FINANCE OPTION AND GROWTH PROSPECT OF PRODUCTION BASED FIRMS IN NIGERIA: A POST-FINANCIAL CRISIS ANALYSIS

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ABSTRACT

Purpose: Firms' funding strategies have grown more fluid and unpredictable since the global financial crisis of 2007, particularly for developing nations like Nigeria. This research looked at the years 2010–2022, after the financial crisis, to see how different types of financing affected the expansion opportunities for production-based businesses in Nigeria. In particular, the research looked at how different types of financing—equity, debt, and retained earnings—impacted the expansion of assets for Nigerian production-based businesses.

Design/Methodology/Approach: A panel regression estimate was used to evaluate the data gathered from the financial accounts of fifteen production-based enterprises.

Findings: The most effective and reliable estimate, which was a random effect, showed that total equity had a positive and statistically significant influence on asset growth rate. Asset growth rates were negatively and insignificantly affected by total debt and retained earnings, according to the result. Compared to the internal option (retained earnings), this study found that the external source of finance option—particularly equity—has a strong propensity to accelerate the rate of expansion of a production-based corporation in Nigeria.

Original/Value: A post-financial analysis of production-based enterprises is the innovative aspect of the study that aligns with Pecking Order Theory's postulates about the relationship between finance and economic prospects in developing nations like Nigeria.

Practical implications: Consequently, producing organizations should include whole equity in their financing options for growth enhancement rather than seeing it as a last resort.

Keywords: finance option, financial crisis, growth prospect, production based, Nigeria.

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PROPÓSITO: As estratégias de financiamento das empresas se tornaram mais fluidas e imprevisíveis desde a crise financeira global de 2007, particularmente para países em desenvolvimento como a Nigéria. Esta pesquisa analisou os anos de 2010-2022, após a crise financeira, para ver como diferentes tipos de financiamento afetaram as oportunidades de expansão para empresas baseadas na produção na Nigéria. Em particular, a pesquisa observou como diferentes tipos de financiamento – patrimônio líquido, dívida e lucros acumulados – impactaram a expansão de ativos para empresas nigerianas com base na produção.

Projeto/Metodologia/Abordagem: Foi utilizada uma estimativa de regressão do painel para avaliar os dados recolhidos a partir das contas financeiras de quinze empresas baseadas na produção.

Conclusões: A estimativa mais eficaz e fiável, que foi um efeito aleatório, mostrou que o total do capital próprio teve uma influência positiva e estatisticamente significativa na taxa de crescimento dos ativos. As taxas de crescimento dos ativos foram negativamente e de forma insignificante afetadas pela dívida total e pelos lucros retidos, de acordo com o resultado. Em comparação com a opção interna (lucros retidos), este estudo descobriu que a opção de fonte externa de financiamento – particularmente patrimônio líquido – tem uma forte propensão para acelerar a taxa de expansão de uma corporação baseada na produção na Nigéria.

Original/Valor: Uma análise pós-financeira de empreendimentos baseados na produção é o aspecto inovador do estudo que se alinha com os postulados da Teoria da Ordem de Pecking sobre a relação entre finanças e perspectivas econômicas em nações em desenvolvimento como a Nigéria.

Implicações práticas: Consequentemente, as organizações produtoras devem incluir todo o capital nas suas opções de financiamento para a melhoria do crescimento, em vez de o verem como um último recurso.

Palavras-chave: opção financeira, crise financeira, perspectiva de crescimento, produção baseada, Nigéria.

