### Effect of Investment Decision on the Profitability of a firm: Study on Manufacturing Company Listed on the Nigerian Stock Exchange

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#### Abstract

This study aims at examining the effect of investment decisions on the profitability of manufacturing firms listed on the floor of Nigerian stock exchange. Based on the study objectives, this is a causality research. The data used are secondary data for a 10-years period (2008-2017), obtained from Nigerian Stock Exchange fact book and the websites of the companies. The study employed a descriptive research design. The study adopted a census sampling approach because of the small number of companies under study. The study utilized panel data which was analyzed using regression model. Results revealed good, significant and positive correlations between ROA and all the predictor variables, that is, Investment Decision, Financial Leverage and Liquidity. The results further show that Investment decisions, financial leverage and liquidity affect company profitability positively and significantly. Based on the findings above the study recommends among others that corporate managers to provide avenues to increase their innovativeness and subsequent new investments, financial leverage, in particular their Debt-To-Equity ratio and their liquidity ratios in order to enhance profitability.

Keywords: Investment Decision, financial leverage, liquidity, profitability

### Introduction

Financing choices can be determined by a combination of many factors that may be related to the characteristics of the firm as well as to their institutional environments (Fan et al., 2012). According to Booth, Aivazian, Hunt and Maksimovic (2001), capital structure decisions of the firms in both developing and developed countries may also be affected by the same firm-specific factors.

The firm's investment decisions would generally include expansion, acquisition, modernization and replacement of the long term asset. Sale of division or business is also as an investment decision. Decisions like the change in the methods of sales distribution, or an advertisement campaign or a research and development programmed have long term implications for the firm's expenditures and benefits, and therefore, they should also be evaluated as investment decisions. It is important to note that investment in the long term assets invariably requires large funds to be tied up in the current assets such as inventories and receivables. As such, investment in fixed and current assets is one single activity.

Financial performance is used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. *Financial Performance* (e.g. profitability, growth) is used, in the vast majority of existing studies, to measure business performance (Murphy & Zoltan 1996).

The importance of Investment decisions on financial performance of firms cannot be over emphasized since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Statman 1988). Investment decision is the main cause of financial distress (Memba & Nyanumba, 2013).

### **Research Problem**

The government and the private sector have invested heavily in creating an enabling environment for doing business in Nigeria and, indeed, some companies have performed exceedingly well as a result. Several companies, however, are experiencing declining performance and some have even been delisted from the NSE in the last decade. For example Shares of traded company in Nigeria decreased by more than 50 percent over the past two years. The Nigeria Securities Exchange has removed the company from its benchmark due to several challenges which include capacity underutilization, lack of regular factory maintenance, poor transport infrastructure and weak corporate governance. Momentous efforts to revive the ailing and liquidating companies have focused on financial restructuring. However managers and practitioners still lack adequate guidance for attaining optimal financing decisions yet many of the problems experienced by the companies put under statutory

management were largely attributed to financing (Chebii, Kipchumba & Wasike 2011). This situation has led to loss of investors' wealth and confidence in the stock market. Studies on the relationship between various financing decisions and performance have produced mixed results.

Several researches on profitability and investment decision were conducted in different part of the world in different industries. Such as Wijaya and Wibawa, (2010) showed that the investment decisions, financing decisions and dividend policy had a positive and significant impact on the profitability. Moreover, Mardiyati (2012); Fenandar and Raharja, (2012); Afzal and Rohman, (2012) found that investment decision and funding decision had significant positive impact on company value, while dividend policy had negative significant effect on it. However, if investment decisions, financing decisions and dividend policy simultaneously tested have a significant effect on company performance.

However, Martikarini Research, (2012) said that the profitability and dividend policy were partially significant effect on it while the debt policy has no effect and insignificant but if profitability, dividend policy and debt policy simultaneously tested had significant influence on the company performance.

It is against this background that this study aims to re-examine the effect of investment decision on profitability of manufacturing companies listed in Nigerian Stock Exchange. However, there were difference between this study and the previous, such as (1) the object of the study was the manufacturing companies listed in Nigerian Stock Exchange, (2 years of observation, is 2008 to 2017,

(3) Most of the studies were on firm value, where this study is on profitability (4) add control variables financial leverage and liquidity, referenced by Mardiyati (2012); Fenandar and Raharja, (2012); Afzal and Rohman, (2012) and Markitarini (2012).

