EVALUATION OF RESOURCE DEPLOYMENT IN A RECESSED ECONOMY: A REVIEW OF LEVERAGED FIRMS ON THE NIGERIAN STOCK EXCHANGE, NSE

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ABSTRACT
Previous studies on capital structure and liquidity covered leverage effect of firms’ liquidity on investment decisions and performance, limited studies examined the effect of resource deployment on business liquidity and growth during recession using a developing economy. The study is exploratory, using secondary data of quoted commodity-based firms (NSE). Population of the study is 180 quoted firms, only 21 firms produce consumer goods. The study used 7 quoted firms whose audited financial statements are within the review period. The study applied descriptive and inferential statistics for analysis. Hausman test result with the P-value of 0.4665 (RQ 1), P-value of 0.1702 (RQ 2) and P-value of 0.9468 (RQ 3) are greater than the acceptable 0.05 level of significance indicating that random effect is suitable for these models. The regression estimate revealed that Profit after Tax, PAT had a positive effect on Capital Employed, CE. CE, $\beta_1 = +0.071107 \times 0$ implying that an increase in PAT will cause a 0.071107 unit increase in CE but not statistically significant ($p= 0.9130$). Secondly, an increase in Net Sales (NS) will cause a 0.070018 unit increase in Net Worth (NW) while Regression estimate indicated that Debt Equity Ratio (DER) had a negative effect on Earnings per Share (EPS), $\beta_1 = -68.61596$; The study recommends that management should be proactive with external factors that influence investment results negatively and apply more appropriate finance-mix to improve performance.

KEY WORDS: Capital Structure, Performance, Recession, Externality, Leverage

1. BACKGROUND OF THE STUDY

Recession negatively affects both national and organizations’ economy and with increases in unemployment, drop in stock prices, slump in the market and increase in national debt, resource deployment decisions become critical. A drop in the purchasing power of buyers affect the level of firms’ performance. Tracing the global recession of 2008 for example, it is notable that recession always emerge from certain challenges that matures from actions and events that had beamed danger signals earlier but were disregarded.

In spite of the rich resource (land, labour, capital) endowment in Nigeria, the business and manufacturing sectors before the recession set in 2015/2016 presented a gloomy picture with poor macroeconomic indicators in which inflation rate reached 9.554%. Interest rate 19%, Exchange rate N365/ $1, sectoral growth in real GDP in the manufacturing sector, 0.0% (1). Whereas countries like Malaysia has 45% to the GDP even though the West African Institute of Financial and Economic Management data puts manufacturing sector’s expected GDP contribution to 35-40%. Often, businesses change hands or close down entirely with a failure rate of between 30 to 40%, (2), (3) for various reasons which include problem of inflation, policy somersault, tax irregularities and indecision about injecting fresh finance into the business. Among these reasons, the use of loan facility often constitutes a daunting challenge due to the effect of interest rate applied on loans (5, 8,84); Even though the trade-off theory on capital structure mix, emphasized that the use of debt impacts the
return on equity, risk-averse investors hardly make use of debt-financing (3), (7, 10, 14, 18, 21, 41, 42, 73, 76, 87). With equity finance however, there is a limit to which investors can manipulate the business’ financing needs as a result of high investment cost and limited funds. These reasons among others, influence the decision of managers or chief executives on the firm’s capital structure. In taking financial decisions, the influence of both internal (cost of funds, size and nature of business, working capital requirements, liquidity, age of firm) and external factors (capital structure, money market, taxation policy, lending and investment policy) require consideration (5, 8, 84). Maximising corporate wealth through the effective and efficient use of resources, selecting appropriate capital structure and firm performance have been variously researched the right size for optimal mix is still strongly debated (9), (11). This is informed by the varying activities and wealth resources available for use. Notably, the application of financial and investment decisions in driving organization performance is inevitable if organization growth is to be achieved.

When there is economic recession, the effect of the accompanying crisis is made real in the behaviour of buyers, which changes with respect to the impact of the crisis. Firms strategize their approaches to resolve challenges through price variation, product differentiation and the use of discounts in order to maintain market share (12); (13). Nonetheless, the management of available funds during the recession period influence the business’ profitability, build-up of wealth and continuity.

