FINANCIAL MANAGEMENT PRACTICES, SHAREHOLDERS WEALTH MAXIMIZATION CRITERION AND FIRM VALUE: AN EMPIRICAL ANALYSIS

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Abstract
In the field of financial management, shareholders wealth maximization is often seen as the desirable goal not only from the shareholders perspective but for the society at large; with the firm's primary goal aimed mainly at maximizing the wealth of its shareholders. This study thus aimed at determining the impact of the core financial management decisions or functions on firm value or shareholders wealth. The study adopted the use of the Ordinary Least Squares (OLS) multiple regression and correlation matrix to ascertain the relationship between shareholders value and the core financial management decisions/functions. The results of our findings in the correlation matrix revealed that all the financial management practices were negatively correlated with shareholders wealth or firm value while the OLS multiple regression revealed that dividend decisions and investment decisions were the two variables that exert significant influences on shareholders wealth or firm value.

Introduction
Financial management is the managerial planning and control of financial resources of a business to achieve the objectives of the business (Olowe, 1999). Financial management is a managerial activity that is concerned with the planning and controlling of the firm's financial resources (Pandey, 2005). The field of financial management is of immense interest to academics and practitioners because it is an emerging discipline with many areas where common grounds have not been reached. Financial management focuses on the acquisition of funds which concerns the financing decision of the firm (choice of the sources of funds for which projects); and utilization of funds which concerns the investment decisions (determination of the firm's choice criteria as well as the selection of investment project that pass the firm's test of acceptance using the company's choice criteria) and dividend decision which concerns whether or not to pay dividends; if yes, whether to pay cash or scrips, bonus shares in lieu of dividends or a combination of both i.e. cash and shares and liquidity decision which concerns the management of current assets (Pandey, 2005).

Financial management is based on the assumption of shareholder's wealth maximization objective (Olowe, 1999). Shareholders' wealth maximization cannot be achieved without a recourse to the functions financing, investment, dividend and liquidity decisions. Financing decisions have implication for the cost of capital and the consequent optimisation of returns; the way the finance of a firm is managed determines to a large extent its survival and growth (Idolor, 2010); investment decisions have implication for the company's profitability and hence its competitiveness and survival in the market place; dividend decision have implication for the shareholders' continued loyalty as well as the organization's well being in the sight of the investing public (present and potential) and the capital market and liquidity decisions have implication for the current asset of the firm.

A careful juxtaposition of financing, investing, dividend and liquidity decision indicates that they are all crucial to the optimization of corporate returns. This underscores the importance of financial management to the success of business organizations.

While most researchers agree on the importance of sound financial management and its functions in achieving shareholders wealth maximization

objective, the point of departure tends to remain with the hierarchy of prepotency of each of the functions. The essence of this study is to wade into the controversy and see which of the oft reported functions is significantly predominant in this very important area of finance. Essentially the study is exploratory and the case studies are confined to Nigerian commercial banks.

Statement of the Research Problem

Little attention has been given to the empirical evaluation of financial management practices in Nigerian banking institutions. Non-adherence to financial management practices has been identified as the cause of illiquidity, poor investment strategy, poor dividend decision and non-optimal capital structure in Nigerian banking institutions.

It is against this background that the study seeks to provide answers to the following questions:

(a) Does Nigerian commercial banks dividend decisions affect their desire to maximize shareholder's wealth?

(b) To what extent do Nigerian commercial banks financing decision affect their desire to maximize shareholders' wealth?

(c) Is the maximization of shareholders' wealth in Nigerian commercial banks influenced by their investment decisions?

Is there a relationship between Nigerian commercial banks liquidity decisions and the maximization of shareholders' return or wealth?

The Concept of Financial Management

Financial management is the managerial planning and control of financial resources of a business to achieve the objectives of the business (Olowe, 1999). Pandey (1999) defined financial management as that managerial activity which is concerned with the planning and controlling of the firms financial resources. The field of financial management is of immense interest to academics and practitioners. This is basically because it is an emerging discipline with many areas where controversies exist, and for which no unanimous agreement has been arrived at. Practicing managers also find this subject interesting because among the most crucial decisions of the firm are those which relates to finance; and an understanding of the theory of financial management provides them with conceptual and analytical insight to make those decisions skillfully. The scope of financial management is very wide because there exist an inseparable relationship between finance on the one hand and other basic organic functions (Production marketing, and Human Resources) performed by the organization. Basically all kind of business activities directly or indirectly involves the acquisition and use of funds. For instance, sales promotion policies come within the purview of marketing, but advertising and other sales promotion activities requires outlays of cash and therefore affect financial resources. Recruitment and promotion of employees in organisations is clearly the responsibility of the personnel department, but it requires payment of wages, salaries and other benefits and thus involves finance (Idolor et al, 2003).