### **Theoretical Review**

Modern Portfolio Theory is used as a theory underpinning this study. Markowitz (1952), an American economist developed a theory of "portfolio choice," which allows investors to analyze risk relative to their expected return. Markowitz's theory is today known as the Modern Portfolio Theory, (MPT). The MPT is a theory of investment which attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given /level of expected return, by carefully choosing the proportions of various assets. The theory encourages asset diversification to hedge against market risk as well as risk that is unique to a specific company. The theory (MPT) is a sophisticated investment decision approach that aids an investor to classify, estimate, and control both the kind and the amount of expected risk and return; also called Portfolio Management Theory.

Modern Portfolio Theory has all it takes to explain our variables of concern i.e. investment decision as well as profitability of businesses. Therefore it is adopted as an underpinning theory for this study.

## **Empirical Review**

Investment decision was a matter of how financial managers must allocated funds into other forms of investment which would be profitable in the future (Sutrisno, 2009). Wijaya and Wibawa, (2010) explained that investment decision was positive significant affected on firm value, the implications was that the companies value was formed through market value indicator was strongly influenced by investment opportunities and discretionary spending in the future.

In line with research conducted by Fenandar and Raharja (2012), Afzal and Rohman (2012), also Rakhimsyah and Barbara (2011) stated that the investment decision had a positive significant effect on corporate value. It's indicated that corporate capital expenditure was critical to increase the company's value as it gave a positive signal about the company's growth in the future.

The funding decision was how the company can use the fund to support its operations optimally, and also how to compose an optimal source of funds that must be maintained (Setiani, 2012). Outsiders defined that increasing debt was about corporate ability to pay future obligation or there were low business risk, so that, the market would respond positively (Wijaya and Wibawa, 2010). Afzal and Rohman (2012) explained that the funding decisions had significant positive effect on firm value. This showed that the investment resulting from leverage had positive information about the company in the future, further had positive impact on the corporate value.

Hao, Jin and Zhang (2011), relate investment growth to the value of the company, profitability and the value of shareholder equity. The study makes it possible to conclude that past investments activities affect the value-accounting relation as a result of conservative accounting practices.

Dividend policy was decision on how much profits from the company at the end of the year will be distributed to shareholders as a cash dividend or stored in the form of retained Where the rising price of the stock will be able to increase the value of the company, because the company's value is the ratio of stock price to book value of the shares. Dividend share gave information or signal about corporate financial performance in investors view. If company had stable dividend paid ratio, or even increase so that gave positive influenced on investors and share price would get higher (Ayuningtias and Kurnia, 2013). Whereas increasing share price could increase corporate value, because corporate value was comparison between share price and book value.

Wijaya and Wibawa (2010), Fenandar and Raharja (2012), Martikarini (2012), Darmawan (2013) and Mardiyati (2012) found dividend policy had positive effect on the company's value. This showed that if the company planned to distribute its earnings to shareholders in the form of dividends rather than hold it in the form of capital gains, the investor will invest in a company that divides its earnings consistently. Based on the explanation above, the hypothesis proposed is as follow:

Investment decision has a significant positive impact on profitability of Nigerian manufacturing companies listed on the Nigerian stock exchange.

#### **Research Methodology**

The target population of the study as at 31st December 2017 was all the 61manufacturing companies listed at the Nigerian Securities Exchange. The study adopted a census approach because of the small number of non-financial companies in the NSE. A census approach enhances validity of the collected data by including certain-rich cases for study. The data was obtained from the NSE fact books. Regression model was preferred for this study as recommended by Muthen and Muthen (2007) because the dependent variable is continuous. Profitability was clearly assessed in terms of Return on Assets.