1 INTRODUCTION

Finance options have been at the centre of discourse in financial management, both in business and educational settings, because of not only the importance of finance but also the attributes of its sources. On one hand, no business can operate without finance. It serves the purpose of providing capital for business start-ups, daily operating activities, and investing activities, as well as other purposes such as payment of labour, workers, and others (Mgbada, Nkwede, & Nguru, 2021). On the other hand, finance has several sources, which are debt, equity, and retained earnings. These options are associated with different costs, different dimensions of the financial market, and different ownership structures, which oftentimes determine the performance and growth trajectory.
of a firm. Retained earnings, unlike others, are internal to the firm, do not involve participants in the financial market except in terms of their withdrawal in the case of being part of bank balances, and the ownership structure is kept intact. Debt is associated with interest charges, which are relatively lower than the cost of equity, and changes in ownership structure depend on the debt contract. It involves participants, such as financial institutions and organizations, who are willing to provide loans and bonds to the firm. Equity is associated with costs to the investors as well as the business itself, and there is certainty of ownership dilution. Hence, firms are often cautious of the option chosen among the financial sources available and accessible to them.

For firms already in operation, financial decisions are mainly for the purpose of fulfilling the investment desires of the firm. Finance, being a resource for the firm, is scarce in nature; hence, the firm on its own may not have sufficient funds to take care of investment opportunities. That is, the retained earnings, being the money in reserve, may not be sufficient to finance the investment project. On the other hand, using the retained earnings may affect the liquidity position of the firm and affect the production and operating outcomes of the organization, which could affect the overall business outcome and growth in the long run. As such, the firm would have to include other options, such as debt and equity, in the options available for investment. Apart from this, the use of retained earnings without any consideration for debt or equity could produce a negative signal in the financial market concerning the project return. But when all options are considered, it gives the business an opportunity to choose the option that would sufficiently fund projects and lower the cost as much as possible, as well as benefit the firm in the long run.

With the incidence of the 2007 global financial crisis, sourcing funds from the financial market has become unpredictable (Khalife, Elia & Yammine, 2023; Kumar & Yadav, 2023), especially in the context of a developing country like Nigeria. According to Mgbada, Nkwede, and Uguru (2021), the financial crisis, coupled with rising investment and business risks, affects the supply of, demand for, and access to finance by firms in Nigeria. During the crisis, for instance, major stock market indices crashed at an unprecedented rate, which affected financial and economic indicators across the globe, with its effect more adverse on private firms such as production-based firms (Becker, Hege, & Mella-Berral, 2020; Saka, 2021). Following the incidence of the financial crisis,
firms, especially in the context of Nigeria, tend to consider other financial options to cushion the negative effects of the unprecedented financial crisis in the world.

Observably, previous studies relating to finance options connected financing options with various business indicators such as performance, profitability, and firms’ value measures. For example, some studies looked at capital/financial structure and performance/profitability (Obigbemi et al., 2016; Ishaya & Abduljeeleel, 2020; Amenawo & Edward, 2017; Solanke et al., 2021; Osimiri et al., 2020; Opoku-Asante et al., 2022; Olaleye et al., 2021); leverage and performance (Abdul & Olayiwola, 2017); capital structure/financial policy and value of firms (Uzokwe, 2019; Lambe, 2015; Saka, 2021); equity and performance (Akintoye & Abdulraheem, 2020, Mustpaha et al., 2023); debt and performance or profit. However, it was discovered from the collection of studies reviewed that little or no attention has been paid to dissecting the interaction between finance options and the growth of firms. In addition, more focus has been on the financial sector, with only a few studies centered on production-based firms. Hence, this study specifically examined the effect of:

i. retained earnings on asset growth of production-based firms in Nigeria
ii. total equity on asset growth of production-based firms in Nigeria
iii. total debt on asset growth of production-based firms in Nigeria

2 LITERATURE REVIEW

2.1 THEORETICAL AND CONCEPTUAL REVIEW

2.1.1 Pecking Order Theory

Davidson first proposed the Pecking Order Theory in 1961, but Stewart Myers and Nicolas Maljuf later developed and popularized it in 1984. The theory proposes that managers consider financing options in hierarchical order when making decisions on sources suitable for business capital financing (Li-Ju & Shun-Yu, 2015). According to the pecking order theory, managers first choose retained earnings, then debt, and finally equity as a last resort. That is, managers would consider internal sources first; if this was not sufficient for their financial needs, they would choose external funds, taking debt over equity. The theory assumed that retained earnings are cheaper compared to debt, and debt is cheaper than equity. The Pecking order theory is based on the view that retained earnings are taken directly from the company with no transaction cost to the firm for its acquisition; hence, it is the cheaper and most convenient finance option. On the other
hand, the theory posited that debt and equity are externally sourced; hence, firms must incur certain fees for the acquisition of debt or issuance of equity, but managers would prefer debt to equity because of the relative lower cost.