Extant literatures on the relationship between debt-finance, equity and performance of business indicate that with equity finance, overall market value and the WACC are independent of capital structure, (14), 15. However, 16 found a positive relationship between short term financing and equity whereas short-term debt-finance is negatively related with the gross profit; this happens as a peculiar case since the tax shield should rather enhance the level of profit (18), (19). Further affirmation indicated that financial leverage affects cost of capital, ultimately influencing firms’ profitability and stock prices (20), (21), (22), (23), (24) submitted that there is a positive relationship between debt equity ratio with return on asset and sales growth while a negative relationship subsists between debt equity ratio and Earnings per Share, Net Profit Margin and return on Equity; the extent to which these assertions are sacrosanct in a recessionary period inform the essence of this study.

1.1 Statement of Problem

Too often, firms encounter financial dilemma in the normal course of business especially, where decisions have to be taken on the method of financing, whether through loan and equity or making use of equity or loan alone; surviving with 100 percent debt financing and a risk-factor due to interest charge, in spite of the tax shield constitute the increase in financial risk to the firm (25). With economic recession, the lender and borrower are faced with the dilemma of possibly losing a guaranteed loan (lender) or becoming low in liquidity such that loan repayment becomes a problem(borrower) especially with inflation being prevalent around the period. When a firm is unable to settle its obligation (interest and principal) it faces distress and possible closure of such investment due to non-liquidity. Equally, when the business is not returning effectively as a result of poor decision making on the appropriate use of resources, the same scenario applies. The broad objective of the study is an ‘Evaluation of Resource Deployment in a Recessed Economy: A Review of Leveraged Firms on the Nigerian Stock Exchange, NSE’.

1.2 Sub-Objectives

The sub-objectives of the study include ---

Examine the extent of influence that Capital Employed has on profitability.

Investigate the effect of recession on the relationship between Liquidity and Sales Revenue.

Evaluate the significant relationship between debt finance (capital structure) and firm’s performance, post-recession.

1.3 Significance of the Study

Most studies on capital structure and liquidity have covered leverage effect of firms’ liquidity on investment decisions, impact of leverage on investment, comparative analysis of investment decisions of firms in order to determine leverage, (26), (27), (28). However, there has not been any study that is directed at an evaluation of resource deployment in a recessed economy in leveraged firms. Pre-empting issues that lead to recession is needful in order to protect performing and young industries. Equally, firms will be better enlightened on the need for proper resource management in order to avoid business failure. Sensitize Government and economic planners on the need to critically review micro economic
policies that threaten the industries. Researchers who are interested in the performance and finance resource management as well as the interested public and investors will benefit from the study. Financing decision in firms is critical to the survival and growth of the organization, managers will be sensitized to the need to make appropriate and timely finance decisions that will enhance performance. From contributions to the wealth of literature, similar organizations can be properly guided in their financial decisions.

1.4 Methodology

The population of the study is the 180 firms registered on the Nigerian stock exchange out of which 21 firms are dealing with manufacturing of consumer goods. This study selects 7 of these firms whose audited report fell within the review period. The empirical study combines survey design and uses content survey to elicit required information from purposively selected sample’s audited financial statements of 7 quoted leveraged companies to evaluate how the firms’ resources are applied before the short recession of 2016 and post-recession 2017. Using Panel data Analysis, the relative financial standing of each of the companies were ascertained by comparing the performance of each company with the financial strength to examine the extent to which the choice of resource deployment has created values for growth, impacted profitability and liquidity of the selected firms. The relationship between the variables will be determined using regression. The post- recession effect of the loan portfolio and investment shall equally be considered. Variables of the study include Capital Employed (CE); Net Worth (NW); Net Sales (NS); Profit before Interest and taxes (PBIT); Profit after Tax and DIV (PAT).

2. REVIEW OF LITERATURE

The need for empirical study on capital structure is still seriously agitated as the acceptability of the theories are still inconclusive. Moreover, researchers are still examining vigorously the extent to which firms should make use of loan finance in running their organizations. Capital structure is a basic finance decision that affects liquidity, profitability and investment; making this decision demands that firms determine the best financial mix that leads to optimality. This involves either the use of equity alone, a combination of debt and equity referred to as gearing or financial leverage or the sole use of debt financing, which attracts interest and thus present some risks (30). However, an appropriate debt-equity mix tends towards increasing profitability and possible returns to shareholders. Equally, a higher return on investment increases the market value of the firm; paradoxically, a higher risk implies a lower market value (31).

