ASSET UTILIZATION AND RETURN ON EQUITY OF QUOTED MANUFACTURING FIRMS IN NIGERIA

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Abstract: The objective of the study is to determine the relationship between asset utilization and dividend per share with a view to understanding the effect of asset utilization on equity return of consumer goods quoted manufacturing firms in Nigeria.

The study used the ex-post facto research design and content analysis. The choice of design was based on the fact that the dependent variable (return on equity) already exists. The research nature was longitudinal in nature because the subjects were not randomly assigned, that is, they were grouped based on a particular characteristic or trait such as listed on Nigerian Stock Exchange. The population of the study is the manufacturing firms that were listed on Nigeria stock Exchange out of which 18 consumer goods were purposively selected. Data were sourced from the secondary means such as financial statements and official websites of the firms.

The result of the study showed that there is a positive relationship between asset utilization and equity return of the quoted consumer goods manufacturing firms in Nigeria.

The study concluded that the utilization of asset is a major predictor of equity return of the selected firms and the better the assets are put to use, the better the return that will get to the providers of equity capital.

Keywords; Asset Utilization, Dividend per Share, Equity Return.

1. INTRODUCTION

In the economic world of dynamism and uncertainty, there is a pertinent need for sustainability among business across the world. One of the best ways in achieving business sustainability is by ensuring efficiency and maximizing an entity's wealth. This is more pertinent at this period of pandemic where most business need to resuscitate their affairs due to measures enacted by various countries to overcome the pandemic such as lockdowns. Nastiti et al. (2020) noted that asset utilization is one of the major ways of ensuring business sustainability. Asset utilization

could be described as the efficient use of a company's asset. Bukit et al. (2018) defined asset utilization as a ratio of total revenue obtained to the total value of asset of an entity. The study further posits that asset utilization helps an organisation to increase his capacity and satisfy the demand of its market. Ismail et al. (2022) noted that there is a need for organisations to pay attention to its asset utilisation levels as it could determine the organisation's income level and hence its survival.

Modern organisations tend to be more concerned by wealth maximization especially for its shareholders. Rahman (2021) noted that management who focus on wealth building do engage in asset utilisation management. Ismail et al. (2022) assert that research towards asset utilization is more relevant now more than ever as most organisations are recovering from the pandemic which beset the world as a whole. This is more pertinent as business environments are more competitive and dynamic in the age and time. Patin et al. (2021) opined that assert utilization is a major form to enhance an organisation's competitive advantage. They further noted that perception of asset utilization of an organisation could similarly affect the investment and wealth management of the organisation including the dividend payment policies.

Dividend policy of an organisation could be understood through its dividend payment perception. However, this depends on the availability of distributed income which is not attainable unless asserts are being properly utilised to generate optimal income (Manaf et al., 2018). Empirical research noted that asset utilisation will greatly influence sustainability growth and increase management perception of wealth management (Nastiti etal., 2020). The informed expectation from business point of view and economic point of view is the asset utilization is supposed to be the driver of return of firms, but what trickles out of this return to providers of equity who holds residual claim in capital hierarchy of stakeholders need to be assesd. Nevertheless, the influence of asset utilisation on dividend payment specifically dividend per share is yet to be properly examined. This paucity especially amongst consumer goods in Nigeria is of pertinent concern and hence this study will aim to examine the influence of asset utilization on dividend per share as a measure of return to equity of consumer goods firms in Nigeria.

2. LITERATURE REVIEW

2.1 Dividend Per share

Dividend per share is a measure of measuring the dividend policy of an organisation (Alias et al, 2012). It indicates an organisation's ability to distribute its wealth with its shareholders. Arsal (2021) opined that dividend per share reflect an organisation's ability to generate wealth and an indication of efficient performance. They further posit that a higher dividend per share will increase the market value of an organisation as management tend to employ higher dividend payment as a signal of performance through its shareholders. This in turn increase market perception and reduces agency cost (Azhagaiah et al., 2008). Gul et al. (2012) noted that firms with high profitability tend to have a higher dividend pay-out. They also noted that dividend pay-out per share is positively associated with stable companies that is, firms with stable or increasing income over a period of time. Similarly, Olaniyi and Enitan (2020) assert that dividend payment affects shareholders' wealth as well as the availability of investible

funds. Although various factors such as leverage, firm size, debt policy etc. (Gul et al, 2020; Ogunbanjo et al., 2019 & Farida et al, 2020) have been considered as predictors of performance, it is noteworthy that dividend per share is concerned and more linked with earnings which can only be achieved by efficient utilization of assets (Belusova & Brychta, 2021). Dividend per share is measured as the ratio of dividend paid to the total number of ordinary shares of a firm (Gul et al, 2020)