2.1.2 Finance Option

Finance options represent alternative sources for generating money to finance the activities of the firm or to form the financial structure of the firm. Financing options are also the choices available to the firm upon which financial structure decisions are made (Osimiri, Wadike, & Idatoru, 2020). They represent alternatives available for consideration when determining the financial sources for business activities. Financing options involve different sources of financing that the firm can use for financing its assets and business activities (Lambe, 2014). This means that financing options can include the equity claims of shareholders and various forms of debt (liabilities). The options, on the other hand, can be to choose one of the choices or to combine one or more of these choices in financing (Osimiri et al., 2020). Firms can issue new shares to increase share capital for capital investment purposes. They can take funds from the profit generated over time for investment purposes, that is, withdraw from the retained earnings. On the other hand, firms can borrow money from outside sources such as financial institutions, non-financial institutions, and individuals for investment purposes. Hence, financing options could vary from sources such as retained earnings, equity, and debt.

2.1.3 Retained earnings

Retained earnings of firms are the amount of realized profit transferred to distributable reserve after expenses, interest, and taxes have been deducted as well as appropriation introduced. The difference between a company's overall earnings over time and the amount paid out in dividends is known as retained earnings. The company determines the amount of net profit that can be distributed to shareholders as dividends after calculating the net profit from the profit and loss statement. The remaining profit is kept as earnings after the dividend is given. The shareholder's interest in the company is increased by this amount, which is transferred to the firm's statement of financial status.
2.1.4 Debt

Debt is referred to as the borrowing fund that the firm uses to finance its investment decisions. It could be short-term borrowing or loans, which give firms only a few years to repay the principal and interest, or long-term loans or bonds, which give firms the opportunity to repay over a long period of time. As such, debt is viewed in two parts: short-term debt and long-term debt. The interest added to the principal amount borrowed is the cost of acquiring capital or financing through debt.

2.1.5 Equity

After deducting expenses, taxes, interest, and dividends (if distributed), equity refers to the sum that shareholders contributed and the number of surpluses. On one hand, retained earnings are the amount generated as profit after all deductibles, which is transferred to the balance sheet as an addition to the claim of shareholders. On the other hand, contributed capital refers to the sum that shareholders or the business's owner invested in the company in exchange for stock or shares that grant ownership of the company. This form of equity, when issued, makes managers experience a loss of a certain degree of ownership and control over the firm. Beyond this, there are further considerations when issuing shares, such as the cost of issuance, the price of shares, and the possibility that shares will not be completely subscribed to or paid for.

2.1.6 Growth

Growth is defined as the increase in the extent to which firms can efficiently and effectively utilize resources to maximize objectives, even in the midst of heavy competition and economic disturbance (Olutunla & Obamuyi, 2008). Growth entails an increase in the profitability, efficiency, and effectiveness of the business. It is the increase in the degree to which an organization can utilize resources, expand sales, income, profit, and assets. That is, an increase in the capability of firms to manage resources (human, material, and financial) and generate income or profit from business activities, as well as generate capital and assets. Growth is measured in terms of the growth of assets, sales turnover, profits, and the number of employees. Notably, the most frequent measures of firm growth are asset growth, employment growth, and sales growth. For instance, studies by Rosmah, Zulkefly, Tamat, and Aisyah (2020), Inyiama, Ugbor, and Chukwuani (2017), Nguyen, Dang, Phan, and Nguyen (2020), all used sales growth.
2.2 REVIEW OF RELEVANT LITERATURE

Mgbada, Nkwede, and Uguru (2021) examined a few of the factors that manufacturing firms in emerging economies consider when deciding on their financial structures. Tangibility, profitability, taxation, and business size were utilized as explanatory variables in the study, which examined financial structure with a total obligation to total asset ratio. In contrast, these variables were based on panel regression estimation analyses of data from eight different Nigerian manufacturing enterprises between 2005 and 2016. Size was found to have a considerable impact on financial structure, but profitability and tangibility had no discernible effect. As a result, the research found that manufacturing firms in developing economies consider firm size when making decisions about their financial structures.