The National Bureau of Statistics, NBS rolled statistics to indicate that recession has abated, prices of goods, unemployment, poverty and inflation figures are however on the increase indicating that the effect of the recession is still prominent.

Years 2016 and 2017, witnessed a high economic downturn in Nigeria and affected the activity level of business organizations most especially as the dollar to naira exchange rate sky-rocketed while prices of commodities and goods went up by 300% (33). To overcome this scenario, the Central Bank targeted injecting highly into the Stock Market, however prices did not return to base, even though the Naira to dollar exchange improved. Whereas, there are claims that recession has gone, prices of goods are still very high (34) thus, pointing to a general downturn in the business sector. Firm survival therefore makes the manager or chief executive to think of strengthening the capital base in order to ensure the business’s relevance.

2.1 Effect of Inflation during Recession

Inflation implies a persistent and gradual increase in the prices of goods and services; this was the experience of the business sector and the masses. Literatures are sparse on the effect of inflation on business variables such as turnover, liquidity, profitability among others, as majority of such studies focused on the effect of inflation on employment (35). According to (36), and (37), when an economy is in a recession, stagflation (stagnant growth) occurs. Wages and salaries remain as they were, sales of goods drop coupled with a general low-tone in business. Generally, the economy is unproductive since not enough money is changing hands. In spite of the Central Bank’s (CBN) attempt to limit year 2017 inflation effect, which affected almost all goods, the prices of goods failed to drop. The short period of recession featured high rise in prices, cost of goods and a few services that require the use of imported materials. Inflation rate in the penultimate year and the next two years revealed that:
Corporate Price Index (CPI) increased yearly from April 2016 to January 2017 after which it dropped very slowly onward till February 2018; ‘from 9.62 percent in January, the CPI climbed to 11.38 percent February, 12.77 percent in March and 13.77 percent in April. Furthermore, it jumped to 15.58 percent in May, 16.48 percent in June, 17.13 percent in July and 17.61 percent in August. In addition, the CPI edged higher to 17.85 in September, 18.33 percent in October and 18.48 percent in November. In all, the CPI rose by 92 per cent in 2016’ (38); it was however noted that commodity prices did not reduce. A glaring effect of inflation is the unavoidable increase in prices of goods and high cost of production which results into reduced profit level or outright losses. These can be observed in the performance of the firms as will be discussed later.

2.2 The Effect of Equity and Debt financing.

Financial Leverage implies the process by which the share-holders’ returns are increased through the use of debt. If, however the cost of debt is higher than the firm’s overall rate of return, the earnings of shareholders will reduce. Equally the use of debt will increase the risks that the firm may have to experience. The financial risk is measured by leverage ratio as well as the determination of the firm’s ability to use debt to the advantage of shareholders. It is usually calculated as a ratio of total debt to an addition of total debt and net worth of the firm. Affirming the importance of the capital structure and firm ownership as determinants of capital structure during periods of crises, (39) further observed its contributory effect on economic growth. Equity financing means raising funds for company activities or operations by issuing stocks to individual and institutional investors. These stocks can be common or preferred. These individual and institutional investors become creditors and receive ownership interest in exchange for their funds. In practice however, managers mostly prefer to use debt because of tax deductibility applicable to loan interest, higher return to equity holders as a result of gearing, non-dilution of control and ownership among other benefits (40).

On the other hand, when a company raises fund through the issuance of bonds or borrowing from banks or other financial institution, it is referred to as leveraging (41); it is assumed that ‘the value of a firm is independent of its capital structure in a frictionless or complete world, where there is no transaction cost, no default risk, asymmetric information and no taxes. However, whenever any assumption is relaxed, the irrelevance value of firm and its capital structure does not hold anymore’. If the irrelevance theory is correct then the market value of firms can increase, as it takes more and more debt, in practice, firms rarely use only debt for operations. Given the uncertainties of the recession period, to what extent will the firms’ resources influence profitability? What is the effect of recession on the relationship between debt finance and firm’s performance? Firms’ capital in form of preference and ordinary shares are referred to as equity capital. Most firms use the share capital as a means of financing the organization’s activities and other obligations as may arise in the course of business activities. With various investment opportunities available to firms, the amount of equity capital that will be available for investment is dependent on the size of its cash-flow and reserves. When firms invest by this means it is virtually at no cost to the firm (42), (43).

