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IMPACT OF LEASE FINANCING ON LIQUIDITY OF NIGERIAN OIL AND GAS COMPANIES

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Abstract

One of the major problems of businesses these days is how to finance their asset in relatively cheaper way. This study therefore examines the impact of lease financing on the liquidity of Nigerian oil and gas companies. The data for the study were collected from the annual reports and accounts of companies in the Nigerian Oil and Gas Industry that are engaged in lease financing and also listed on the Nigerian Stock Exchange (NSE) not later than January, 2005. Fixed effect regression analysis was used to analyze the impact of lease financing on current ratio (CR). The results of the study revealed that lease financing does not have significant impact on the liquidity of oil and gas companies in Nigeria. Therefore, the research recommends that firms should improve on their liquidity since there is evidence that liquidity is not affected by lease financing. More liquidity means that firms can meet their immediate capital obligations without cutting their finances and are therefore ideal.

Keywords: Finance Lease, Operating lease, Liquidity, Current ratio, Oil and Gas industry

INTRODUCTION

Leasing is an alternative means of financing plant, equipment and business vehicles. It is a contract between an owner of equipment (the lessor) and another party (the lessee) giving the lessee possession and use of a specific asset in return for payment of specific rentals over an agreed period. The lessee may or may not be entitled to acquire title to the goods through the exercise of an option to purchase, usually at the end of the lease term. The lessor's role is to

finance the acquisition of equipment required by the lessee who will have selected the goods and dealt directly with the supplier in determining their performance attributes and suitability (Salam, 2013).

Firms use assets in the production of goods and services. One way of obtaining these is to buy them, but an alternative way is to lease them. A common decision faced by firms is whether to buy an asset by issuing debt to finance the purchase or to simply lease the asset. These alternative financing have attracted a lot of studies and models. In a lease framework, the debate has become enshrined in the phrase; “Lease or Borrow”, and “Lease or Buy”.

Leasing remained attractive to investors cutting across the various sectors of the economy. Asides the traditional practitioners made up of banks, finance houses and leasing companies, new entrants from the insurance companies, discount houses, manufacturers/vendors, oil services companies, stock broking firms and even government are getting more involved in leasing. At present, there are over 350 established companies engaged in diverse forms of leasing in Nigeria (Equipment Leasing Association of Nigeria (ELAN), 2012).

Liquidity indicates whether a company has the ability to pay off short-term debt obligations (debts due to be paid within one year) as they fall due. Generally, a higher value is desired as this indicates greater capacity to meet debt obligations. Widely used liquidity ratios are Current ratio and acid test ratio. However, this research will use current ratio to measure liquidity of Nigerian oil and gas companies due to the fact that it measures company’s ability to repay short-term liabilities such as accounts payable and current debt using short-term assets such as cash, inventory and receivables.

The oil and gas industry is one of the vital industries in the world, largely because of its strategic role in every economy and the world at large. The distinctive features that characterized the industry are derived from the nature of crude oil, its operations and commercial arrangements.

Nigeria is Africa’s largest oil producer and has been a member of the Organization of Petroleum Exporting Countries (OPEC) since 1971. The Nigerian economy is heavily reliant on the oil sector, which, accounts for over 95 percent of export earnings and about 40 percent of government revenues, according to the International Monetary Fund. According to the International Energy Agency, Nigeria produced about 2.53 million barrels per day, well below its oil production capacity of over 3 million barrels per day, in 2011 (Samaila, 2014).

In spite of the importance of Oil and Gas industry to the development of the Nigerian economy, researches in lease financing and firm’s performance is tilted to other sectors of the Nigerian economy. Thus, there is the need to examine the impact of lease financing on liquidity

of firms with a view to determine the extent of relationship. This study is carried out to fill this gap for the Nigerian oil and gas industry.

Several researchers were conducted on leasing and liquidity of firms, but only Kurfi (2005) was conducted in Nigeria for the period 1993-2002 in the Nigerian manufacturing industry. Considering the age of Kurfi (2005) research which was carried out a decade ago necessitate the conduct of similar research to substantiate its findings or otherwise in different industry and period.

In view of the above the current research work is aimed at examining the impact of lease financing on liquidity of Nigerian oil and gas companies. In line with the above objective the hypothesis of the research is hereby formulated in null form thus: **H_o:** Lease financing does not have significant impact on the liquidity of companies in the Nigerian oil and gas industry.