Abdul and Olayiwola (2017) looked into how leverage affected Nigerian businesses' bottom lines. The following variables were utilized: total equity, return on assets, debt ratio, and the tangibility of assets. Using pooled regression estimation, the research examined data from three chosen Nigerian chemical and paint companies from 2000 to 2009. Their research demonstrated that total equity significantly impacted company performance for the better. In contrast, the results showed that the debt ratio had a negligible yet unfavourable effect on the performance of the firm.

The relationship between asset expansion and the financial performance of Nigerian manufacturing enterprises was investigated by Inyiama, Ugbor, and Chukwuani (2017). The variables that were examined included profit after tax, non-current asset growth rate, and current asset growth rate. The data used for this analysis covered the period from 2006 to 2015 and was evaluated using the Pearson correlation approach for six consumer goods firms. The relationship between the growth rates of current and non-current assets and profit after tax was clearly seen in the results.

Ezeaku, Anidiobu, and Okolie (2017) looked at the impact of funding on the expansion of Nigeria's manufacturing industry. This study uses the Engel-Granger co-integration and error correction models to examine the following variables: growth in manufacturing sector output, growth in deposit money bank credit to SMEs, interest rate, inflation rate, and exchange rate. The data used for these analyses spans the years 2000 to 2010. Thus, the results showed a long-term correlation between lending to SMEs and growth in manufacturing sector production. The study also found that increases in manufacturing production were associated with bank loans to SMEs.
Uzokwe (2019) investigated the impact of capital structure on the worth of publicly traded companies in Nigeria. Data was collected and analyzed using panel regression estimates for variables such as retained earnings, equity-capital ratio, long-term debt ratio, debt-to-equity ratio, and Tobin's q over the period 2008–2017. Following this, the most efficient estimate—random effect estimation—showed that Tobin's q was directly and significantly affected by retained earnings, the equity-capital ratio, and the long-term debt ratio. A notable inverse relationship between the debt-to-equity ratio and Tobin's q was also shown by the results. Thus, the study disproved the irrelevance argument by concluding that capital structure is significant for value maximization.

Asaolu (2021) investigated the relationship between debt capacity and the financial performance of Nigerian enterprises. Twenty companies' financial reports were used to extract data from 2014 to 2018. The data was then analyzed using fixed effect panel estimation, and the study included variables such as debt-to-asset ratios, long-term debt-to-asset ratios, short-term debt-to-asset ratios, return on assets, return on equity, and Tobin's q. The results showed that debt ratios significantly affected Tobin's Q in a positive way. Consequently, the research found that debt capacity does have a role in improving the financial performance of Nigerian enterprises that are publicly traded.

Akintoye and Abdulraheem (2020) looked into the effects of equity financing decisions on the performance of Nigerian pharmaceutical enterprises. The research used a pooled regression estimate to examine seven companies' data on ROA, liquidity, ordinary share capital, retained earnings, and the years 2000–2019. The results showed that retained earnings significantly boosted performance, but ordinary share capital significantly decreased it. The study's opposite conclusion was that liquidity was positively and insignificantly affected by ordinary share capital and retained earnings. As a result, the study found that equity funding decisions had a significant impact on enterprises in Nigeria.

