DETERMINANTS OF RETAINED EARNINGS OF QUOTED MANUFACTURING FIRMS IN NIGERIA.

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Abstract
This work examined the determinants of retained earnings of quoted manufacturing firms in Nigeria. The study is anchored on Pecking Order Theory while an ex-post facto research design was adopted wherein secondary data sourced from financial statements of selected quoted manufacturing firms in Nigeria covering a period of 10 years (2009 to 2018) were used for analysis. The result of the panel data regression analysis revealed that earnings retention ratio (ERR) have an inverse and insignificant effect on ROA; dividend payout ratio (DPR) have a direct and insignificant effect on ROA; while net profit margin (NPM) have a direct and significant effect on ROA of quoted manufacturing firms in Nigeria. This implies that any increase in ERR (other predictors being constant) will lead to a decrease in ROA while any increase in DPR and NPM (other predictors being constant) will lead to a corresponding increase in ROA. The study concluded that retained earnings significantly determines the growth of quoted manufacturing firms in Nigeria and therefore recommends that the dividend policy to be considered any period should be in respect to the worthwhile nature of the potential investment opportunity. Also, the management should always ensure consistency in declaration and payment of dividends to enhance the confidence of investors. Lastly, an effective marketing strategy in the area of pricing, research, promotion and innovation should be established to enhance the desirability of the firm’s products, exploit the available market opportunities, increase profitability and stimulate consistent growth.

Keywords: Retained earnings, Dividend payout ratio, Earnings retention ratio, Net profit margin, Return on assets.
1.1 Background of the Study

It’s no longer a new discovery on how financing a business organization only initially can hinder its growth tendency and survival. Thus, the importance of retained earnings as a source of gearing continuous funding of a business to stimulate growth, sustainability, survival and competitiveness cannot be overstressed.

However, Investopedia (2020) defined retained earnings as the amount of net income left over for the business after it has paid out dividends to its shareholders. A company’s dividend policy is its long-term financial strategy with regards to deciding how much earnings to pay out as against retaining them for investment in the company. Altman (1993) emphasized that retained earnings leads to division of profits between dividend payment to shareholders and reinvestment in the company. Hence, there are no transaction and bankruptcy costs associated with retained profits (Altman, 1993).

Furthermore, retained earnings constitute a major source of finance for companies as investors prefer capital gains over dividends. This is because capital gain taxes can be deferred into the future and are taxed at a minimum rate while taxes on dividends must be paid as soon as they are received and are taxed at a relatively higher rate. Whenever there is an increase in personal income tax of the shareholders, companies tend to retain and reinvest more of their earnings. Payment of earnings as dividend is associated with agency cost and an opportunity for existing shareholders is lost to reinvest their earnings for growth of the company. Droms (1990) opined that investors benefit more from reinvested earnings than dividends in the long-run. Harkavy (1953) supported by affirming that, Plough back of corporate profits gives rise to appreciation in the value of corporate securities of a firm.

The level of internal funds conveys information about growth prospects of companies which embraces the firm’s profitability. Hence, retained earnings are the most important sources of financing growth of a firm (Gilchrist & Himmelberg, 1995). Growth firms pay lower dividends, reinvest more of their earnings, and provide a greater percentage of their total returns in the form of capital gains. Companies with a few major investment opportunities would limit paying out a larger percentage of their earnings. For this reason, higher dividends are paid in stable, low-growth industries. By contrast, high-growth companies with lots of investment opportunities are likely to pay low dividends because they have profitable uses for the capital. So, growth is likely to place a greater demand on internally generated funds. Moreover, higher growth firms uses less debt (Rajan & Zingales, 1995).

Consequently, it’s in the light of the aforementioned background that the study evaluated the determinants of retained earnings of quoted manufacturing firms in Nigeria.

1.2 Statement of the Problem

Retention of earnings is one of the cheapest sources of raising money for continuous funding of a business. However, it has been predominantly supported by many empirical studies that internally generated funds have enormously contributed to financing the growth of manufacturing firms in Nigeria. Yet, irrespective of these assertion, in recent times, there have been a strong controversy among investors and scholars on whether truly decisions on reinvested profits determines the growth of manufacturing firms in Nigeria which in turn benefit the owners (shareholders).

