

CASH HOLDING MANAGEMENT AS A CORRELATE FOR FIRM PERFORMANCE

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Abstract:

This study x-rays the relationship existing between Cash Asset Holding Management and company performance (Profitability) in Nigeria. The study uses multiple regression technique on 17 sampled firms employing data available on each sampled company's audited annual report for the period 2010 to 2016. The empirical evidence shows that Cash Holding Management and Firm Performance are positively related. It follows along with studies which argued that corporate cash holding increases the ability on competition in the financial markets. It was also established that the negative influence of fixed assets on firm performance could be attributed to the depreciation (wear-and-tear) and the underestimation of the fixed assets of firms. Based on these findings, the study recommended that company managers place more emphasis on the cash position of their firms at all times, since a stable cash position ensures that the firms competently meet up with their current liabilities.

Keywords: Cash Holding, Firm performance, Management, Financial market

Introduction:

The management of the cash position of a business remains a day-to-day struggle in the business environment. It ranks among the important business activities of management. According to [1] the working capital is the life blood, since cash and its equivalents are the most liquid assets a firm could ever possess. Cash holdings have many advantages related directly to investment activities, especially in flexibility and capitalizing on opportunities. [2], argues that firms possessing high cash holdings can take advantage of more investment opportunities without being too restricted by capital, ensure adequate capital for planned or unplanned opportunities (business expansion, market opportunities during the financial crisis, when unexpected news brings a stock price down, real estate deal, business opportunities, and so on).

Availability of cash holdings allows firms to take advantage of the moment. Firms can make profitable investment deals that have a huge impact on their continuity whether for restructuring purposes or for taking advantage of new opportunities. On the other hand, the firm's decisions on cash holdings must be thorough, logical and sound in order to avert the negative effects of holding too much cash [3].

The need for cash holdings have even been on the increase in Nigeria. Increased borrowing from banks has been the norm of Nigerian firms since the 1990s. The effect of this was not perceived until the financial crisis struck in late 2008. During the crisis, most financial agents and institutions around the world were faced with severe funding crisis. Due to the loss of financial institutions' intermediation capacities, the domestic capital markets rapidly shrank in its functions. Most Nigerian firms were unable to secure credit

facilities from the local capital markets. In order to curb this, non-financial firms were engaged to strengthen funding strategies in the face of financial constraints.

It should also be noted that banks in Nigeria suffered less from the global financial crisis compared to their overseas financial institutions counterparts. Owing to this, firms in Nigeria that was unable to secure finance from the capital markets, had the option to solicit such increased borrowings from banks.

Statement of Research Problem:

Cash holding management constitutes a major pillar in the working capital management framework. Extensive studies have been done on working capital management in both advanced market economies and developing economies [4],[2]. For instance, the study of [5], observed that most failed businesses (up to 60%) were of the opinion that all or most of their failures were due to cash flow problems. It should be noted that though these studies in the past have established the nature and direction of the relationship between working capital management and financial performance, till date, only limited studies have investigated the relationship between firm cash holding management and financial performance especially as it affects the developing economies like Nigeria. This thus is the motivation or rationale for this study.

Objective of the Study:

The relationship (if any) that exists between cash holding management and firm profitability among listed insurance companies in Nigeria forms the main objective of this study.

Hypothesis:

There is no significant relationship between cash holding management and profitability of listed Nigerian insurance companies.

Review of Related Literature:

The Cash Holding Dilemma:

While the agency theory of [5] and [6] asserted that managers with self-interest might over spend the cash reserves of the organization for their own benefits even at the expense the organisation's shareholders, low cash holdings could have detrimental effects on firms' liquidity.

Many studies have examined the validity of the above. For instance, it is shown that agency problems can result in firms with high cash holdings spending on capital expenditures and acquisitions with depreciating values [4]; [6] and [2]. Thus, in the event of investors overly emphasizing the agency costs and excessively discounted cash-holdings, there will be a temporarily undervaluation of the firms.

If the implicit real-illiquidity costs are neglected and the low cash-holdings firms are not sufficiently discounted by investors, these firms might temporarily be overvalued. Thus, financially-constrained firms are mainly concerned with higher cash holdings and corporate liquidity in order for the firms to with uncertainty [7] and [8]. When there is a proper evaluation and correction, firms with high cash-holdings will reap abnormally high stock returns in the future, while firms with low cash-holdings will reap abnormal low returns.