Research by Amenawo and Edward (2017) looked into how a company's capital structure affected its performance in Nigeria. The research utilized a panel regression approach to assess the following variables: debt asset ratio, debt equity ratio, debt stock, equity stock, retained profits, earning per share, return on assets, and return on equity. The data for 94 firms was collected from 2011 to 2014. The results showed that equity stock and retained earnings had a positive impact on earnings per share, but debt stock had a negative one. The return on assets was shown to be positively but insignificantly
affected by the debt-to-equity ratio, whereas the debt-to-asset ratio was found to be negatively significant. In addition, the results showed that the debt-to-asset ratio had no effect on return on equity and that the debt-to-equity ratio had a positive and substantial effect. Consequently, the study found that the capital structure significantly affected company performance.

Researchers Osimiri, Wadike, and Idatoru (2020) looked at how different types of business financing affected the ROI of Nigerian banks. The study utilized pooled ordinary least squares estimation to evaluate the variables return on asset, leverage financing, and equity financing. Data for eight firms was collected from 2010 to 2016. This led to the conclusion that leveraged financing significantly reduced ROA. Equity financing had a positive but negligible effect on return on assets, according to the study's results. Therefore, the study recommended that banks use their best judgment to determine the ideal amount of capital mix and put it into practice to maximize performance.

Ikpesu and Eboiyechi (2018) and Mustapha et al., (2021) looked at how Nigerian manufacturing firms' capital structures affected their financial difficulties. This study included fifty-eight enterprises' financial distress, capital structure, asset tangibility, revenue growth, age, profitability, and size as variables. The study spanned the years 2010 to 2016. Capital structure significantly and negatively impacted financial distress, according to the data assessed using the Panel Corrected Standard Error (PCSE) regression estimation approach.

The authors, Atseye, Mboto, and Suleiman (2019), beheld into the correlation between lease financing and the bottom line for Nigerian companies. Using data collected from six firms between 2012 and 2017, the researchers utilized a pooled regression estimation approach to estimate factors such as return on assets, lease financing, firm size, and long-term debt ratio. Lease finance was found to have a detrimental effect on the return on assets of the firms. Thus, the research concluded that conglomerates should use lease financing instead of other forms of debt financing.

Opoku-Asante, Winful, and Neubert (2022), looked at how capital structure relates to the financial success of businesses in Nigeria and Ghana. A total of 85 companies in Nigeria and Ghana had their financial data collected and evaluated using the regression estimation and Pearson correlation methods between 2014 and 2018. The study's variables included the following: short-term debt ratio, long-term debt ratio, total debt ratio, return on equity, and return on asset. The results showed that short-term debt
ratios and long-term debt ratios both had positive effects on return on equity, whereas long-term debt ratios had a negative effect. The results showed that total debt and the ratio of short-term loans had a negative impact on return on assets, whereas short-term loans improved it.

Researchers Rosmah, Zulkefly, Tamat, and Aisyah (2020) looked at the manufacturing sector of Asean countries to see how financial inclusion affects business growth. Factors such as sales growth, loan access, initial sales, state ownership, foreign ownership, size of enterprises, and direct and indirect exports were examined in the study, which used 2015 data from 513 firms in Vietnam, Malaysia, and the Philippines. After that, the data were examined using the splitting sample threshold regression technique. The results demonstrated that financial inclusion had a positive and statistically significant effect on company growth up to the threshold but a negative and statistically significant effect on firm growth beyond the barrier.

Saka (2021) investigated how financial policy affected the value of Nigerian consumer goods enterprises. The results showed that dividend payout ratio, debt to equity ratio, and debt to asset ratio all had a negative but minor impact on return on assets. The return on assets was positively and significantly impacted by price earnings, according to the results. As a result, the study discovered that the only factor affecting consumer product enterprises' value in Nigeria is investment finance decisions.

**Figure 1: Finance options and growth prospect of a firm**

Source: Author’s Design
The finance options based available to a firm based on theories and empirical submissions is recognized to be of two parts which are internal finance option and external finance options respectively. On one hand, the internal finance option is the retained earnings while on the other hand, the external finance options are debt (short term and long term debt) and equity (Lambe, 2014; Osimiri et al, 2020; Li-Ju & Shun-Yu, 2015). Therefore, the finance options are measured as retained earnings, debt and equity. The growth prospect is measured among many others as the asset growth rate. In addition, the firm age is incorporate as control variable since it is recognized as important element for growth (Ikpesu & Eboiyechi, 2018). Hence, the framework indicated that finance options (retained earnings, debt and equity) including firm age flows to influence the asset growth rate of the firm.