LITERATURE REVIEW

This section is targeted at evaluating the concept of leasing, its types, importance and problems among others. Review of empirical studies as well as the theoretical framework of the study is presented in this section.

Concept of Leasing

Leasing has been defined by different authors in different ways but all the same, the meaning is anchored toward the same thing. Kurfi (2003) conceptualized leasing as “an alternative mode of financing to the traditional debt and equity capital for the acquisition of capital assets by firms”. Kraemer and Lang (2012) sees leasing as a contract between two parties where one party (the lessor) provides an asset for usage to another party (the lessee) for a specified period of time, in return for a specified payments. Nigerian Accounting Standard Board (NASB) in information another party (the lessee) which conveys to the lessee the right to use the leased assets for consideration usually periodic payments called rent. Therefore, leasing can be seen as a contractual agreement between two parties (Lessor and Lessee), where the lessor buy an item (equipment/asset) for the lessee in consideration for an agreed periodic rental payment.

Types of Leases

Leases are classified currently under IAS 17 *Leases*.

Finance Lease

Long-term, non-cancelable lease contracts are known as financial leases (Kurfi, 2003). It combines some of the benefits of leasing with those of ownership. Hence a finance lease is

structured as a non-cancelable agreement, where the leasing company buys the equipment which the client has chosen and the client uses the equipment for a significant period of its useful life (Ndu, 2004).

Operating Lease

An operational lease involves the lessee only renting an asset over a time period which is substantially less than the asset's economic life. In such cases operating lease may run for 3 to 5 years (Adekunle, 2005). The lessor is usually responsible for maintenance and insurance. It is cancelable by the lessee prior to its expiration, the lessor provides service, maintenance and insurance, and the sum of all lease payments by the lessee does not necessary fully provide for the recovery of the asset cost.

Importance of Leases

Several authors have considered reasons why leasing may be considered preferable to financing assets by non-leasing debt alternatives. These reasons are grouped into six categories: accounting treatment; tax savings; borrowing capacity; repayment; risk sharing and other reasons (Day, 2000 and Thomson, 2005).

Accounting treatment

At present, International accounting standards (IAS17) require the capitalisation of only finance leases. Thus, operating leases could be favored for their 'off balance sheet' nature as rental payments are expensed in the profit and loss account, with neither the leased asset nor leased liability appearing on the balance sheet (Thomson, 2005). In the other hand capitalizing operating lease may increase the EBITDA of the firms making their financial position stronger.

Tax Savings

At present, legal ownership and the right to claim capital tax allowances on qualifying plant and machinery remains with the lessor. If the lessor can make better use of capital tax allowances than the lessee, then potential lessees may be enticed with the offer of lower rental payments (Day, 2000 and Thomson, 2005). Tax savings on behalf of the lessee may still arise, even though an asset does not qualify for capital allowances because lease rentals paid are tax deductible. Although the increased cost of lease rentals, imposed to compensate the lessor for the absence of capital allowances, may reduce the tax savings, leasing can still potentially be beneficial. This is especially true if the lessee makes rental payments in respect of commercial buildings/offices and if the lessor is of non-tax paying status (Thomson, 2005).

Borrowing Capacity

Leasing might be used to extend a firm's capacity for borrowing if managers perceive that leasing obligations consume less or even no debt capacity compared to non-leasing debt alternatives (Day, 2000). Further, lease agreements may contain less restrictive covenants and thus have less impact on obtaining future finance (Thomson, 2005 and Day, 2000).

Repayment

Leasing may be favored in terms of cash flow considerations. It provides 100% finance for an asset with a limited deposit of a rental payment in advance. Lease agreements are flexible, incorporating features that enable repayment to accommodate fluctuations in cash flows (Thomson, 2005 and Day, 2000).

Risk Sharing Reasons

Operating leases are said to reduce the risk of obsolescence and provide the flexibility to obtain modern or upgraded equipment (Day, 2000). If lessors have a diversified portfolio, then the cost of obsolescence can be borne more cheaply, reflected in the cost of rental payments. Lessors may be in a better position to acquire standardized assets, which they supply to numerous lessees, through bulk purchase (Thomson, 2005 and Day, 2000).