Drivers' of Cash Asset Holdings:

As [9], and [3] and other related literature summarize, there are several major theoretical perspectives on why firms hold liquid assets: financial constraints and costly external funding, influence of creditors such as banks, and corporate governance. Financial constraints on funding are the most obvious reason for firms to hold liquid assets such as cash and deposits. It would be natural for firms to keep liquidity reserves such as in the form of cash in advance in order to avoid the constraints for funding in the future.

Firstly, [10] discuss how cash and deposits provide firms with financial slack, which allows them to manage operations without costly external funding. These arguments are based on the Pecking Order Hypothesis (POH), according to which firms have a preference for internal reserves over costly external funding. If there is a large asymmetry of information between borrowers and lenders, firms with large agency costs from the asymmetry of information tend to reserve more liquid assets instead of using external funding. In addition, if a firm has a larger growth opportunity or faces a larger funding risk, it will increase its cash reserve.

Second, debtors' cash-holdings are significantly influenced by creditors. As creditors are repaid their debts by debtors, liquid assets are not unnecessarily reserved [11]. It is an established fact that creditors will be reluctant to make additional loans to debtors, when such debtors already have numerous untapped cash in their possessions. In the vein, firms would prefer to use reimbursed cash flows rather than accumulated cash reserves in their coffers if the opportunity cost of holding liquid assets is large owing to high funding costs.

In order to avoid bankruptcy, debtors will struggle to build cash reserves in the face of severe cash management crisis and high level of debts. However the case, borrowers' cash holdings is affected by the banks. The study of Hoshi, [4], analyzed the effect of banks on cash reserve levels. It suggested that if banks are able to provide a minimum liquid to firms, such firms do not require extra cash-holdings, especially if they are already indebted heavily.

The third argument on holding cash concerns conflicting interests between managers and external stakeholders from the viewpoint of corporate governance. [5], on the basis of agency theory, suggests that managers have incentives to increase assets under their control rather than to pay out cash as dividends to external shareholders.

The reasons for firms' liquid asset holdings are various and related to different interests of internal and external stakeholders. Thus, empirical studies investigate specific motivations for cash holdings to explore the relationship between firms and stakeholders. In terms of cash holdings under financial constraints, [12] show that firms with easy access to the capital markets hold lower ratios of cash to total assets. By using U.S. firm data for 1971-1994, they show that when cash flow is low for investment or external funds are costly, firms hold liquid assets to ensure that they will be able to keep investing. [13], on U.S. small firms, [11] on UK firms, and the study of Ferreira and [4] on EMU firms have similar results.

Liquid Asset Holdings vs Corporate Performance:

This study investigates not only the reasons for cash holdings but also firms' performance and value from cash holdings perspective. There are dearth in empirical works that addressed the effects of cash holdings decisions on the firm's profits and financial performances.

The wide perception in the classical view is that there is a negative effect of firms' liquidity on profits, and that firms holding more liquidity will not be able to exploit the profitable investment opportunities, and possibly ending up paying higher taxes on this asset [14]. The studies of [15], [16], and [17] among others reported that there is a positive relationship between cash holdings and firm value have been proved after the financial crisis. These literatures argued that cash holdings increase the ability of competition in financial markets.

The research work of [18] found evidence that firms holding higher cash than their competitors achieve better performance and profitability when measured by return on assets. The study presented evidence that firm's market-share increased than that of their fellow competitors due to increasing levels of cash holdings. Thus, the firm employs effective capital management to benefit from operational competitive advantages whatever the economic climate is [19].

Low cash holdings could be negatively affect the real liquidity of the firm [12]. Precautionary-savings and market-timing both constitute why firms put away cash during season of financial stability [8]. On their, [7], gives evidence(s) why cash holdings will reduce refinancing risk on the part of firms. In such a situation, the investors tend to overlook the dangers of corporate liquidity caused by low cash holdings.

The study of [20] also concluded that liquidity holdings do not depend on debt, instead, it made firms financially stronger and attract heavy investment on the part of investors. Thus, the most important decision a management need is adequate cash holdings [21], [18] and [22].