The fact that have geared this controversy is that even the management of some manufacturing firms with no promising investment ideas at hand to exploit still maintains strict earnings retention policy rather than paying out a lion share of the total earnings as
dividend. Consequently, this development has disheartened many shareholders who are safely expecting future capital gains attributable to the sacrifice of their previous dividends. The problem of no reasonable and consistent growth in present dividend and prospect of future capital gain accruing to shareholders resulting from reinvested profits has led to poor confidence of investors in the Nigerian manufacturing industry. This strong doubt perhaps necessitated this study which tends to investigate the effect of the determinants of retained earnings on growth so as to properly weigh the effectiveness of the management of Nigerian manufacturing firms in maximizing retained earnings to ensure reasonable and consistent growth in the returns of the shareholders.

1.3 Objectives of the Study
The main objective of this study is to evaluate the determinants of retained earnings of quoted manufacturing firms in Nigeria. The following specific objectives guided this study:

1. To ascertain the effect of earnings retention ratio on return on assets of quoted manufacturing firms in Nigeria;
2. To determine the effect of dividend payout ratio on return on assets of quoted manufacturing firms in Nigeria;
3. To investigate the effect of net profit margin on return on assets of quoted manufacturing firms in Nigeria.

1.4 Research Questions
The following research questions guided this study:

1. To what extent does earnings retention ratio affects return on assets of quoted manufacturing firms in Nigeria?
2. What is the effect of dividend payout ratio on return on assets of quoted manufacturing firms in Nigeria?
3. How does net profit margin affects return on assets of quoted manufacturing firms in Nigeria?

1.5 Research Hypotheses
The hypotheses to be tested in this study are listed below in their null form:

1. Earnings retention ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria.
2. Dividend payout ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria.
3. Net profit margin has no significant effect on return on assets of quoted manufacturing firms in Nigeria.

1.6 Scope of the Study
The content coverage of this study is determinants of retained earnings and its effect on growth of quoted manufacturing firms in Nigeria. The study covers a period of ten (10) years from 2009-2018. Here growth will be proxied by return on assets growth rate.
2.0 Review of Related Literature

2.1 Conceptual Review

2.1.1 Retained Earnings

Retained earnings refer to that part of corporate’s net profit after tax which is not distributed to the shareholders as dividend but is reinvested in the business. Retained earnings therefore, are the sum of a company’s profits after dividend payments, since the company’s inception. They are also called earned surplus, retained capital or accumulated earnings. Retained earnings are an important source of internal or self-financing by a company. The savings generated internally by a company in the form of retained earnings are ploughed back into the company for diversification of its business. Retention of earnings by companies reduces their dependence on funds from external sources in order to finance their regular business needs (Masood, 2017).

Retained earnings is a technique of financial management under which all profit after tax is not distributed amongst the shareholders as dividend but a part of profits is retained or reinvested in the company. They are also called earned surplus, retained capital or accumulated earnings.

2.1.2 Determinants of Retained Earnings

This refers to factors which their outcomes or decisions invariably affect retained earnings of a firm. They include:

2.1.2.1 Earnings Retention Ratio

Retention ratio is also called as plough back ratio. As per definition, earning retention ratio is the ratio that measures the amount of earnings retained after dividends have been paid out to the shareholders. The prime idea behind earnings retention ratio is that the more the company retains the faster it has chances of growing as a business. There is always a conflict when it comes to calculation of earnings retention ratio, the managers of the company want a higher plough-back ratio, while the shareholders of the company would think otherwise, as the higher the plough-back ratio the uncertain their control over their shares and finances are.

Mathematically, Earnings Retention Ratio = 1 – Dividend Payout Ratio.

2.1.2.2 Dividend Payout Ratio

The dividend payout ratio is the ratio of the total amount of dividends paid out to shareholders relative to the net income of the company. It is the percentage of earnings paid to shareholders in dividends. The amount that is not paid to shareholders is retained by the company to pay off debt or to reinvest in core operations. It is sometimes simply referred to as the 'payout ratio.'