Financial management is based on the assumption of shareholders wealth maximisation objective (Olowe, 1999). The firm's investment and financing decisions are unavoidable and continuous. In order to make them rational, the firm must have a goal. It is thus generally agreed in theory that the financial management goal of the firm should be the maximisation of shareholders (owners) economic welfare, by maximising the wealth of shareholders as reflected in the market value of shares (Pandey, 1999). The objective of shareholders wealth maximisation (SWM) is an appropriate and operationally feasible criterion to choose among the alternative financial actions. This is because it provides an unambiguous measure of what financial management should seek to maximize in making investment and financial decisions on behalf of owners (shareholders). Therefore, the performance of the financial manager must thus be evaluated in line with the overall objective of shareholders wealth maximisation (Olowe, 1999). Shareholders wealth maximization, means maximising the net present value of a course of action to shareholders. The net present value (NPV) of a course of action is the difference between the present value of its benefits and the present value of its cost. A financial action resulting in positive NPV creates wealth for shareholders and is therefore desirable. A financial action with negative NPV should be rejected since it would destroy shareholders wealth. Among a number of mutually exclusive projects, the one with the highest positive NPV should be adopted (Pandey, 1999). Wealth maximisation considers risk and time factor. This is reflected in the discount rate which can be adjusted up or down for risk and time preferences. Wealth maximisation is also verifiable. If a firm is

maximising its NPV, there will be increase in the demand for its shares, so the price of its shares will rise. Otherwise, its share price will fall. Wealth maximisation can be derived using the following method:

$$W = \frac{A_1}{(1+k)^1} + \frac{A_2}{(1+k)^2} + \ldots + \frac{A_n}{(1+k)^n} - C_o$$

Where $A_1, A_2, \ldots, A_n$ = The stream of benefit expected to occur if a course of action is adopted
C_o = The Cost of that action
K = The appropriate discount rate to measure the quality of A's
.1, 2, …, n = Time or number of occurrence
W = the net present value of wealth i.e. the difference between the present value of the stream of benefit and the initial cost.

The data required for wealth maximisation criterion are the cash inflows and cash outflows. Non cash expenses are excluded. In addition, assets are valued at market prices (Eriki, 1999).

There are basically three major activities/ functions carried out in financial management. These include the raising of fund (financing function), the control and utilization of funds to meet the diverse needs and objective of the firm (investment function) and the payment of dividends to shareholders (dividend function). However Pandey (1999) has suggested a fourth financial management function which involves the management of a firm's current asset (liquidity function). These functions, very briefly discussed in the next subsection of this study, are interrelated and have impact on the market price of a company's shares.

Investment Decision
This is the allocation of an organisation's capital funds to investment proposals to yield future benefits that will meet up the expectations of all investors in a company (Olowe, 1999). Investment decision or capital budgeting involves the decision of allocation of capital or commitment of funds to long-term assets that would yield benefits in the future. Two important aspects of the investment decision are the evaluation of prospective profitability of new investments and the measurement of a cut-off rate against which the prospective return of new investments could be compared. Future benefits of investments are difficult to measure and cannot be predicted with certainty. Because of the uncertain future, investment decisions of a necessity involves risk (Pandey, 1999). Besides the decision to commit funds in new investment proposals also involves decisions bordering on the re-commitment of funds when assets become less productive or non profitable. Thus there exists a broad agreement that in any investment decision, the correct cut-off rate is the required rate of return or the opportunity cost of capital (Robickek, 1967).

Financing Decision
Financing decision is another important function to be performed by an organisation. Broadly, all organisations must decide when, where and how to acquire funds to meet the firms investment needs. The central issue of importance here is to determine the proportion of equity and debt. The mix of debt and equity is known as the firm's capital structure. The organisation must therefore strive to obtain the best financing mix or the optimum capital structure for itself. The firm's capital structure is considered to be optimum when the market value of its shares is maximized. When the shareholders return is maximised with minimum risk, the market value per share will be maximised and the firm's capital structure would be considered optimum. Once the firm is able to determine the best combination of debt and equity, it must raise the appropriate amount through the best available sources (Pandey, 1999).

Dividend Decision
This involves determining the proportion of a company's earnings to pay out as dividend or to retain within the firm for further expansion (Olowe, 1999). Naturally, the dividend policy or decision should be determined in terms of its impact on shareholders value. At all times, the optimum dividend policy is the one that maximises the market value of the organisations shares. However, the value, if any, of a dividend policy to investors must be balanced against the opportunity cost of retained earnings.