Better Focus of Resources on Firm's Core Business

Companies want to spotlight their core competencies; they avoid getting entangled and wasting time performing task disadvantageous to those competencies therefore back offices are critical for the firm's everyday activities, the operation of the back office requires high maintenance and specialized concentration. By going for leasing, business can focus on their major activities (Thomson, 2005).

Competitive Advantage

In recent times, for a company to retain its customers, provision of high quality services is of great importance. The company should also provide the services at cheap prices. Leasing in this case can help the company maintain lower rates with better service solutions, thereby giving them a better market position and competitive advantage. Organizations obtain sustained competitive advantage by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses (Thomson, 2005).

Lease Financing and Firm's Liquidity

Gate (2013) examined the changes in financial position that might be by the potential change in reporting operating lease in Florida Airline industry. The study used current ratio and quick ratio to measure liquidity and the study revealed that lease financing do not have significant impact on liquidity of airline companies in Florida.

Gavazza (2006 and 2008) examined the between liquidity, firm's boundary and financial contracts with aircraft leasing in Europe. The studies revealed that aircraft leasing has a positive relationship with liquidity of aircraft companies in Europe.

However, Kurfi (2005) examine the impact of lease financing on liquidity position of Nigerian manufacturing firms for the period 1993 to 2002. The study analyses the data obtained from the annual financial statements of the sampled firms using Pearson moment correlation and regression analyses. The study revealed that lease financing does not improve the liquidity position of Nigerian manufacturing firms.

Thomson, (2005) studied leasing in US and UK firms. The study revealed that there is no clear existence of a linear relationship between leasing and firm size. UK evidence suggests that firms at both extremes of the size range employ less leasing compared to firms of medium size. Although a positive relationship was observed between liquidity and finance leasing for a sample of US firms, the relationship appears negative for UK firms in relation to both finance and total leasing. In the US, firms in a high tax position or with substantial cash flows appear to employ less operating leases. High levels of leasing in US firms appear to be associated with operating in a national/international environment, possessing a large proportion of fixed assets in relation to total assets, a high financial distress potential and large proportion of managerial ownership. Industry classification appears to exert influence on the use of leasing in both the UK and US. Leasing is exceptionally prominent in the UK retail trade.

Goodacre (2003) assesses the potential impact of lease accounting reform in Oxford. The study found out evidence that operating leases represent a major source of finance for many companies generally and more specifically for companies in the retail sector. Recognition of operating leases on the lessee's balance sheet would have a significant impact on performance measures, especially gearing.

In the UK, Lasfer and Levis (2008) found out those companies using finance leases to be larger in terms of sales turnover and to exhibit higher gearing ratios and market to book ratios. Leasing companies were found to have higher growth levels as measured by additions to other tangible fixed assets. There was evidence to support the argument that leasing was used to transfer capital allowances to lessors. In large companies, profitability, financial gearing and taxation were found to be positively correlated with leasing, whereas in small companies the

leasing decision did not appear to be driven by profitability or taxation reasons, but by growth opportunities. On balance, firms using finance leases appeared to have higher levels of financial gearing, higher growth in assets and a lower ability to service debt, in comparison to firms that didn't. However, the profitability and investment opportunities experienced by firms using finance leases in comparison to those who did not use finance leases was unclear. Unfortunately this study excluded operating leases.

Thomson (2005), based on a survey on the leases decision across UK listed companies, found that avoiding large capital outlay and cash flow considerations are important for companies in the decision to lease all asset types.

METHODOLOGY

To examine the impact of lease finance on liquidity of Businesses in Nigeria, the data is collected from annual reports and accounts of the sampled companies and annual publications of ELAN. The study population comprises of the entire ten (10) companies in the Nigerian oil and gas industry listed on the floor of Nigerian Stock Exchange. For collecting information, the study has a working population as well as the sampled of six (6) companies. The sample includes only 6 companies that are engaged in finance lease and are listed on the Nigerian stock exchange not later than January, 2005 and remain listed till December, 2014. The data on financial performance was generated from 2005 to 2014 annual reports.