However, performance assessment framework enable decision making on the investment prowess of the managers. The ultimate measure of a firm’s performance is its growth rate, this is accentuated through values that accure to the business from the returns on investment. (44), (45) Conner. If the managers fail to invest or diversify, the income inevitably begin to fall. Thus, it is essential that firms invest rightly in order to improve on performance.

Managers have different financial options to effect investment decisions, and considering the challenges posed by crisis of the effects of recession the source of finance has to be reviewed critically. Financial Leverage implies the process by which the share-holders’ returns are increased through the use of debt. However, if the cost of debt is higher than the firm’s overall rate of return, the earnings of shareholders will reduce. Using debt during recession will increase the risks that the firm may have to experience. Another option in financing is using the debt/equity combination or equity alone. Since each decision is accompanied with some measures of risk such as inability to attain predetermined performance level, falling into distress or bankruptcy, (46) and (4) suggested consideration of optimum debt/equity mix to enhance performance and prevent insolvency, a decision that is crucial to the continued existence of the firm.
2.3 Effect of firms’ finance decisions on Liquidity, Profitability and Growth

A major determinant of efficiency is the investment decision of a firm (48); this involves a commitment of resources to generate expected gains in form of profits and growth. With a positively correlated relationship between liquidity and profitability, the efficient and effective management and composition of the working capital play significant role in producing the result. Extant literatures affirm that the absence of effective liquidity management has implication for profitability and the success of investments (49); equally the relationship between liquidity and profitability has an implication for the rate at which the working capital is continuously available for solving firm obligations and influencing the value of current assets to a tolerable level (50), (51) The firm’s ability to meet its obligations is considered an affirmation of its liquidity. Elements of liquidity include current assets which comprises cash and bank balances, marketable securities, sundry debtors and inventories though this is less liquid. Basic benefits arising from here are seen in the prompt settlement of short-term obligations of the firm. Notably, holding too much cash affect profitability if the cash is not invested while shortage or low level of cash holding lead to failure to settle obligations as at when due as well as investing anew (52), (53).

Even though a weak relationship is affirmed between liquidity and profitability by (55) had earlier indicated that leverage has impact on firm profitability. Thus, resolving liquidity position of firms through the use of credit purchase, and bank overdraft constitute a major need in order to prevent poor business performance. To the firm, the ultimate measure of performance is its growth rate. This is accentuated through values that accrue to the business from the returns on investment. If the managers fail to invest or diversify, the income inevitably start to fall. In assessing performance, firms use the cost of capital framework. The assessment involves a comparison of the actual profitability of projects with the overall cost of capital. Thus, it is inevitable that firms invest rightly in order to improve on the firms’ performance. In a bid to expand, modernise or diversify projects, term loans being sources of long-term debt are generally useful (56) while bank loans constitute source of long-term debt that is used in financing the objectives of the firm. These loans, obtainable from banks and finance houses are interest bearing, but due to the usually high interest charges, management’s decision on weighing the sources of finance becomes very necessary in order to avoid misdirection of resources. Decision making features determination of maturity, direct negotiation, security, restrictive covenants, convertibility and repayment schedule. Therefore, managers have to weigh the cost of fund or interest attached in line with the investment option to decide the best mode of financing.

2.4 Does Recession affect Firm’s Leverage?

This question is partially positioned for further investigation based on the findings of (57) on the effects of financial crisis on leverage dynamics and its consequences. The study ‘avered that as a result of the presence of debt, the risk of default arises, thus emphasizing the importance of the capital structure of a firm when there is financial crisis”. During financial crisis such as economic recession, its effect is made real in the behaviour of buyers which changes with respect to the effect of the crisis, during this period, firms equally strategize their approaches to business through price variation, product differentiation and the use of discounts in order to maintain market share (58) and (59). As a result of the presence of debt, the risk of default arises, thus emphasizing the importance of the capital structure of a firm when there is financial crisis (60). Pecking Order, Trade Off and Marketing Timing Models indicated that the type of ownership has an implication for capital structure rather than its ownership. Equally during financial crisis firm’s leverage activity is average, bankruptcy costs lead to lesser profits (61). Applying this to the study, notably, one of the outcomes of recession is inflation in prices of goods. This affects turnover, profitability and continuity of operation while some other businesses record super profit such as Nestlé, Unilever and UACN, among the firms that are reviewed (See appendix). It can also be observed that firms that made losses happened between 2015 and 2016 (UACN, John Holt, Guinness and did not make use of loan in these years. An empirical study by (62) equally revealed that under inflation, the value of corporate debt is influenced by the amount of depreciation and the gap between yield, corporate bonds and equities.