Liquidity Decision
Current asset management that affects a firm's liquidity has been suggested as yet another important financial management function, in addition to the management of long-term assets. Current assets should be managed efficiently for safeguarding the organisation against the dangers of illiquidity and insolvency. Investment in current assets affects the firm's profitability, liquidity and risk. A conflict exists between profitability and liquidity while managing current

assets. If the firm does not invest sufficient funds in current assets, it may become illiquid. But it would lose profitability as idle current assets would not earn anything. Thus a proper trade-off must be achieved between profitability and liquidity. In order to ensure that neither insufficient nor unnecessary funds are invested in current assets, the financial manager should develop sound techniques of managing current assets. He or she should estimate the firm's need for current assets and make sure that funds would be made available when needed (Pandey, 1999).

Research Hypotheses

As a frame of reference, the following hypotheses are posed:

Ho_1: Investment decisions positively affect shareholders value.

Ho_2: Financing decisions exerts a positive influence on shareholders' value.

Ho_3: Dividend decisions exert a positive influence on shareholders' value.

Ho_4: Liquidity management decisions positively influences shareholder's value.

Research Methodology

In this study the impact of the four core financial management functions/decisions on firm value or shareholders wealth was analysed and measured, so that the relationship between them can be established. The Ordinary Least Square (OLS) method of regression and the correlation matrix was used to ascertain the relationship between shareholders value and the core financial management functions/decisions. Our choice of the Ordinary Least Square estimation technique is based on the fact that it possesses some desirable properties which makes it unique. This is because among a class of linear unbiased estimators, the ordinary least square estimator is "blue" (best linear unbiased estimator).

Our model was specified using shareholders wealth or returns (SHAV) as the dependent variable; while dividend payout (DIV), liquidity ratio (LIQ), debt-equity ratio (FIN) and total fixed asset (INVT) was used as independent variables (explanatory variables). Specifically, the model is specified in functional form as follows:

SHAV = F (DIV, LIQ, FIN, INVT)

The model is further specified in linear form as follows:

$SHAV = {}_{\alpha} + \beta_1 DIV + \beta_2 LIQ + \beta_3 FIN + \beta_4 INVT + \sum_i$

Where:

${}_{\alpha}$ = Intercept of the entire regression model

β_1 = Slope of DIV

β_2 = Slope of LIQ

β_3 = Slope of FIN

β_4 = Slope of INVT

$\sum_i$ = Stochastic error term or white noise.

The definition of our model variables as well as their *apriori* signs or expectations are shown in table 1

Table 1: Definition of Variables and Expected Signs

Furthermore, the nature of the study necessitated the use of secondary data. These data include the selected banks' dividend payout (proxy for dividend decisions), liquidity ratios (proxy for liquidity management decisions), debt-equity ratios (proxy for financing decisions), total fixed asset (proxy for long term investment decisions) and returns on capital employed (shareholders wealth or returns which is the goal of financial management practice). Also constraints of data availability necessitated the use of ten (10) publicly quoted deposit money banks in Nigeria for our analysis which covered a five (5) year period from 2004-2008. The sampled banks were Skye Bank, Eco Bank, Standard Chartered Bank, Zenith Bank, Afribank, Bank PHB, Fin Bank, Oceanic Bank, Union Bank and Stanbic IBTC Bank. The choice of the sampled banks as previously noted was based on the use of judgemental sampling techniques due to constraints of data availability. The data was sourced from BGL research reports, Nigerian Stock Exchange (NSE) fact books and the respective banks annual financial reports. It most however be noted that due to recent changes in the Nigerian banking industry, some of the banks used as case study have either changed their names or merged with other banks. This however does not in any way dampen the flavour of our current research endeavour

Data Analysis and Interpretation of Regression Result

The empirical relationships between the core financial management functions/decisions and shareholders' value was examined. The dependent variables used was shareholders return on capital (SHAV) while the independent variable were dividend payout, liquidity ratio, debt equity ratio, and total assets. In evaluating the influence of banks financial management practices on their shareholders value, we employed both the Pearson correlation matrix and Ordinary Least Square (OLS) multiple regression technique. This is especially important for a better understanding of how shareholders value can be maximized by adjustments in the bank's financial management practices. Table 2 shows the correlation matrix as well as the regression results obtained before and after correction for autocorrelation and heteroskedasticity.

Table 2: Correlation Matrix

	DIV	INVT	FIN	LIQ	SHAV
DIV	1	0.781671	-0.0814	0.116616	-0.045862
SHAV	-0.045862	-0.153614	-0.264844	-0.080737	1
INVT	0781671	1	0.121996	-0.098892	-0.153614
FIN	-0.0814	0.121996	1	-0.222618	-0.264844
LIQ	0.116616	-0.098392	-0. 222618	1	-0..080737

The correlation matrix table in table 2 reveals that the selected banks dividend (-0.05), financing (-0.26), investment (-0.15) and liquidity (-0.08) practices are negatively correlated with shareholders wealth (firm value). This implies that most banks in Nigeria are adopting financial management practices that are associated with reducing shareholders returns or firm value. The results also indicates that the reduction in shareholders wealth or firm value is not strongly associated with increases in dividend payout, total asset, debt-equity ratio and liquidity ratio.

