaire with assistance of two research assistants in the selected Local Government Areas in Delta State. They were trained on how to carry out the administration, before the questionnaires was administered, the administration took two weeks. Also, data collected from respondents was analyzed using the descriptive statistics of frequency and percentage. Also, Pearson Moment Correlation Analysis and T test Analysis were used to test the four hypotheses at 0.05 level of significance.



IV. Results

Respondents' Demographic Data

Table 4.1: Distribution of Respondents by Sex

Sex	Frequency	Percentage
Male	408	68.00
Female	192	32.00
Total	600	100.00

Source: Researcher Fieldwork, 2022

Table 4.1 shows the distribution of respondents' sex. The male selected were 408 (68.00 %) while the female were 192 (32.00%). This means that the male used in the study were more than their female counterparts.

Table 4.2: Distribution of Respondents by Age

Age group	Frequency	Percentage
21-30	50	8.33
31-40	213	35.50
41-50	270	45.00
Above 50	67	11.17
Total	600	100.00

Source: Researcher Fieldwork, 2022

Table 4.2 shows the age distribution of the respondents. 50 (8.33%) respondents were between 21-30 years, between 31-40 age group were 213 (35.50%), between 41-50 were 270 (45.00%) and above 50 were 67 respondents with representing 11.17%. The largest age group were between 41 and 50 years.

Table 4.3: Distribution of Respondents by Experience

Range of Year of Experience	Frequency	Percentages
Less than 1 year	15	2.50
1 – 5 years	200	33.33
6 – 10 years	70	11.67
11 – 15 years	104	17.33
16 -20 years	123	20.50
21 -25 years	35	5.83
26 -30 years	21	3.50
More than 30 years	32	5.33

Source: Researcher Fieldwork, 2022

Table 4.3 shows the years of experience distribution of the respondents. 15 (2.50%) respondents had less than a year working experience, 70 (11.67%) respondents had between 6-10 years, 104 (17.33%) respondents had 11-15 years of working experience, 123 (20.50%)

respondents had between 16-20 years of working experience. 35 (5.83%) respondents had between 21-25 years of working experience, 21(3.50%) respondents had 26-30 years of working experience. Those with more than 30 years of working experience were 21 representing 5.33%.

Table 4.4: Distribution of Respondents by Marital Status

Marital status	Frequency	Percentage
Married	416	69.33
Divorce/ separated	140	23.33
Singles	44	7.33
Total	600	100.00

Source: Researcher Fieldwork, 2022



Table 4.4 shows the marital status of the parents used for the study. Obviously, majority of the respondents were married, i.e. 461(69.33%) respondents, divorce/ separated were 140(23.33%) respondents while singles were 44 (7.33%) respondents.

Table 4.5: Position Distribution of Respondents

Religion	Frequency	%
Managerial workers	100	16.67
Supervisory workers	120	20.00
Professional workers	250	41.67
Clerical workers	90	15.00
Unskilled workers	40	6.67
Total	600	100.00

Source: Researcher Fieldwork, 2022

Table 4.5 shows the position status of the 4 respondents used for the study. Obviously, majority of the respondents were professional workers, 250 (41.67%), while the least were unskilled labour, i. e.

40 (6.67 %) respondents, managerial workers were 90(15.00%) workers, supervisory workers were 120 (20.00%) respondents, while clerical workers were 40 (6.67%) respondents.

Table 4.6: Educational Qualifications/ Background of the Respondents

Educational Attainment	No of respondents in	% the range
SSCE/School certificate	150	25.33
OND	70	11.66
1st degree	238	39.67
2 nd degree	142	23.67
Total	600	100

Source: Researcher Fieldwork, 2022

From table 4.6 displays the educational qualification of the respondents. Those with SSCE/School certificates were 150 (25.33%) respondents. Also, 70(11.67%) had OND

certificates, the largest respondents were 238 (39.67%) with first degree certificates. Those with second higher degree (Masters) were 142 (23.67%) respondents.

Testing of Hypotheses

Hypothesis 1: There was no significant influence of asset quality on financial performance of paint manufacturers in Rivers State.

Table 4.6a-c: Summary of regression analysis for the effect of Asset Quality on Financial Performance of paint companies in Delta State

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.220 ^a	.048	.042	.16404

Predictors: (Constant), Financial performance

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.195	1	.195	7.232	.008 ^b
	Residual	3.821	142	.027		
	Total	4.016	143			

a. Dependent Variable: Financial performance



Predictors: (Constant), Asset quality

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.769	.185		14.989	.000
	AQNEW	.149	.055	.220	2.689	.008

a. Dependent Variable: Financial performance

Source: Field Survey Data (2022)

Table 4.6a-c presents the results of the regression analysis for the effect of asset quality on financial performance of paint companies in Delta State. Table 4.6 a presents a model summary which establishes how the model equation fits into the data. The R² was used to establish the predictive power of the study's model. From the results, asset quality has very weak and significant relationship with financial performance of paint companies in Delta State (R = 0.220, p<0.05).

The coefficient of determination (R²) of 0.048 indicated that asset quality explained 4.8% of the variation in financial performance while the remaining 95.2% variation in financial performance is expressed by other exogenous variable different from asset quality studied. This result submitted that asset quality influence 4.8% of financial performance of paint companies in Rivers State, Nigeria. Table 4.6b presents the results of ANOVA

(overall model significance) of regression test which revealed that the asset quality has a significant influence on financial performance of paint companies in Rivers State, Nigeria. This can be explained by the F-value (7.232) and p=0.000 which is statistically significant at 95% confidence interval.