Cash holdings play a significant role in economic growth of emerging countries. [23], suggested that corporate cash holdings in emerging markets promote economic growth. The study attributed this relationship to firms' desire in developing countries taking advantage of investment opportunities. [5], note that firms with large cash holdings are not highly valued by external stakeholders who can spend cash on investing in less profitable projects. This increases agency costs. Similarly, [8], also explains that firms with large cash holdings tend to invest in mergers and acquisitions, which decreases corporate values.

On the other hand, if a firm faces a profitable investment opportunity but the asymmetry of information prevents additional capital funding from shareholders, underinvestment problems arise, as [10] point out. Assuming that the firm has large cash holdings and investment opportunities are also large enough, cash holdings could solve the underinvestment problems. External shareholders do not highly value large cash holdings before investment, but the firm could invest in proper projects using cash and earn profits.

In terms of empirical studies on cash holdings and corporate performance, [24], analyze a small sample of firms that have cash windfalls from lawsuits. They find that managers retain cash rather than distribute it to

shareholders even though they have no attractive investment opportunities. The results also show that such firms invest in projects that later fail.

[25], using U.S. firm-level data for the period of 1950-1999 show that firms with growth opportunities have their higher cash value. They also demonstrate that the cash holdings of most firms with stable investment programs and those facing the possibility of financial distress are less valued.

[26], using Japanese firm data for the period of 2000-2004, similarly shows that cash holdings of firms with big opportunities for investment are highly valued, although financial constraints such as debt ratios and capital market access have no significant effects on the relationship between corporate values and cash holdings.

In addition to the performance and profitability aspect, the decision to hold cash is associated with rivalry and rapacity in product markets. The flexible firms with incapability to respond to changes in product markets can force the risk of being excluded out of the market. For example, holding vast cash can empower a firm to respond rapidly to new investments opportunities by building entry barriers and let the firm monopolizes the market in a situation where an entrant is trying to create competition. Cash rich corporations seek to enforce the competitors who are financially constrained by mediating their cash flow.

The model of Bolton and [27], showed that the company's ability to finance their activities mitigates the financial distress through generating funds internally, decreasing the rapacity risk and stimulating growth in the product markets.

Research Methodology:

This study focuses on the relationship between firm profitability and cash holding in some selected listed Nigerian insurance companies. The period under question spanned from 2010 through 2016. The variables tested were Cash balance, Total Assets, Property Plant & Equipment, Profit-After-Tax and Cash flow from operations. This research employed the Pooled Ordinary Least Square Regression Technique putting into perspective the pool nature of the data.

Nature and Source of Data:

The study employed secondary data extracted from selected Nigerian insurance companies. Such data are more reliable because they are adequately audited and presented. The data give a fair and true perspective of issues of the companies according to the Companies and Allied Matters Act, 2004.

Sample data:

The sample data were gathered from the financial records of 17 companies (Prestige Assurance, Niger Insurance, Consolidated Hallmark, Standard Alliance Insurance, Lawunion & Rock, Linkage Assurance, Nem Insurance, Aiico, Lasasco Assurance, Continental Reinsurance, Cornerstone Insurance, Wapic Insurance, Mansard Benefit Assurance, Custodian & Allied Insurance, Royal Exchange, Staco Insurance, and Mutual Benefit Assurance) listed on the Nigerian Stock Exchange (NSE), from 2010 to 2016. The data are computed in Excel and Stata 13. The following principles were used to guide the selection of companies to ensure results objectivity and accuracy:

Companies that are delisted or in dissolution stage were excluded from the selection, in order to reduce the number of outliers and anomalous performance as well as observe regular business activities. To achieve data reliability, only companies with complete financial statement position for each year were selected.

Empirical model:

This study examines selected variables affecting firm performance especially in connection to cash holding on a time series basis using cross-sectional data over the period of 2010-2016. We will regress Profit-After-Tax against a group of variables;

In line with this, performance is given as follows:

$$\text{Performance} = f(\text{Cash balance, Total Assets, Property Plant \& Equipment, Cash flow from operations}) \dots\dots (1)$$

The static linear models are presented in equation 2

$$\text{PATAX}_{it} = \alpha_i + \beta_1\text{CASHH}_{it} + \beta_2\text{TASST}_{it} + \beta_3\text{FASST}_{it} + \beta_3\text{CASFO}_{it} + \varepsilon_{it} \dots\dots\dots (2)$$

Where;

PATAX = Profit-After-Tax

CASHH = Cash balance

TASST = Total Assets

FASST = Property Plant & Equipment

CASFO = Cash flow;

α_i (i = 1...1, 2, 3) = intercept,

t = 2010...2016 represents the year analyzed,

β_s = coefficients for every independent variable, and,

ε_{it} = error term.