2.5 Creating Values for Firm’s Growth Through Effective Deployment of Resources

The efficiency of the management impacts the rate of cashflow to the firm; high turnover rate tends to have a growing effect on the firm’s earnings per share (EPS) and growth capital. Resources when deployed in structures, controls, and securing commitments create the capabilities necessary for organizational success. Without effective resource deployments, requisite capabilities are unlikely to be developed leading to resource wastage (63). Value is added by continuously probing whether resources are used effectively in organizations through creating value for shareholders, customers or other stakeholders. In business organizations, added value materialises in creating business expansions,
increase in firm’s asset base and enhanced liquidity that can enable diversification in investments. Resources include – consistent raw material input, innovative capacities, trained personnel, committed customers, strategic capabilities in areas of marketing, core competences or intellectual capital, and work processes and systems. These alone cannot yield the goal of the firm if finance resources are not enough to meet the firm’s need to invest in projects, expand or diversify its main business. According to (65), effectiveness is determined by the capabilities of the firm’s management in delivering the set goals such as cash flow to the business as well as market values that enhance attainment of firm’s performance goals. Effectiveness shows organizational performance plus the plethora of internal performance outcomes normally associated with more efficient or effective operations (66), (68) and (69). Earnings as affirmed by (70) and (71) is an evidence of management’s effectiveness, when positively related to stock returns, it impacts the value of the firm. (72) from another perspective argued that two-thirds of the variance of price changes can be explained by the variables representing corporate cash-flows. The foregoing assertions however tend to negate (73) position that leverage is not related to firm’s investment. Equally, (74) observed that highly levered firms are less likely to exploit valuable growth opportunities as compared to firms with low levels of leverage, whereas 75, posited that firms that are benefitting constant growth may not need to incur high capital expenditure for operating efficiency.

This study therefore examined the published financial statements of seven companies that specialized in consumer goods as listed on the Nigerian Stock Exchange (NSE) and their loan port-folio cum equity capital; the effect of the loan port-folio on investment, performance indices such as profitability, activity ratio and debt turnover are examined to determine the effect of the presence or absence of leverage on investment to affirm the reality of the foregoing theories in each organization. The relationship between variables are determined using regression. The post-recession effect of the loan portfolio and investment are equally considered.

3. THEORETICAL FRAMEWORK

3.1 Modigliani and Miller (M-M, 1958) in Capital Structure Theory

The position of (76) theory on capital structure that “leverage is not related to firms’ investment choices and firm’s value” was further argued that in a world where there are incomplete markets and significant agency costs, leverage may have a wide-ranging effect on investment. (77) however, opined that high leverage in low growth firms usually discourage management from investing in non-profitable investments and projects. This can be observed in the finance mix of each of the organizations under study as depicted in the debt-equity ratio. M&M model on how financial leverage affects the value of the firm under the application of tax indicated that the personal income tax rate on equity income is zero (Tpe = 0) therefore investors would prefer to invest in equity. Hence, the desire for loan is active as a result of the tax incentive that they have on equity.

3.2 Peking Order Theory by Donaldson, 1961

The theory postulates that managers choose financing from three sources, internal funds, debt and new equity, follow a hierarchy to choose source of finance with preference for internal financing. The theory however, stipulates that since managers have more information about their firms than investors, they will issue debt when they are positive about their firm’s prospect and choose equity when they are unsure of the market prospects. Possibility of this position in the firms use of resources are evident in the decision to finance projects of the firms. This theory is applicable to the managers’ decision-making process when choosing a source of finance and deploying it in order to achieve firm’s strategic objectives.