The dividend payout ratio provides an indication of how much money a company is returning to shareholders versus how much it is keeping on hand to reinvest in growth, pay off debt, or add to cash reserves (retained earnings). The dividend payout ratio can be calculated as the yearly dividend per share divided by the earnings per share, or equivalently, the dividends divided by net income (Investopedia, 2020). Dividend payout ratio is the amount of dividends paid to shareholders in relation to the total amount of net income the company generates. In other words, the dividend payout ratio measures the percentage of net income that is distributed to shareholders in the form of dividends.
Mathematically, Dividend Payout Ratio = \frac{\text{Dividend Paid}}{\text{Profit for the year}}

### 2.1.2.3 Net Profit Margin
Emekekwue (2016) opined that net profit margin measures profitability of a firm in relation to its sales. It is the ratio of net profits to revenues for a company or business segment. Expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit.

Net profitability is an important distinction since increases in revenue do not necessarily translate into increased profitability. Net profit is the gross profit (revenue minus cost of goods) minus operating expenses and all other expenses, such as taxes and interest paid on debt. Although it may appear more complicated, net profit is calculated for us and shows up on the income statement as net income.

Net profit margin is the percentage of revenue left after all expenses have been deducted from sales. The measurement reveals the amount of profit that a business can extract from its total sales. The net sales part of the equation is gross sales minus all sales deductions, such as sales allowances.

Mathematically, Net Profit Margin = \frac{\text{Profit for the year}}{\text{Turnover}} \times 100

### 2.1.3 Firm Growth
The term growth means increase in size, or an improvement in quality as a result of a process of development in which an interacting series of internal changes leads to increases in size accompanied by changes in the characteristics in the growing object (Penrose, 1959). Growth is the most frequently used corporate strategy. It means increasing sales, assets, net profits and a chance to take advantage of the experience curve to reduce the per unit cost of products sold and thereby increase profits. The cost reduction is very crucial if a firm’s industry is growing quickly and competitors are engaged in price wards in attempts to increase their market shares. Those firms which do not gain the necessary economy of large scale productions normally face large loses unless they can find and fill a small but profitable niche where higher prices can be offset by special product or service features (Absanto and Nnko, 2013).

Growth is the process of increasing in size while business growth refers to the stage where a business reaches the point for expansion and seeks additional options to generate more profit. Two powerful issues challenge every successful business: how to achieve growth and how to sustain growth (Weinzimmer, 2001).

However, a manufacturing firm’s growth is crucially the main channel through which the effect of retained earnings can be ascertained. For the purpose of this study, return on assets was used to measure the growth of quoted manufacturing firms in Nigeria.

### 2.1.3.1 Return on Assets
Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. It gives a manager, investor, or analyst an idea as to how efficient a company’s management is at using its assets to generate earnings (Investopedia, 2019). Falope and Ajilore (2009) expressed that return on assets measures the return to all firm’s assets and is often used as an overall index of profitability. Thus, the higher the ROA, the more profitable the firm will become.
2.2 Theoretical Framework
The study anchored on the Pecking Order Theory and Irrelevant Theory of Dividend.

2.2.1 Pecking Order Theory by Myers and Majluf (1984)
Pecking order theory tries to capture the cost of asymmetric information. It states the companies; prioritize their sources of financing from internal financing to equity, according to the law of last resort, or least resistance, preferring to raise equity as a financing means of “last resort”. Hence, internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued. This theory maintains that businesses adhere to a hierarchy of financing sources and prefers internal financing.

The Pecking Order Theory tries to explain why most profitable firms use internal financing. The easy reason for this is that they do not need to make use of external funding. However, the other extreme, which are businesses with less profits do not possess enough internal capital and have to seek for external funding (Myers, 1984).

2.2.2 Irrelevant Theory of Dividend by Modigliani and Miller (1961)
The theory assumes that the dividend policy of a firm has no effect on the wealth of shareholders. Accordingly, M&M hypothesis is a proposition that investors are not concerned with a company’s dividend policy since they can sell a portion of their portfolio of equities if they need cash. Rather, they are indifferent between returns from dividends or returns from capital gains. This theory regards dividend decision merely as a part of financing decision because the earnings available may be retained in the business for reinvestment, but if the funds are not required in the business they may be distributed as dividends. Thus, the decision to pay dividends or retain the earnings may be taken as a residual decision. This theory assumes that investors do not differentiate between dividends and retention by the firms. Their basic desire is to earn higher return on their investment. In case the companies have profitable investment opportunities giving a higher rate of return than the cost of retained earnings, the investors would be content with the company retaining earnings to finance the same.