The technique adopted in the study is Pooled Ordinary Least Squares (OLS). The regression will be corrected where necessary in order to avoid the pitfalls of heteroskedasticity and autocorrelation. This is necessary since we do not possess a balanced panel data for all firms. In addition, in order to capture a holistic view of the impact of cash-holding on firm profitability, the pooled ordinary least square gives a better result.

Presentation and Interpretation of Data:

The study investigates the relationship between cash holding and firm profitability in some selected listed insurance companies in Nigeria between the periods 2010 – 2016. In identifying the possible firm’s specific characteristics and exogenous factors that would influence firm’s performance we conducted descriptive statistics, correlation matrix, and Pooled Ordinary Least Square Regression. Moreover, some post estimation tests were equally conducted.

Summary Statistics

We present the summary statistic of all variables employed in the study below;

Table 4.0:

Summary Statistics:

Summarize cashh fasst tasst patax casfo

Variable	Obs	Mean	Std. Dev.	Min	Max
cashh	108	3432.898	8962.043	22.1	89755
fasst	117	1361.587	1195.99	103.4	5905.5
tasst	117	15659.35	10483.36	4801.8	58338.1
patax	116	305.7914	1448.066	-8413.8	4099.1
casfo	113	872.1265	1925.208	-1559	15676.9

Source: STATA 13 OUTPUT

Table 4.0 shows the mean (average) for each of the variables, their minimum values, maximum values, and standard deviation. The results in Table 4.1 provided some insights into the nature of the selected quoted companies that were used in this study. A careful view of the table shows a large difference between the maximum and minimum values of PATAX, TASST, FASST and CASFO. Such large differences show that the sampled quoted companies in this study are not dominated by either large or small companies during the period of study.

Correlation Analysis:

The table below shows the correlation among the variables under study.

Table 4.1: Pearson Correlation Matrix

correlate cashh fasst tasst patax casfo

(obs=107)

	cashh	fasst	tasst	patax	casfo
cashh	1.0000				
fasst	0.1355	1.0000			
tasst	0.2061	0.6147	1.0000		
patax	0.1804		0.0862	0.3903	1.0000
casfo	0.1586	0.5575	0.6778	0.3655	1.0000

Source: STATA 13 OUTPUT

In Table 4.1 above, we focus on the correlation between firm performance and the individual explanatory variables. The result shows that firm performance for the selected firms are positively associated with Cash-holding (CASHH = 0.18), Property Plant & Equipment (FASST = 0.086) and Total Asset (TASST = 0.39). However no variable of interest showed high positive correlation that would have created suspicion for the problem of multicollinearity, although the Variance Inflation Test was used to validate this result.

Normality Test:

Table 4.2 shows the skewness and Kurtosis statistics (Data Normality Test).

Table 4.2: Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
cashh	108	0.0000	0.0000	.	0.0000
fasst	117	0.0000	0.0000	46.19	0.0000
tasst	117	0.0000	0.0005	32.82	0.0000
patax	116	0.0000	0.0000	61.85	0.0000
casfo	113	0.0000	0.0000	.	0.0000

Source: STATA 13 OUTPUT

Table 4.2 showed that all the variables are normally distributed and are significant at 1% level of significance. The descriptive statistics in general revealed that there is no sample selection bias or outlier in the data that would impair the generalization from this study.

Test for Autocorrelation

The table below shows the result for the test for autocorrelation, although this is a common problem with time series data.

Table 4.3: Variance Inflation Factor Result

Variable	VIF	1/VIF
tasst	6.71	0.149111
fasst	3.81	0.262665
intercept	3.79	0.263579
casfo	2.34	0.426568
cashh	1.20	0.835385
Mean VIF	3.57	

Source: STATA 13 OUTPUT

The table above shows the result obtained from the variance inflation factor analysis. Here the mean value of 3.57 which is less than the bench mark value of 10 indicates the absence of multicollinearity.