3.3 Empirical Framework

It is examined the relationship between capital structure and profitability of 10 listed Sri Lankan Banks from 2002 to 2009. As usual, the banks had to decide on debt/equity choice in order to achieve high profitability and also enjoy competitive advantage. Findings revealed that debt-equity ratio was 8 times higher suggesting use of more debt. The study therefore suggested that an appropriate mix of capital structure be used in order to increase profitability, recognizing that a debt-equity ratio of 2 is normally safe. (80) examined the effect of recession on the operational performance of firms producing luxury goods. He suggested a positive response to the effect of recession, and a better firm performance was recorded when compared with its peer group. Performance variables such as sales growth, profitability and financial flexibility were tested and found positive in spite of the effect of the recession. (81) in a study of the effects of fiscal policy after recession found that fiscal contraction tends to reduce output and employment in the short term. The study underpinned the assertion that fiscal policy should be expansionary in subsequent years after recession.
(82) in an examination of the impact of leverage on firms’ investment decisions, opined that highly levered firms are less likely to exploit valuable growth opportunities as compared to firms with low levels of leverage. He stated further that a related under investment theory focused on a liquidity effect on firms with large debt commitments and that they invest less no matter what their growth opportunities are. Theoretically, even if leverage creates potential underinvestment incentives, the effect could be reduced by the firm’s corrective measures. Ultimately, leverage is lowered if future growth opportunities are recognized sufficiently early.

4. ANALYSIS, FINDINGS AND DISCUSSION OF RESULT

4.1 Descriptive Analysis

This section shows the pattern of occurrence and the characteristics of the data set. The description of the panel or longitudinal data is based on mean, maximum, minimum and standard deviation of the variables. The descriptive statistics of the panel data obtained are illustrated in Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>CE</th>
<th>DER</th>
<th>EPS</th>
<th>NS</th>
<th>NW</th>
<th>PAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4438239.</td>
<td>1.088857</td>
<td>84.57657</td>
<td>53715707</td>
<td>31575103</td>
<td>3987662.</td>
</tr>
<tr>
<td>Median</td>
<td>2036325.</td>
<td>1.378500</td>
<td>17.50000</td>
<td>57488026</td>
<td>37778123</td>
<td>2274831.</td>
</tr>
<tr>
<td>Maximum</td>
<td>54821913</td>
<td>2.160000</td>
<td>636.0000</td>
<td>143328982</td>
<td>74090194</td>
<td>22235640</td>
</tr>
<tr>
<td>Minimum</td>
<td>-44800000</td>
<td>0.140000</td>
<td>0.400000</td>
<td>1323000.</td>
<td>-4033000.</td>
<td>-1783705.</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>16298776</td>
<td>0.631369</td>
<td>141.3905</td>
<td>43533357</td>
<td>24286134</td>
<td>5402180.</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.146490</td>
<td>-0.181355</td>
<td>2.558792</td>
<td>0.342239</td>
<td>0.191052</td>
<td>1.854023</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>6.993784</td>
<td>1.649022</td>
<td>9.673641</td>
<td>1.969979</td>
<td>1.853094</td>
<td>6.411901</td>
</tr>
<tr>
<td>Observations</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation

Table 1 indicates some variation in the minimum and maximum values of Capital Expenditure (CE), Debt Equity Ratio (DER), Earnings per Share (EPS), Net Sales (NS), Net Worth (NW), and Profit after Tax (PAT) of quoted companies with the following maximum values respectively 54821913, 2.160000, 143328982, 74090194 and 22235640. Their minimum values also indicate variability as follows -44800000, 0.140000, 1323000. -4033000. and -1783705. respectively. This implies that for the period under study, the proxies of profitability, recession, capital structure, liquidity and performance of leveraged Nigerian quoted companies fluctuated. The standard deviation of the variables under consideration shows some dispersion or spread in the data series for Capital Expenditure (CE), Debt Equity Ratio (DER), Earnings per Share (EPS), Net Sales (NS), Net Worth (NW), and Profit after Tax (PAT) with the following values 16298776, 0.631369, 141.3905, 43533357, 24286134 and 5402180. In addition, skewness measures the asymmetry of the distribution of the panel data around the mean.

Capital Expenditure (CE), Earnings per Share (EPS), Net Sales (NS), Net Worth (NW), and Profit after Tax (PAT) were all positively skewed; while Debt Equity Ratio (DER) was negatively skewed. Furthermore, the Kurtosis measure indicates the peak or flatness of the distribution of the panel data, as shown in Table 1, Capital Expenditure (CE), Debt Equity Ratio (DER), Earnings per Share (EPS), Net Sales (NS), Net Worth (NW), and Profit after Tax (PAT) had distributions that peaked at 6.993784, 1.649022, 9.673641, 1.969979, 1.853094 and 6.411901 respectively.