2.1.2 Asset Utilization

Asset utilization currently do not have a universal definition as perception varies from industry to industries. Nevertheless, it could be described as the ability of an organisation to minimize opportunity gap on an asset usage and function. According to Ellis and Westside (1998), asset utilization could be defined as the percentage of output that could be achieved by an asset if it is utilised at its maximum capacity over a specific period of which it can maintain a consistent quality output. They further posit that asset utilization is the ratio of the actual output of the asset to the maximum output attainable by the asset in a specified period. Asset utilization is important to a firm as its success is commonly tied to the ability to manage and leverage its assets. It also could be descried as the effective use of assets which will bring the most economic results by way of lower costs and higher returns. Belusova and Brychta (2021) assert that asset utilization could affect the dividend policy of an organisation as most organisations will tend to signal their ability to the shareholders and potential investors. Asset utilization is often measured as return on assets Islam et al. (2018) or as asset turnover (Akinleye et al, 2019). Nevertheless, this study will measure asset utilization as asset turnover which is the ratio of sales to total asset.

2.2 Theoretical Framework

2.2.1 Stakeholder's Theory

The stakeholder theory was first discovered in an internal memorandum at Stanford Research Institute, during the year 1963 and afterward, Edward Freeman in 1984 published his book, which he titled Strategic Management: A stakeholder approach which gave a profound insight into the understanding of the theory. Stakeholder theory examines how an organisation's management endeavours to create value and their responsibility to the organisation's stakeholders which goes beyond shareholders alone.

Charlese et al. (2006) assert the conventional meaning of a stakeholder is any faction or individual who can influence or be influenced by the accomplishment of the firm's goals. Friedman (2006) opines that the company itself should be regarded as a grouping of stakeholder and the objective of the firm therefore should be to oversee their interests, wants and perspectives. This stakeholder management is assumed to be achieved by the directors of a company. The executive should on the one hand direct the organization for the use of its interested parties with the aim of ensuring their rights and involvement in reaching an informed and also on the other hand the executive must stand in as the shareholder's mediator in order to guarantee the continued existence of the company that will protect the interest of each faction in the long term. Based on the perception of the theory, management is expected to act with utmost efficiency in managing wealth (asset utilization) entrusted to them by the shareholders and in turn maximize the wealth of the shareholders. This assert that organisations are to have

an optimal asset utilization capacity which will enable them to generate wealth and encourage dividend payment to its shareholders.

2.3 Empirical Review

Oniyama et al. (2021) Examined Interest in shareholders' value is gaining momentum as a result of several recent developments in the business environment. Basically, it is a critical decision and quite challenging for the managers to decide on an appropriate and ideal dividend policy to adopt, that will improve shareholders' wealth. In such a decision dilemma, the managers are faced with the decision of whether to pay dividends or to plough back distributable earnings into the business. Therefore, this study examined the effect of dividend policy on shareholders' wealth. The result of the multiple regression analysis conducted revealed that dividend policy had significant effect on market price per share; dividend yield exerted significant negative effect on share price, dividend per share had a significant positive effect on share price; while dividend pay-out ratio negatively but insignificantly influenced market share price.

Ofor and Farajimakim (2020) investigated the effect of assets utilization on the net worth of big cap companies quoted in the Nigeria Stock Exchange Market between the financial year 2012 and 2016. The ex-post facto research design was utilized while Secondary sources of data were derived from the panel data collected from the annual financial report of twenty companies with high market capitalization. The data collected was analysed using panel ordinary least square regression analysis, however, the study also conducted some preliminary analysis such as descriptive statistics and correlation analysis. The study reveals that both current asset and tangible non-current assets positively and significantly affect the net worth of companies with a big market capitalization in Nigeria.