2.3 Empirical Review
Ravi (2013) studied Firm Growth and Retained Earnings Behavior – A Study on Indian Firms (1996-2010). The results of the study suggested that cash flow and dividend were found to be the most influencing variables on retained earnings.

Thuranira (2011) conducted a study on The Effect of Retained Earnings on the Returns of Firms Listed at the Nairobi Securities Exchange. The study covered periods 2009 to 2013. The results revealed that there was a statistically significant effect of retained earnings and Dividend Yield.

Shisia, Sang, Sirma and Maundu (2014) studied the Assessment of Dividend Policy on Financial Performance of Telecommunication Companies Quoted at the Nairobi Securities Exchange. Data for the study was sourced from secondary sources and random sampling technique was adopted. Their study revealed a direct and significant relationship between dividend pay-out ratio and dividend per share in which a unit change in dividend per share is followed by a unit positive change in retained earnings.
Yegon, Cheruiyot and Sang (2014) examined the Effects of Dividend Policy on Firm’s Financial Performance: Econometric Analysis of Listed Manufacturing Firms in Kenya. The data were extracted from annual report and accounts of Nine (9) quoted manufacturing companies in Kenya. The findings of the study indicated that; there was a significant positive relationship between dividend policies of organizations and firm’s profitability, there was also a significant positive relationship between dividend policy and investments and there was a significant positive relationship between dividend policy and Earnings per share.

Velnampy and Kalaiarasi (2014) evaluated the Interaction between Dividend Policy and Firm Performance: Evidence from the Manufacturing Companies Listed on the Colombo Stock Exchange. The population of the study comprises listed manufacturing companies for a period of 5 years (2008 – 2012). The results provided evidence that dividend policy measures are not significantly correlated with earnings per share and dividend payout as dividend policy, return on equity and return on assets as firm performance measures. The study further revealed that dividend policy did not contribute to firm performance of earnings per share and dividend payout.

Thafani and Abdullah (2014) studied the Impact of Dividend Payout on Corporate Profitability: Evident from Colombo Stock Exchange in Sri Lanka. Data were extracted from the annual reports of the selected Manufacturing companies during the period from 2007 – 2011. The results revealed that there was a significant relationship between dividend payout and corporate profitability in terms of return on assets, return on equity and earnings per share. Furthermore, a positive significant relation was found between dividend payout and return on assets and return on equity for the whole sample while significant negative relationship was found between dividend payout and earnings per share.

Elizabeth (2015) evaluated The Effect of Profitability on Dividend Policy of Commercial Banks in Kenya (2009 – 2014). Secondary data and descriptive research design was used. The study revealed that there was a significant relationship between dividend policy and the profitability of commercial banks. Furthermore, dividend policy had a positive correlation with the profitability of the firm.

Monogbe and Ibrahim (2015) evaluated the influence of Dividend Policy on Financial Performance: A Case Study of Selected Registered Firm in Nigeria. The data for the study were extracted from annual report and accounts of twenty five quoted companies in Nigeria. The results revealed that a positive and significant association between the firm performance and dividend policy of the sampled firm. The study further showed a strong and positive significant relationship between return on capital employed (ROCE), total fixed assets (ASST) and dividend policy while earnings per share (EPS) showed a positive impact on the firm dividend policy.

Enekwe, Nweze, and Agu (2015) studied The Effect of Dividend Payout on Performance Evaluation: Evidence of Quoted Cement Companies in Nigeria (2003 – 2014). Secondary data used for the study were obtained from the financial statements of the selected quoted cement companies in Nigeria. The study results suggested that dividend payout ratio (DPR) has positive relationship with all the dependent variables (ROCE, ROA and ROE) used for this study; that dividend payout ratio (DPR) has statistically significant relation with Return on Capital Employed (ROCE) and Return on Asset (ROA) while DPR has statistically insignificant relation with Return on Equity (ROE) of quoted cement companies in Nigeria.

sources through the publications of Nigeria Stock Exchange and financial statements of the companies were used for the study. The findings revealed that dividend policy in Nigeria still remains a function of strong dynamic variables such as return on investment (ROI), earnings per share (EPS) and dividend per share (DPS).