In evaluating the causal-effect relationship among the variables, we used the Ordinary Least Squares (OLS) regression analysis. The result is shown in table 3.

Table 3: OLS Multiple Regression Results

	Result 1	Result 2
C	48.54 (3.29)	52.5 (1.85)
DIV	0.001 (0.69)	0.002 (3.76)
INVT	-2.04 (-1.10)	-2.83 (-321)
LIQ	-0.20 (-1.23)	0.27 (1.25)
FIN	-1.23 (-1.75)	0.94 (-0.72)
R^2	0.12	[illegible]
Adj. R^2	0.04	0.20
F-statistics	[illegible]	[illegible]
DW	2.8	2.2

Note: The values in parentheses are the t-ratios

Table 3 shows the regression results obtained before and after correction for autocorrelation and heteroskedasticity, which we depicted as result 1 and result 2. For result 1, the adjusted R^2 value of 0.04, Durbin-Watson (DW) statistics of 2.8 and F-statistics of 1.5 (the initial result from our model) is very poor and sends signal that it might be subject to the problem of autocorrelation and heteroskedasticity. This findings necessitated the adoption of AR (1) autocorrelation correction method. This aided in arriving at a more valid result for this study.

As shown in result 2, the R^2 value of 0.28 shows that about 28% of the systematic variations in shareholders wealth or firm value is jointly explained by changes in the sampled banks financial management practices (i.e. financing, dividend, liquidity and investment practices). This is further complimented by the adjusted R-square of 20%. The low R-square value can be attributed to the exclusion of other important pertinent variables that can contribute to firm value. The F-statistics of 3.40 (0.01) is highly significant at 5% level of significance. This implies that the overall model is significant. Also, the Durbin-Watson (DW) statistics of 2.2 after post residual analysis suggests the absence of autocorrelation in the regression results; thus giving more credence to regression result 2.

Also, result 2 shows that dividend (0.002) and investment (-2.83) are the two most statistically significant variables influencing shareholders wealth or firm value at 5% level. The results also revealed that increasing dividend payout in the selected banks translate to increases in firm value while increases in asset investment decreases firm value from shareholders wealth maximization criterion (or view point). The decreasing effect of asset investment on firm value is logically acceptable since more funds will be ploughed back into the firm rather than being transferred to the shareholders. Furthermore, the results revealed that financing and liquidity financial management practices of the selected banks had a negative but insignificant influence on firm value or shareholders returns.

Conclusion and Recommendation

The broad objective of this study was to empirically evaluate the effect of financial management practices of quoted firms in the Nigerian bourse; on firm value or value of shareholders. Based on the empirical findings, we discovered that dividend and investment financial management practices were the only two core functions or decisions that had a significant influence on firm value. The finding also revealed that dividend positively influenced shareholders wealth while investment negatively influenced shareholders wealth. It is therefore fair for us to generalize that increased dividend payout ultimately leads to increased shareholders value while increased investment in assets leads to decreased shareholders value. Also, liquidity and financing decisions are not good factors in determining shareholders wealth.

Flowing from our findings we recommend that more focus be placed on dividend and investment decisions as they both appear to have significant influence on shareholders wealth compared to liquidity and financing decisions. However, we note that serious improvements is needed in the financing and liquidity management decisions of Nigeria firms, as this help ensure their continued survival (as no firm can survive without funds); as well as ensure that they do not become illiquid and insolvent. While suggesting that this research work expresses a highly intelligent guide to the propellers of firm value and shareholders wealth maximization criterion in Nigeria, interested scholars and researchers are hereby advised to conduct more research on this very topical area of financial management, as improvement will be highly appreciated.

Reference

Eriki, P.O. (1999). *Basic Business Finance*. Benin: Bofic Consulting Group Ltd.

Idolor, E.J. (2010). Financial Management Practices of Microfinance Banks: Evidence from Benin: *European Journal of Social Sciences*. Volume18, Number 1, pp.7-17.

Idolor, E.J., Ajao, M.G., Audu, G.A., Amadi, A.A., and Ajayi, O.E. (2003). "Financial Management in the Banking Industry: A Case Study of Selected Commercial Banks in Benin City, Edo State". Unpublished B.Sc. Project, University of Benin, Nigeria.

Olowe, R.A. (1997). *Financial Management: Concepts, Analysis and Capital Investment*. Lagos: Brierly Jones Nigeria Limited.

Pandey, I.M. (1999). *Financial Management*. New Delhi: Yikas Publishing.

Pandey, I.M. (2005). *Financial Management*. New Delhi: Yikas Publishing.

Robickek, A. (1967). *Financial Research and Management Decision*. New York: John Wiley.