 $ROA = \alpha + \beta INV_{it} + \beta FLV_{it} + \beta LQD_{it} + e_{it}$ 

Where,

ROA = Profitability as measured by Return on Assets of the company

INV = Investment Decision as measured by the amount of new investment

FLV = Financial Leverage of the company as measured by the Debt to Equity ratio

LQD = Liquidity as measured by current assets to current liabilities ratio of the company

 $\alpha$  = The Intercept or constant

 $\beta$  = the regression coefficients of the independent variables

e = Error term

#### **Results and Discussion**

Under the advance analysis, correlation analysis was first used to measure the degree of association between different variables under consideration. Regression analysis was used to determine the impact of the investment decision variables on firms' profitability.

#### INV FLV LQD ROA ROA 1.00 INV 0.227(\*\*)1.00 **FLV** 0.458(\*\*) .624(\*\*) 1.00 LQD 0.869(\*\*) .447(\*\*) .409(\*\*) 1.00

#### **Table 1: Pearson's Correlation Coefficients Matrix**

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### Source: Research Findings

Table 1 shows that at 0.01 confidence interval, there were good, significant and positive correlation between ROA and: Investment Decision (R = 0.227), Financial Leverage (R = 0.458) and Liquidity (R = 0.869). There was also good, significant and positive correlation between Financial Leverage and Investment Decision (R = .624); Liquidity and Investment Decision (R = .447) as well as between Financial Leverage and Liquidity (R = .409).

## **Regression Analysis**

The study further used panel data regression analysis to investigate the relationship between Investment Decision and the profitability of firms listed in the Nigerian Securities Exchange.

## Table 2: Model Goodness of Fit

R	R2	Adjusted R2	Std. Error	
0.754	0.279	0.157	0.0358	
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a. Predictors: (Constant), Investment Decision, Financial Leverage, Liquidity

b. Dependent Variable: ROA

## Source: Research Finding

The study used regression analysis to establish the relationship between ROA and pertinent investment decision factors including Investment Decision, Financial Leverage and Liquidity. A correlation value (R) of 0.75 was produced depicting a significant linear dependence of ROA on investment decision factors including Investment Decision, Financial Leverage and Liquidity.

R-squared of 0.279 further revealed that Investment Decision, Financial Leverage and Liquidity only explain 28 percent of the variations in ROA while the remaining 72percent is explained by other factors not accounted for in the model.

### **Table 3: Regression Coefficient Results**

	Coef	Std error	Т	Beta	Sig.	
Constant	6.493	.013		6.689	.022	
INV	.122	.084	.101	1.934	.008	
FLV	.115	.056	.097	2.378	.031	
LQD	.189	.176	.131	.991	.026	

# a. Dependent Variable: ROA

## Source: Research Findings

The coefficients of determination in table 3 above reveal a positive relationship between ROA and all the Predictor variables, that is, Investment Decision, Financial Leverage and Liquidity. In this regard, the established regression equation is:

#### ROA = 6.493 + .122INV + .115FLV + .189LQD + e

Significant tests (T-tests and P-values) revealed that all of these relationships were significant; thus, the study to establish the effect of investment decision on the profitability of firms listed in the Nigerian Stock Exchange. The regression results show that, when Investment Decision, Financial Leverage and Liquidity have zero values, the space allocation value would be 6.493. It is also established that a unit increase in Investment Decision, while holding other factors (Financial Leverage and Liquidity) constant, would result in a .122 increase in ROA. This statistic had a t-value of 1.934 with a P value of at .008 showing that the statistic is significant at 95% confidence level. Holding other factors constant, a unit decrease in Financial Leverage would cause an increase in ROA by .115 while a unit increase in Liquidity would lead to a .189 increase in ROA. T-values of 2.378 and .991 and P values of .031 and .026 were also established at 95% confidence level hence the relationships were statistically significant. This implies that among other factors, Investment Decision, Financial Leverage and Liquidity positively and significantly influence affect the performance of firms listed in the Nigerian Securities Exchange.