Bassey, Edom and Aganyi (2016) conducted a study on Assessing the Impact of Retained Profit on Corporate Performance: Empirical Evidence From Niger Mills Company, Calabar-Nigeria. The Data used for the study were collected from the annual report of Niger Mills Company Ltd. Calabar. The findings revealed that the future earnings capacity of Niger Mills Ltd. Calabar depends on its retained profit. Their study also discovered that accumulated profit retained in the business has the potential of boosting future earnings.

Masood (2017) conducted a study on Determinants of Retained Earnings in Profitable Cement Companies in India: A Study of Cement Sector. Multiple linear regression covering a period of sixteen years was used for the analysis. The findings of his study revealed the importance of retained earnings as a source of finance for cement sector companies.

Hirindu and Kushani (2017) assessed The Effect of Dividend Policy on Corporate Profitability: An Empirical Study on Beverage, Food and Tobacco Industry in Sri Lanka. Secondary data for the period of 2012 to 2015 was used for the study based on financial statement. The study revealed that there was a positive significant relationship between dividend policy and the profitability in Beverage, Food & Tobacco (BFT) industry in Sri Lanka.

Mohsin, Sadia, Iftikhar and Hamid (2018) studied the Impact of Dividend Policy on Firm Performance: Evidence from the Manufacturing firms in Pakistan (2014 to 2017). Time series data were calculated from the financial statement of the selected manufacturing firms. Findings revealed that all the independent variables (dividend payout ratio, earning per share, price earnings ratio) have a positive relationship with dependent variables (return on investment).

Masood (2018) investigated the Determinants of Retained Earnings in Profitable Steel Companies in India: A Study of Steel Sector. The analysis concluded that the variables studied (profit after tax, current ratio, reserve, debt to equity ratio, reserves, dividend paid, inventory, depreciation, cash flow and corporate tax) have been found to be the important determinants of retained earnings of steel companies of steel sector in India.

The gap identified from the above literatures reviewed showed that several works which have been conducted on retained earnings focused primarily on profitability and financial performance while attention is deviated from the primary purpose of retained earnings which is provision of fund for further investment to facilitate consistent business growth and competitiveness which would in turn benefit the shareholders. Thus, the essence of retained earnings in ensuring that the business exploits its available market opportunities and stay ahead of demand is still questioned by many scholars as there’s a huge variation between profitability and growth. It’s against this backdrop that it becomes imperative to investigate the determinants of retained earnings of quoted manufacturing firms in Nigeria.
3.0 Methodology
3.1 Research Design
The study adopted the *ex-post facto* research design as data for the study are already existing/established data.

3.2 Population and Sample Size

3.3 Sources of Data
Data for this study is secondary data sourced from Financial Statement of selected firms. The data for this study covered a period of ten years (2009-2018).

3.3 Description of Variables

<table>
<thead>
<tr>
<th>Table 3.1 Dependent Variable</th>
<th>Measurement</th>
</tr>
</thead>
</table>
| ROA = Return on Assets       | ROA = \( \frac{Net\ Income}{Total\ Assets} \times 100\) %  
                             | % \( \Delta \) in ROA = \( \frac{ROA_{2} - ROA_{1}}{ROA_{1}} \times 100\) |