5. ANALYSIS OF DATA

Objective One: To what extent does the Capital Employed influence profitability of quoted leveraged Nigerian companies?

Research Hypothesis 1 (Ho1): Capital Employed does not significantly influence profitability of quoted leveraged Nigerian companies.

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>0.530204</td>
<td>1</td>
<td>0.4665</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation
Table 2b Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>MODEL 1</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Stat.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4154688</td>
<td>4278762.7</td>
<td>0.971002</td>
<td>0.3405</td>
<td></td>
</tr>
<tr>
<td>PAT</td>
<td>0.071107</td>
<td>0.644735</td>
<td>0.110289</td>
<td>0.9130</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.000555</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>-0.037885</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>16604643</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob.(F-Stat)</td>
<td>0.014450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obs</td>
<td>28</td>
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<tr>
<td>Cross-sections</td>
<td>7</td>
<td></td>
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<td></td>
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</tbody>
</table>

Dependent Variable: CE
Authors’ Computation

CE = 4154688 + 0.071107PAT + μ…………………………………………………………… (1)

Table 2a shows the Hausman test result with the P-value of 0.4665 which is greater than the acceptable 0.05 level of significance. Thus, the null hypothesis that random effect is suitable for this model was accepted. This indicates that the model was estimated using random effect; Table 2b depicts the result of the regression estimate. The regression estimate on Table 2b shows that Profit after Tax (PAT) had a positive effect on Capital Employed (CE) of quoted leveraged Nigerian companies. This is shown by the sign and size of the coefficient: β₁ = +0.071107 > 0. The coefficient suggests that an increase in Profit after Tax (PAT) will cause a 0.071107 unit increase in Capital Employed (CE). Table 2b reveals that the R-square, indicates less than 1% variations in Capital Employed (CE) could be attributed to Profit after Tax (PAT), while the remaining 99% is attributable to other explanatory factors outside this model. The p-value of the t-statistics shows (p>0.05) is greater than the acceptable 5% level of significance, while the model is also not statistically significant (p= 0.9130). Consequently, the positive effect that Profit after Tax (PAT) has on Capital Employed (CE) quoted leveraged Nigerian companies is not statistically significant and can be attributed to chance. Thus, the null hypothesis that Capital Employed (CE) does not significantly influence profitability (PAT) of quoted leveraged Nigerian companies is accepted.

Objective Two: What is the effect of recession on liquidity of quoted leveraged Nigerian companies?

Research Hypothesis 2 (H₀): Recession (NS) does not significantly influence liquidity (NW) of quoted leveraged Nigerian companies.

Table 3a Hausman Test Result

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>1.881235</td>
<td>1</td>
<td>0.1702</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation

Table 3b Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>MODEL 1</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Stat.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>27814033</td>
<td>9326271.7</td>
<td>2.982332</td>
<td>0.0061</td>
<td></td>
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<tr>
<td>NS</td>
<td>0.070018</td>
<td>0.085697</td>
<td>0.817040</td>
<td>0.4213</td>
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<tr>
<td>R²</td>
<td>0.024232</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
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<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>10407403</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Prob.(F-Stat)</td>
<td>0.645670</td>
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</tr>
<tr>
<td>Obs</td>
<td>28</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cross-sections</td>
<td>7</td>
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<td></td>
</tr>
</tbody>
</table>

Dependent Variable: NW
Authors’ Computation

NW = 27814033 + 0.070018NS + μ……………………………………………….. (2)

Table 3a shows the Hausman test result with the P-value of 0.1702 which is greater than the acceptable 0.05 level of significance. Thus, the null hypothesis that random effect is suitable for this model was accepted. This implies that the model was estimated using random effect; Table 3b depicts the result of the regression estimate. The regression estimate
Table 4a Hausman Test Result

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>0.004460</td>
<td>1</td>
<td>0.9468</td>
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</tbody>
</table>