Test for heteroskedasticity

The table below shows Breusch-Pagan / Cook-Weisberg test for heteroskedasticity.

Table 4.3 Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of patax

chi2(1) = 0.07

Prob > chi2 = 0.7903

Source: STATA 13 OUTPUT

In order to eradicate the suspicion of a possibility for spurious correlations among variables (constant variance), we applied the tests for heteroskedasticity to the panel data. The result (0.79) which is insignificant even at 10% level of significance recommends that we accept the null hypothesis of constant variance hence the data is free from the consequences of heteroskedasticity.

Pooled Ordinary Least Square Regression

The estimated static regression models indicated that the variable of firm performance (Profit-After-Tax) is influenced by Cash balance, Total Assets, Property Plant & Equipment, and Cash flow from operations. The results are shown below

Table 4.4: Pooled Ordinary Least Square Regression

regress patax cashh fasst tasst casfo

Source	SS	df	MS	Number of obs = 107		
-----+-----				F(4, 102) = 7.90		
Model	54881486.5	4	13720371.6	Prob > F = 0.0000		
Residual	177171705	102	1736977.5	R-squared = 0.2365		
-----+-----				Adj R-squared = 0.2066		
Total	232053192	106	2189181.06	Root MSE = 1317.9		

patax	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
cashh	.0167656	.0145363	1.15	0.251	-.0120671	.0455984
fasst	-.3794058	.1392004	-2.73	0.008	-.6555091	-.1033025
tasst	.0519189	.0175774	2.95	0.004	.0170542	.0867835
casfo	.1981227	.0911895	2.17	0.032	.0172487	.3789966
_cons	-225.7783	248.1702	-0.91	0.365	-718.0228	266.4661

Source: STATA 13 OUTPUT

From the above table, three (3) of the four (4) variables conform to a priori expectations. These are CASHH, TASST and CASFO. FASST did not obtain the required sign. This finding implies that the cash holdings of a firm positively influence the firm's profitability. These results go in line with the results of [5], [16], and [17], among others, which argued that cash holdings increase the ability of competition in financial markets. Also, it goes in line with the study of [8], which concludes that holding vast cash support investment without hindering corporate performance. The negativity of FASST could be attributed to either the underestimation or the effects of depreciation (wear-and-tear) of the firm's fixed assets.

The above findings have certain implications. On one hand, companies tend to earn more to meet their financial needs in the face of strong performance. In that case, companies need not borrow from external sources to finance their operations. Companies have stronger operational capacity if profits are high and the capital structure is well placed. This finding conforms to the findings of [28].

The study also establishes that the nature of relationship between profitability and cash holdings of firms with robust investment opportunities is not significant, though positive. It implies that when the sudden severe deterioration in the economy occurred in 2008, external shareholders could value conservative cash holding management higher, regardless of large investment opportunities, but in fact, such firms failed to utilize assets to improve profitability in that period, as mentioned earlier. It is assumed that if such cash management and difficulty in improving the profitability on assets continues, market values would decline.

Conclusion:

This study focuses on cash holdings management decisions and their significant role in enhancing the financial performance of firms and ensuring that required funds are made available at all times. The results obtained from the study showed a positive relationship between profitability and cash holdings. This means that insurance firms' profitability in Nigeria is affected positively by cash holdings level. In other words, a good corporate profitability is an outcome of holding huge reserves in terms of cash.

The positive relationship between profitability and cash holdings reflect the effectiveness of hedging behaviors by Nigerian insurance firms' managers that such strategies help Nigerian listed insurance firms avoid cash shortages and easily pay obligations which reflects positively on the firm's profitability. Moreover, these results imply that the disruption in production and sales impacts on inventory causes a technical insolvency represented on inability to pay the creditors in time due to the restrictive policy.

Recommendations:

Bases on the findings of paper, it is eminent to proffers the following suggestions:

- i. Since a stable cash position will easily ensures smooth operations, company managers should keep a close look on the cash position (cash or liquid assets at hand) at all times.
- ii. Cash management techniques designed to expand cash resources should be adopted.
- iii. The company should adopt corporate credit policies that state what limit must be adopted in terms of the company's finances.
- iv. Finance managers should consider both internal and external factors driving capital as well as the sensitivity of these factors to the ever-changing business environment.

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