3 METHODOLOGY

This study adapted the model used by Abdul and Olayiwola (2017), which specified firms’ performance in terms of return on asset as a function of equity and debt finance as show in equation (i).

\[ ROA_{it} = \alpha_0 + \alpha_1 x_{it} + \alpha_2 tan_{it} + \epsilon_{it} = - - (i) \]

Where:

x represent both equity ratio and debt ratio, while tan was used as a control variable representing asset tangibility.

However, this study modified the model by using both asset growth rate (AGR) as measure of firm growth to replace return on asset, while such as retained earnings, total equity and total debt were used to capture finance option alongside firm’s age as control variable. Hence, the model for this study is specified as:

\[ AGR_{it} = \alpha_0 + \alpha_1 RE_{it} + \alpha_2 TE_{it} + \alpha_3 TD_{it} + \alpha_4 FAGE_{it} + \epsilon_{it} = - (ii) \]

Where:

“AGR represent asset growth rate, RE represent retained earnings, TE represents total equity, TD represents total debt, and FAGE represents firm’s age”
This study addressed the post-global financial crisis. In particular, the study covered 2010–2022. From the 21 consumer goods firms registered on the Nigerian stock exchange, 15 production-based firms were randomly picked. The data came from these firms' annual reports for the period covered. Panel-based estimation methods, such as pooled OLS, fixed effect, and random effect estimation, were used in this study. The Wald, Pesaran, and Wooldridge tests of heteroscedasticity and autocorrelation were also used.

4 RESULT

Table 1: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>AGR</th>
<th>RE</th>
<th>TE</th>
<th>TD</th>
<th>FAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE</td>
<td>-0.012</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TE</td>
<td>0.055</td>
<td>0.473</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD</td>
<td>0.587</td>
<td>0.067</td>
<td>0.165</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>FAGE</td>
<td>0.025</td>
<td>-0.232</td>
<td>0.326</td>
<td>0.038</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation (2023)

Correlation result presented in Table 1 showed coefficients of -0.0120 for AGR and RE, 0.0553 for AGR and TE, 0.5873 for AGR and TD as well as 0.0254 for AGR and FAGE which indicated that asset growth rate has negative relationship with retained earnings, but positive relationship with total equity, total debt and firm age. This showed that asset growth rate moves in opposite direction with retained earnings, but in same direction with total equity, total debt and firm age.

Table 2: Panel Estimation Result

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Pooled</th>
<th>Prob</th>
<th>Fixed</th>
<th>Prob</th>
<th>Random</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.296581</td>
<td>0.032</td>
<td>14.16744</td>
<td>0.470</td>
<td>2.227158</td>
<td>0.130</td>
</tr>
<tr>
<td>RE</td>
<td>-1.174248</td>
<td>0.040</td>
<td>0.2262461</td>
<td>0.524</td>
<td>-1.498424</td>
<td>0.189</td>
</tr>
<tr>
<td>TE</td>
<td>0.4182085</td>
<td>0.000</td>
<td>0.7566311</td>
<td>0.039</td>
<td>0.4120042</td>
<td>0.001</td>
</tr>
<tr>
<td>TD</td>
<td>-0.0790502</td>
<td>0.210</td>
<td>0.0776945</td>
<td>0.663</td>
<td>-0.0611897</td>
<td>0.449</td>
</tr>
<tr>
<td>FAGE</td>
<td>-0.4880275</td>
<td>0.082</td>
<td>3.942452</td>
<td>0.435</td>
<td>0.4866116</td>
<td>0.207</td>
</tr>
</tbody>
</table>