Source: Authors’ Computation

Table 4b Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Stat.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>159.2895</td>
<td>71.17848</td>
<td>2.237889</td>
<td>0.0340</td>
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<tr>
<td>DER</td>
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<td>54.48546</td>
<td>-1.259344</td>
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<tr>
<td>R²</td>
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<tr>
<td>Adj. R²</td>
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<tr>
<td>F-Statistic</td>
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<td>Obs</td>
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<tr>
<td>Cross-sections</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Dependent Variable: EPS
Authors’ Computation

EPS = 159.2895 + (-68.61596)DER + μ ................................................................. (3)

Table 4a shows the Hausman test result with the P-value of 0.9468 which is greater than the acceptable 0.05 level of significance. Thus, the null hypothesis that random effect is suitable for this model was accepted. This implies that the model was estimated using random effect; Table 4b depicts the result of the regression estimate. The regression estimate on Table 3b shows that Debt Equity Ratio (DER) had a negative effect on Earnings per Share (EPS) of quoted leveraged Nigerian companies. This is shown by the sign and size of the coefficient: β₁ = -68.61596. The coefficient suggests that an increase in Debt Equity Ratio (DER) will cause a 68.61596 unit decrease in Earnings per Share (EPS) of quoted leveraged Nigerian companies. Table 4b reveals that the R-square, indicates 5.9% variations in Earnings per Share (EPS) could be attributed to Debt Equity Ratio (DER), while the remaining 94.1% is attributable to other explanatory factors outside the model. In addition, the model is not statistically significant at 0.05 threshold (p = 0.2191). Consequently, the negative effect that Debt Equity Ratio (DER) has on Earnings per Share (EPS) of quoted leveraged Nigerian companies is not statistically significant and can be attributed to chance. Consequently, the null hypothesis that Capital structure (DER) does not significantly influence performance (EPS) of quoted leveraged Nigerian companies is accepted.

6. SUMMARY OF DISCUSSION AND CONCLUSION

With equity finance, there is a limit to which the investor can manipulate the business’ financing needs as a result of high investment cost and limited funds. These reasons among others influence the decision of managers on the firm’s capital structure. In taking financial decisions, the influence of both internal (cost of funds, size and nature of business,
working capital requirements, liquidity, age of firm) and external factors (capital structure, money market, taxation policy, lending and investment policy) require consideration (84). Maximising corporate wealth through the effective and efficient use of resources is apt, as selecting appropriate capital structure that will influence firm performance is quite essential. During periods of financial crisis such as inflation or recession, firms’ leverage activity is average as observed in the result of the analysis. It is therefore important that firms strategize their approaches to attain set performance objectives, as positioned by (85), (86). These positions affirm the outcomes of the study and hold within the context of the variables considered. As inferred, capital structure does not significantly influence performance, equally, the influence of Net Sales (NS) on the Net Worth (NW) as well as the supposed effect of liquidity on EPS, of the firms, point to the influence of extraneous factors outside the model of the study. The implication of this study emphasize that managers have to be proactive in managing financial decisions and investments specially to ensure performance that meets expected standards. This study suggests that recession has a far-reaching effect on firm performance in terms of profitability and growth. Equally, the value of the firm’s cashflow is affected as the effective application of available funds often fall below budgeted activity level. Conclusively, it is suggested that related studies be carried on an extended period of financial crisis to further determine possible effects of inflation or recession and leverage decisions on the variables of this study or otherwise.

6.1 Recommendation

Even though the period of recession was assumed short-lived initially, its effect has actually persisted on the inflated prices of goods, some as high as 50% or its multiples. However, the departure of economic recession did not return the prices of goods to previous level (that is the price of goods before the recession set in). This corroborates the outcome of the study that extraneous factors contribute to the increase in prices of goods. Thus, it is expedient that government’s micro and macro-economic policies are put in proper perspectives since the effect of inflation impacts the turnover of firms and the purchasing power of the citizens. The dual effect of these is grave on the growth of the nation’s economy. Once prices of goods soar, bringing it down becomes a challenge since procurements were made during the period of inflation. Firms will in no way issue stock to production at lower prices since each organization is out to make profit. Equally important is the need to consider the effect of financial indices such as interest rate for loans; this affects bank interactions with producers in terms of sourcing funds for operations and the influence of costs of finance. This position was suggested in the propositions of (87) and the Peking Order theory (88).

REFERENCES


Jhingan M. & Stephen K. (2009), Managerial economics, Delhi, Vrinda Publications Ltd.