Descriptive, correlation and multiple regression techniques of data analysis is used in analyzing the data generated for the study in addition to some diagnostic tests carried out. Diagnostic checks carried out on the model include multicollinearity test (to check whether there is a correlation among the explanatory variables), Hausman test (to check which model (Fixed or Random effect) is suitable to accept), modified Wald test (to check whether there is heteroskedasticity or not) and Normality test (to check for data normality or the distribution pattern of the research data).

The results from the analysis is organized, summarized and presented using tables, so as to achieve the objectives of the study as well as test the research hypothesis. To achieve the objective of the study the following model is used:

$$CR = \alpha + \beta_1 FL_{it} + \beta_2 OL_{it} + \beta_3 SZ_{it} + \beta_4 DT_{it} + e_{it}$$

Where:

FL = Finance lease (finance lease index)

OL = Operating lease (operating lease index)

CR = Current Ratio (current asset/current liabilities)

SZ = Size (Natural log of total assets)

DT = Debt (debt to total assets)

α = the constant

β = the coefficient

e = error term

The dependent variable for this study is the financial performance of firms in the Nigerian oil and gas industry measured by CR. The explanatory variables are finance lease (measured by finance lease to total asset index), operating lease (measured by operating lease to total asset index), size (measured by natural log. of total asset) and debt (measured by debt to total asset index).

EMPIRICAL RESULTS AND DISCUSSIONS

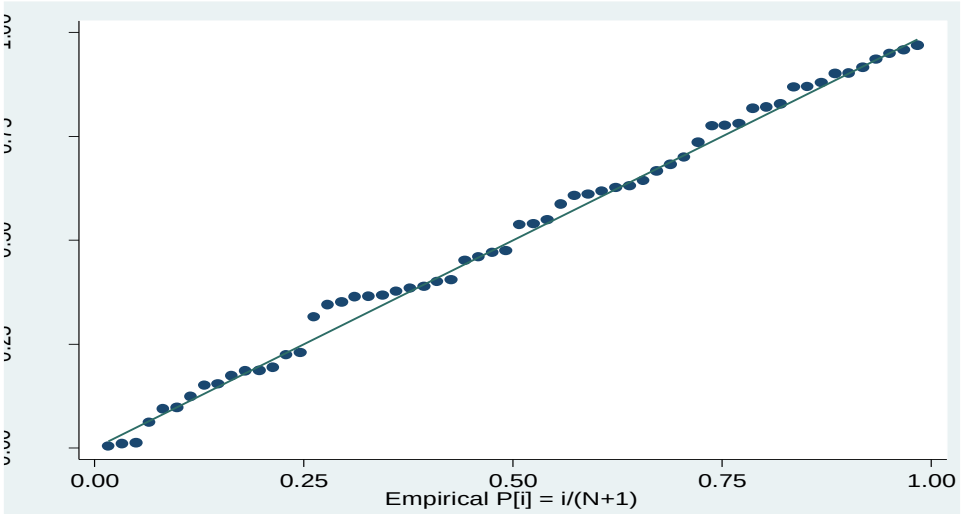
The Diagnostic tests were carried out to check for heteroskedasticity, multicollinearity, outliers, serial correlation and test for choosing appropriate model. Hausman specification test indicates that Fixed Effects (FE) model is preferred to its Random Effect counterpart. This follows the rejection of null hypothesis, as a result of significant chi-square value (0.0003) at 0.01 (significance) levels (table 1). Therefore, FE model is adopted in this analysis. To check whether the variability of error terms is constant or not, a test for heteroskedasticity was conducted and the result of the test revealed absent of heteroskedasticity. The results of the tests also revealed absent of multicolinearity and outliers in the variables (table 1).

Table 1: Breusch Pagan/Cook-Weisberg test and Hausman test

	Breusch Pagan test	**Hausman test**
Chi^2	1.07	20.99
Pro> Chi^2	0.3008	0.0003
Result	Absence of Hetoroskedasticity	Fixed effect model preferred

To check for data normality or the distribution pattern of the research data, the research uses normal probability plot for this purpose (Fig. 1). The normal p-plot of the regression standardized residual indicates a good fit and does not suggest the presence of outliers among the regression standardized residuals. The results of the tests therefore suggest that the data of the research did not differ significantly from a normal distribution, as evidenced by the normal probability plot.