<table>
<thead>
<tr>
<th>Table 3.2 Independent variable description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERR = Earnings Retention Ratio</td>
<td>ERR = 100 − DPR</td>
</tr>
<tr>
<td>ERR Growth Rate</td>
<td>( \frac{ERR_{2} - ERR_{1}}{ERR_{1}} \times 100)</td>
</tr>
<tr>
<td>DPR = Dividend Payout Ratio</td>
<td>DPR = ( \frac{Dividend\ Paid}{Net\ Income} \times 100)</td>
</tr>
<tr>
<td>DPR Growth Rate</td>
<td>( \frac{DPR_{2} - DPR_{1}}{DPR_{1}} \times 100)</td>
</tr>
<tr>
<td>NPM = Net Profit Margin</td>
<td>NPM = ( \frac{Net\ Income}{Turnover} \times 100)</td>
</tr>
<tr>
<td>NPM Growth Rate</td>
<td>( \frac{NPM_{2} - NPM_{1}}{NPM_{1}} \times 100)</td>
</tr>
</tbody>
</table>

3.4 Model Specification
The model for this work was structured in a way to empirically show the effect of retained earnings on profitability of manufacturing firms in Nigeria. Specifically, the hypotheses stated in chapter one was modeled in a simple linear equation as follows:
1. For the hypothesis one which states that earnings retention ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria. We thus have the relevant equation as:

\[ \text{ROA}_t = \beta_0 + \beta_1 \text{ERR}_t + \mu_t \]  \hspace{1cm} \text{(1)}

Where:
\[ \beta_0 = \text{Constant} \]
\[ \text{ROA} = \text{Return on assets} \]
\[ \text{ERR} = \text{Earnings retention ratio} \]

2. For the hypothesis two which states that dividend payout ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria. The relevant model for the hypothesis represented thus:

\[ \text{ROA}_t = \beta_0 + \beta_1 \text{DPR}_t + \mu_t \]  \hspace{1cm} \text{(2)}

Where:
\[ \beta_0 = \text{Constant} \]
\[ \text{ROA} = \text{Return on assets} \]
\[ \text{DPR} = \text{Dividend payout ratio} \]

3. For the hypothesis three which states that net profit margin has no significant effect on return on assets of quoted manufacturing firms in Nigeria. We thus have the relevant equation as:

\[ \text{ROA}_t = \beta_0 + \beta_1 \text{NPM}_t + \mu_t \]  \hspace{1cm} \text{(3)}

Where:
\[ \beta_0 = \text{Constant} \]
\[ \text{ROA} = \text{Return on assets} \]
\[ \text{NPM} = \text{Net profit margin} \]

4.0 Data Presentation and Analysis

4.1 Data Presentation

The data for this study was generated from the annual reports and accounts of the seven (7) sampled Consumer Good firms in Nigeria.

4.2 Data Analysis

The hypotheses were tested and analyzed using the Ordinary Linear Multiple Regression.

4.2.1 Test of Hypothesis One

Ho: Earnings retention ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria.

Decision Rule: Accept Ho if p-value > 0.05, otherwise reject Ho

Table 1. Regression result showing the effect of ERR on ROA of quoted manufacturing firms in Nigeria.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>R</th>
<th>Coefficient</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.027</td>
<td>0.001</td>
<td>-0.014</td>
<td>-0.004</td>
<td>0.825</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation, 2020

Level of Significance at 5%

Table 1.0 shows the regression result explaining the effect of earnings retention ratio (ERR) on return on assets (ROA) of quoted manufacturing firms in Nigeria. The analysis shows an R Square of 0.1%. This means that 0.1% of the variations in ROA could be explained by changes...
in earnings retention ratio (ERR). Again, a unit increase in ERR will cause a decrease of 0.004 in ROA. The result shows a p-value of 0.825. This means that the effect of ERR on ROA is negative and insignificant at 5% level of significance.

**Decision:** Based on the result, Ho is accepted.

### 4.2.2. Test of Hypothesis Two

**Ho:** Dividend payout ratio has no significant effect on return on assets of quoted manufacturing firms in Nigeria.

**Decision Rule:** Accept Ho if p-value > 0.05, otherwise reject Ho

**Table 2. Regression result showing the effect of DPR on ROA of quoted manufacturing firms in Nigeria.**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Coefficient</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.073</td>
<td>0.005</td>
<td>-0.009</td>
<td>0.006</td>
<td>0.548</td>
</tr>
</tbody>
</table>

**Source:** Author’s Computation, 2020

**Level of Significance at 5%**

Table 2 shows the regression result explaining the effect of dividend payout ratio (DPR) on return on assets (ROA) of quoted manufacturing firms in Nigeria. The analysis shows an R Square of 0.5%. This means that 0.5% of the variations in ROA could be explained by changes in dividend payout ratio (DPR). Again, a unit increase in DPR will cause an increase of 0.004 in ROA. The result shows a p-value of 0.548. This means that the effect of DPR on ROA is positive and insignificant at 5% level of significance.