Moreover, the findings of regression coefficients in table 4.6c, revealed that at 95% confidence level, a unit change in audit quality will lead to a 0.149 rise in financial performance of paint companies in Rivers State, Nigeria, given that all other reasons are held constant. On the strength of this result (R² = 0.048, F (7.232) = 1.141, p= 0.008), this study reject the null hypothesis one (H₀₁) which state that asset quality has no significant effect on financial performance of paint companies in Rivers State, Nigeria.

Hypothesis 2: How can the use of liquidity monitoring levels be applied to Macro economy Factor of listed companies in Delta State, Nigeria?

Table 4.7 a-c: Summary of regression analysis on Macroeconomic Factor on Financial Performance of paint companies in Delta State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.240 ^a	.058	.051	.16324

a. Predictors: (Constant), MEFNEW

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.232	1	.232	8.688	.004 ^b
	Residual	3.784	142	.027		
	Total	4.016	143			

a. Dependent Variable: FPNEW

b. Predictors: (Constant), MEFNEW

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		



1	(Constant)	3.875	.208		18.666	.000
	MEFNEW	-.171	.058	-.240	-2.947	.004

a. Dependent Variable: FPNEW

Table 4.7 a-c presents the results of the regression analysis Macroeconomic factor on financial performance of paint companies in Rivers State. Table 4.7a presents a model summary which establishes how the model equation fits into the data. The R^2 was used to establish the predictive power of the study's model. From the results, there was very weak and significant relationship with Macroeconomic factor and financial performance of paint companies in Rivers State ($R = 0.240$, $p < 0.05$).

The coefficient of determination (R^2) of 0.058 shows that asset quality explained 5.8% of the variation in Macroeconomic factor on financial performance of paint companies while the remaining 94.20% variation in financial performance is explained by other exogenous variable different from asset quality examined. This result suggests that Macroeconomic factor influence 94.0% of financial performance of paint companies in Delta State, Nigeria.

Table 4.7 b presents the results of ANOVA (overall model significance) of regression test which revealed that the Macroeconomic factor has a significant influence on of financial performance of paint companies in Delta State, Nigeria. This can be explained by the F-value (8.688) and $p=0.004$ which is statistically significant at 95% confidence interval. Furthermore, the results of regression coefficients in Table 4.7c, revealed that at 95% confidence level, a unit change in audit quality will lead to a 0.149 increase in financial performance of paint companies in Delta State, Nigeria, given that all other factors are held constant. On the strength of this result ($R^2 = 0.048$, $F(8.688) = 1.142$, $p = 0.004$). This study thus reject the null hypothesis two (H_{02}) which state that Macroeconomic factor has a significant influence on of financial performance of paint companies in Delta State, Nigeria.

Hypothesis 3: In what way do the Capital Structure affect the financial performance of selected listed companies in Delta State, Nigeria.

Table 4.8a-c: Summary of regression analysis for the effect of Capital Structure on Financial Performance of paint companies in Delta State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741 ^a	.550	.546	.11286

a. Predictors: (Constant), CSNEW

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.207	1	2.207	173.257	.000 ^b
	Residual	1.809	142	.013		
	Total	4.016	143			

a. Dependent Variable: FPNEW

b. Predictors: (Constant), CSNEW

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
1(Cons)	2.036	.094		21.687	.000
CSNEW	.353	.027	.741	13.163	.000

a. Dependent Variable: FPNEW



Table 4.8a-c presents the results of the regression analysis for the effect of Capital structure on financial performance of paint companies in Rivers State. Table 4.6 a presents a model summary which establishes how the model equation fits into the data. The R^2 was used to establish the predictive power of the study's model. From the results, Capital structure has very weak and significant relationship with financial performance of paint companies in Rivers State ($R = 0.741$, $p < 0.05$). The coefficient of determination (R^2) of 0.550 indicates that Capital structure explained 5.5% of the variation in financial performance while the remaining 94.50% variation in financial performance is explained by other exogenous variable different from Capital structure examined. This result submitted that Capital structure influence 5.5% of financial performance of paint companies in Delta State, Nigeria.

Table 4.8b presents the results of ANOVA (overall model significance) of regression test which revealed that the Capital structure has a significant influence on of financial performance of paint companies in Delta State, Nigeria. This can be explained by the F-value (173.257) and $p = 0.000$ which is statistically significant at 95% confidence interval.

Furthermore, the results of regression coefficients in table 4.8c, revealed that at 94.50% confidence level, a unit change in audit quality will lead to a 0.149 rise in Capital structure and fiscal performance of paint companies in Delta State, Nigeria, given that all other issues are held constant. On the strength of this result ($R^2 = 0.550$, $F(173.26) = 1.142$, $p = 0.000$). This study therefore rejected the null hypothesis three (H_03) which state that Capital structure has no significant effect on financial performance of paint companies in Delta State, Nigeria.

V. Conclusion

There was effectiveness of the overall liquidity monitoring levels among the listed companies. Generally, the overall effectiveness of liquidity monitoring levels was at acceptable level. It equally found that the company used more than one instrument/technique for measuring liquidity. It was discovered that Prudential Limits, Ratio Analysis and Cash Flow Forecast Analysis are tools that are relatively highly applied in the company followed by, Maturity Gap Analysis and Stress Testing analysis. Apart from stress testing & sensitivity analysis and the cash flow forecast techniques, all the liquidity monitoring levels are

considered to be effective measure of liquidity in the case of NIB.

VI. Recommendations

Based on the conclusion of the study, the following were recommended:

1. Governments must be ready to promote industrial financial policies that would encourage sustainability of companies.
2. There is need for government to provide additional needed amenities to promote industrial development.
3. Nigerian Industrial Development Bank (NIDB) should be a link of support to companies to encourage industrial continued existence.
4. There is need for proper systematic review of accounting tools to observe liquidity levels of companies in Nigeria.

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