## Conclusion

The findings reveal that the amount of new investments significantly determines the firms' financial performance. Financial leverage may enhance the profit after taxes due to lower interest rates and ultimately the higher earnings may result in the higher Earnings per share or dividend payout ratios which may increase the firms' profitability. Even if the marginal earnings as the result of lower interest rates and tax shields are retained for the company's growth, it may maximize the company's value in the long term and may lead towards the achievement of wealth maximization objective for which the real owners invest. Most companies listed in the NSE are not only marketable and capable of financing short term investment opportunities owing to the relatively high liquidity ratios in respective companies; they are also largely risk averse as regards liquidity based takeovers. This, points to the implication that management has incentives to minimize the liquidation risks of the companies. With decreasing board power, the management may tend to be stable and in a position to resist takeover.

The study therefore recommends that corporate managers should provide avenues to increase their innovativeness and subsequent new investments, financial leverage, in particular their Debt-To-Equity

ratio and their liquidity ratios in order to enhance profitability. This study further recommends that the government should regulate the financial sector through various monetary and fiscal policies in order to reduce the cost of borrowing given that companies who rely on external borrowing to finance their cash requirements are likely to perform poorly. Thirdly, corporate managers should follow a conservative investment policy in order to enhance the performance of their companies. This implies that the managers should maintain a higher level of investment in liquid assets relative to non-current assets.

#### References

- Afzal, A. & Rohman, A. (2012). Effect of investment decision, financing decision, and dividend decision on corporate value. *Diponegoro Journal of Accountancy*, 1(2).
- Ayuningtias, D. and Kurnia, (2013). The effect of Investment Opportunity on corporate value: Dividend Policy for Mediating Variables. *Journal of Science and Accounting research*.
- Booth, L., Aivazian, V., Hunt, A., Maksimovic, D. (2001), Capital structure in developing Countries, *Journal of Financial Research*, *Spring*.
- Chebii, E., Kipchumba, S. & Wasike, E. (2011). *Relationship between Firms Capital* Structure & Dividend Payout Ratio. Kabarak University First International Conference.
- Fenandar, G. I. And Raharja, D. S. (2012). Influence of Investment Decisions, Decisions Funding, And Dividend Policy on Corporate Values. *Journal of Accounting*. 1(2), 1-10.
- Hao, S., Jin, Q. and Zhang, G. (2011). Investment growth and relation between equity value, earnings, and equity book value. *The Accounting Review* 86: 605-635.
- Martikarini, N. (2012). Influence of Profitability, Debt Policy, and Dividend Value of Manufacturing Companies Listed in Indonesia Stock Exchange Period 2009-2011. *Journal Fakultas Ekonomi Universitas Gunadarma*.
- Mardiyati, U. (2012). The influence of dividend policy, debt policy and profitability on the Company's value. *Journal of Management Science Research Indonesia*, 3(1).
- Memba, F. & Nyanumba. J. (2013) .Causes of Financial Distress: A Survey of Firms Funded by Industrial & Commercial Development Corporation in Kenya. Vol 4(12)
- Muthen, L. K. & Muthen, B. O. (2007). Mplus Users Guide, 5<sup>th</sup> edition. Los
- Angeles. Murphy, A. & Zoltan, J. (1996). An Examination of the Relationship

between Professional

Investment Recommendation & Stock Prices in European Stock Market. *Journal of East & West Business*.

- Rakhimsyah, L. A. and Barbara, G. (2011). The Influence of Investment Decisions, Decisions Funding, Policy Dividend and Interest Rate on Corporate Values. *Journal of Investment*, 7(1), 31-45.
- Setiani, R. (2012). The Influence of Investment Decisions, Decisions Funding, and the Interest Rate on Corporate Value in Automobile Company Listed in Indonesia Stock Exchange. *Journal Economic*, Faculty of Padang State University, 3(1).
- Statman M. (1988), "Investor Psychology and Market Inefficiencies", in Katrina F Sherrerd Equity Markets and Valuation Methods. The Institute of Chartered Financial Analysts, Charlottesville, Virginia.
- Sutrisno, (2009). *Financial Management Theory, Concepts and Applications*. Ekonesia, Faculty of Economics of UI Jakarta.
- Wijaya, L. R. P., and Wibawa, B. A. (2010). The Influence of Investment Decisions, Decisions Funding and Dividend Policy Against Corporate Values. National Accounting Simposium XIII Purwokerto.