**Decision:** To this extent of the result above, Ho is accepted while the alternate is rejected.

### 4.2.3. Test of Hypothesis Three

**Ho:** Net profit margin has no significant effect on return on assets of quoted manufacturing firms in Nigeria.

**Decision Rule:** Accept Ho if p-value > 0.05, otherwise reject Ho

**Table 3. Regression result showing the effect of NPM on ROA of quoted manufacturing firms in Nigeria.**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Coefficient</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.940</td>
<td>0.883</td>
<td>0.882</td>
<td>0.892</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Source:** Author’s Computation, 2020

**Level of Significance at 5%**

Table 3 shows the regression result explaining the effect of net profit margin (NPM) on return on assets (ROA) of quoted manufacturing firms in Nigeria. The analysis shows an R Square of 88.3%. This means that 88% of the variations in ROA could be explained by changes in net profit margin (NPM). Again, a unit increase in NPM will cause an increase of 0.892 in ROA. The result shows a p-value of 0.000. This means that the effect of NPM on ROA is positive and significant at 5% level of significance.

**Decision:** To the extent of the above result, Ho is rejected while the Hi is accepted.
5.0 Summary, Conclusion and Recommendations

5.1 Summary of Findings
Findings arising from this research are summarized as follows:

1. Earnings retention ratio has a negative and insignificant effect on return on assets of quoted manufacturing firms in Nigeria. This suggests that a rise in earnings retention ratio will bring about a decrease in return on assets of quoted manufacturing firms in Nigeria. This indicates that the profits re-invested back into the business are not effectively channeled to profitable ventures that would facilitate growth. The implication is that retaining a greater proportion of firms’ earnings without an available investment opportunity in view would stunt the growth of the firm and reduce the confidence of both the existing and potential investors as it shows management’s inefficiency in maximizing the benefits of retained earnings.

2. Dividend payout ratio has a positive and insignificant effect on return on assets of quoted manufacturing firms in Nigeria. This suggests that manufacturing firms in Nigeria have the potential to grow if they consistently declare and pay dividends. This is because investors are dividend responsive and growth conscious.

3. Net profit margin exerts a positive and significant effect on return on assets of quoted manufacturing firms in Nigeria. This affirms and proves that sales revenue and profitability to a great extent determines the growth of quoted manufacturing firms in Nigeria.

5.2 Conclusion
It is quite obvious from the findings of the study that the expansion and growth of a business will be mirage without adequate funding. However, retained earnings remain a formidable source of financing new projects due to its relative cheap cost. The study affirms that it is highly imperative for firms to consistently retain some portions of their earnings in a bid to experience a continuous and remarkable growth. Thus, it is the submission of this study that retained earnings significantly determines the growth of quoted manufacturing firms in Nigeria.

5.3 Recommendations
Based on the findings of this research study, the following recommendations are made:

1. The management of quoted manufacturing firms in Nigeria should ensure that they have a well-appraised and promising investment opportunity to exploit before deciding to retain the lion share of their earnings. Otherwise, they should declare and pay a larger proportion of their earnings as dividend. Hence, the dividend policy to be considered should be in respect to the worthwhile nature of the potential investment opportunity.

2. Quoted manufacturing firms in Nigeria should always ensure consistency in declaration and payment of dividends to shareholders as it will to a great extent boost the confidence of existing and potential investors. This development will help quoted manufacturing firms in Nigeria to secure competitive advantage, expand market share and stimulate growth.

3. Concerted efforts should be employed to enhance the productive and innovative capacity to meet up with ever changing need of the customers, take full advantage of available market opportunities and boost the net profit margin. This can be achieved by instituting
an effective pricing, research and promotion strategy that would enhance the desirability of the firm’s products and foster consistent growth.

REFERENCES


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