R-square=0.5118  R-square=0.6322  R-square=0.6107  Wald chi2(5)= 12.1
We can see the outcomes of the restricted F-test, the Hausman test, random approaches, pooled OLS, and fixed effect estimations in Table 2. Consistent and efficient results were determined to be best by comparing several estimate methods; random effect estimation emerged as the clear winner. Because of this, the study's discussion hinges on the outcome of the random effect estimation. Table 2 shows that the coefficients and probability for RE were -.1498424 and 0.189 (p > 0.05), respectively. This means that when retained earnings go up by 1%, the asset growth rate tends to go down by about 0.14%. This means that retained earnings have a negative effect on asset growth rate, but the effect is not very big. The findings also showed that TE had coefficients and probabilities of .4120042 and 0.001 (p < 0.05), which meant that a 1% rise in total equity led to a 0.41% rise in asset growth rate. This means that total equity has a positive and significant effect on the asset growth rate of the chosen production-based firms. The result also showed that TD had coefficients and a probability of -.0611897 and 0.449 (p > 0.05), which showed that an increase of 1% in total debt caused the asset growth rate to drop by about 0.06%. This means that total debt has a negative and not very significant effect on the asset growth rate.

Table 2 shows that it is possible to reject the following null hypotheses: (1) panel autocorrelation due to AR(1), (2) no cross-sectional dependence, and (3) panel homoscedasticity. This is because the Wald test showed 0.324 > 0.5, the Pesaran test showed 0.456 > 0.5, and the Wooldridge test showed 0.156 > 0.5. So, we can say that the assumptions that the residual terms have the same variance, that they are independent across sections.
4.1 DISCUSSION OF FINDINGS

The result showed that an increase in retained earnings had a deteriorating effect on the asset growth rate. This implies that using retained earnings to fund investment opportunities would reduce the level of asset growth. This could be because the use of retained earnings can reduce the liquidity position of the firm, which in turn affects the operating capacity and outcome, which could constrain or reduce the need for expanding business. Even with this, the result indicated that retained earnings, if chosen for investment purposes, are not remarkable enough in determining the asset growth rate of production-based firms in Nigeria. This implies that using retained earnings as the primary financial decision, as the pecking order theory recommends, to ensure asset growth may either have no effect or result in a decline in growth. The result also refuted the findings of Akintoye and Abdulraheem (2020), Amenawo, and Edward (2017).

The results revealed that an increase in total equity had a favourable effect on the asset growth rate of the selected production-based firms in Nigeria. Although the pecking order theory viewed equity as the last resort in business finance choices, the results evidently indicated that it significantly influences the asset growth rate of the selected firms. This is in line with the findings of Obigbemi et al. (2016), Abdul and Olayiwola (2017), Osimiri et al. (2020), Akintoye and Abdulraheem (2020), and Ishaya and Abduljeleel (2014).

In addition, the results indicated that an increase in total debt can lead to a decline in the asset growth rate of the selected production-based firms, but that the effect is not remarkable. This implies that sourcing investment funds through borrowing and loans, both short-term and long-term, has no effect on the asset growth rate of the selected firms. Although debt is the first choice among the external sources recognized by the pecking order, its effect on growth implies that firms have to rethink the way they approach debt financing for investment projects. However, the finding refuted the submission of Obigbemi et al. (2016) but was in line with that of Ishaya and Abduljeleel (2014).

5 CONCLUSION AND RECOMMENDATION

Compared to the internal option (retained earnings), this study found that the external source of financing option, particularly equity, has a strong propensity to accelerate the rate of expansion of a production-based corporation in Nigeria. The study's results suggest that production-based businesses in developing countries like Nigeria
shouldn't just focus on the cost of financing. They should also think about other aspects of their financing options, such as how option stimulation and steady liquidity can improve their efficiency and growth prospects. The research concludes that production enterprises should consider total equity financing options as a means to boost growth rather than a last resort. To improve the growth prospects of production-based firms in the country, the government and financial authorities should implement measures to stabilize the financial market, boost investor confidence, and attract local and international investors to the Nigerian stock market.
REFERENCES