Figure 1: Normal P-Plot of Regression Standardized Residual (Liquidity (CR))



Correlation coefficients on the relationship between the dependent variable (CR) and explanatory variables (finance lease, operating lease, size and debt) are presented in table 2. The correlation coefficient for CR and FL is 0.3795 indicating a weak positive relationship, which shows that CR and FL are positively but weakly correlated. The correlation results presented in table 2 indicated that the dependent variable (CR) is positively related with all the four explanatory variables (Finance lease, operating lease, size and debt). Furthermore, all the explanatory variables are positively correlated among themselves, except for OL and FL that are negatively and weakly related. The result indicated that an increase in OL may lead to a decrease in FL and vice-versa and this is obvious.

To determine the presence or otherwise of collinearity problem, a Variance Inflation Factor (VIF) test results is also presented in the table which provide evidence of the absence of collinearity. This is because the results of the VIF test are less than 5 to all the explanatory variables. However, VIF of 5.00 can still be a proof of absence of collinearity (Kothari & Garg, 2014) while other researchers argued that even the VIF of not more than 10 portrait non existence of collinearity (Gujarati, 2013; Gujarati & Porter, 2009; Gujarati & Sangeetha, 2007 and Gujarati, 2004).

Table 2: Correlation Matrix and VIF test of Collinearity

	CR	FL	OL	SZ	DT	VIF
CR	1					-
FL	0.3795	1				1.52
OL	0.0063	-0.0804	1			1.28
SZ	0.4241	0.3863	0.3630	1		1.48
DT	0.0507	0.3771	0.0860	0.0616	1	1.22

In Table 1, both fixed effect (FE) and random effect (RE) models revealed that the parameter estimates for finance lease, operating lease and debt were found to have insignificant relationship with liquidity (CR). However, size was found to have a positive impact on liquidity (CR) at 0.01 (significance) levels. This means, for 1% increase in size, CR will increase by 3.8% (FE) and 2.58% (RE). The R^2 value for FE model is 0.02 which implies that 2% of the variation in CR is explained by the joint influence of the explanatory variables captured in the model. Therefore, this form the basis for accepting our null hypothesis which says that lease financing do not have significant impact on the liquidity of Nigerian oil and gas companies. This result is consistent with the findings of Gate (2013), Kurfi, (2005) and Thomson, (2005). However, the result is in contrast to the findings of Gavazza (2008 & 2006). The findings can be justified as an increase in lease finance may lead to an increase in rent expenses (in case of operating lease) and interest expense (in case of finance lease) and untimely payment of these expenses may leads to increase in the current liabilities which will subsequently decreases liquidity (current ratio).

The *F-value* for fixed effects reveals 3.65 at 0.05 (significance) levels. The analysis of variance shows that the model estimated by the regression procedure is adequate too. This indicates that at least one coefficient is different from zero. This signifies the probability of considering the model for drawing conclusions and recommendations for this study.

Table 3: Regression Results

Dependent Variable: Liquidity (CR)		
	Coefficients	Estimates (and t-ratios)
Independent Variables	FE Regression	RE Regression
FL	-0.083 (-1.22)	0.098 (1.74)
OL	-0.028 (-0.31)	-0.040 (-0.77)
SZ	0.372 (3.80)*	0.217 (2.58)*
DT	-0.166 (-0.27)	-0.288 (-0.45)
CONSTANT	-1.120 (-1.29)	-0.933 (-1.70)
R^2	0.02	0.6394
F	(3.65)**	(18.11)*

Significance at 1% (*), 5% (**) and 10% (***)

CONCLUSION AND RECOMMENDATIONS

The study concludes that lease financing does not influence the liquidity of listed companies in Nigerian oil and gas industry. As it is shown, there is evidence of insignificant relationship between lease financing and liquidity at all acceptable levels of significance. Thus, the liquidity of listed companies in Nigerian oil and gas industry is not affected by the level of leasing.

Finally, the study recommends that firms should improve on their liquidity since there is evidence that liquidity is not affected by lease financing. More liquidity means that firms can meet their immediate capital obligations without cutting their finances and are therefore preferred. The liquidity ratios can be improved by reduction in current liabilities, by way of timely payment of rent and interest expenses attributable to finance lease and operating lease.

Since, firms that are less liquid tend to lease in order to finance their assets, therefore the research found out more imperative for researches to be carried out on the impact of lease financing on financial performance of companies so as to give room for generalization on the subject matter.

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