Farida et al. (2020). Investigate the Impact of dividend policy on the financial performance of consumer goods companies in Nigeria. The ex-post Factor research design was employed and data was extracted from the annual report and accounts of the sampled companies covering a period of 8years (2010-2017). The data were analysed using multiple regression analysis and the result showed that dividend per share has a positive significant and insignificant relationship on return on assets and return on equity respectively. The dividend pay-out has a negative and insignificant relationship on return on assets. The dividend pay-out has a positive and insignificant relationship on return on equity. The study concluded that dividend pay-out ratio has both positive and negative impacts on return on asset and return on equity respectively.

Olaniyi and Enitan (2020) examined the existence of information asymmetry, agency problems, taxes, and transaction costs that make dividend policy a controversial corporate decision. This study investigates the effect of dividend policy on shareholders' wealth in agricultural firms in Nigeria. Secondary data spanning 2009-2015 were obtained from annual reports. Using multiple regression of OLS, the results show that a unit change in earnings per share, dividend per share, dividend pay-out and price-earnings lead to a positive increase in shareholders wealth measured by the market price per share respectively. Furthermore, result shows that without paying dividends, the market price per share of agricultural firms in Nigeria will decrease significantly. The study thus concludes that dividend policy has a significant positive effect on shareholders' wealth of agricultural firms in Nigeria.

Akinleye and Adesina (2019) examined the effect of assets utilization on the performance of selected manufacturing firms in Nigeria. Secondary data were collected from the annual report and accounts of the ten selected quoted firms for a period of five years spanning from 2012 to 2016. Data collected were analysed using descriptive statistics, correlation and regression analyses. The empirical results revealed that asset turnover has a positive and significant effect on the return on assets of the selected manufacturing firms while the debt assets ratio has a negative but insignificant effect on return on assets. The findings showed that majority of the variation in the ROA is explained by asset turnover, current ratio and debt-assets ratio. The study concluded that assets utilization has a positive and significant effect on the performance of manufacturing firms in Nigeria.

3. METHODOLOGY

The study employed the ex-post facto research design and content analysis. This entails the collection of secondary data from a population of 18 consumer goods manufacturing firms listed on the Nigeria Stock Exchange (2021). The 18 firms were purposively selected based on the availability of data.

A modified regression model by Abubakar (2021) was adopted to achieve the objective of this study:

$$DPS_{it} = \beta_o + \beta_1 ASSET\_UT_{it} + \beta_2 AGE_{it} + \beta_3 LIQ_{it} + \beta_4 PROF_{it} + \beta_5 SALES\_GR_{it} + \mu_{it}$$

Where; DPS = dividend per share; ASSET_UT = asset utilization; LIQ = liquidity; SALES_GR = sales growth; AGE = age of listing on the Nigerian stock exchange; PROF = profitability.

4. RESULTS & DISCUSSION

4.1 Descriptive Statistics Analysis

Descriptive Statistics provided information about the sampled variables. Mean, Median, Maximum and Minimum and the distribution of the sample measured by the skewness, Kurtosis, and Jarque-Bera statistics for 18 companies give 288 observation. As presented in Table 1, the dependent variable Dividend per share that is (DPS) has a minimum value of 0.0000 and a maximum of 70.000 having a mean value of 1.898125. This result shows that on average, listed consumer goods manufacturing firms in Nigeria produces a dividend per share of N1.90 to the shareholders. Asset Utilization (ASSET_UT) as presented in Table 4.1 has a minimum value of 0.0000, a maximum of 2.6200 and a mean value of 0.938194. This shows that consumer goods manufacturing firms in Nigeria are utilizing the assets deployed in business operations to generate ₦0.94 revenue on ₦1.00 invested on assets. It can be concluded that average consumer goods manufacturing firms in Nigeria are not optimizing their assets' revenue-generating capacity. Age (AGE) has a mean value of 18.3090 with a maximum value of 47.000 and a minimum value of 0.0000. It could be inferred from this information that the average age of a listed consumer goods manufacturing firm in Nigeria is 18 years. Furthermore, liquidity (LIQ) which shows an average of 1.1009, a minimum of 0.0000, and a maximum of 3.2500, which means that the average listed consumer goods manufacturing firms in Nigeria is liquid enough and can cover its obligations as at when due. While profitability (PROF) has a mean of 0.07431 which shows that on average, listed consumer goods manufacturing firms in Nigeria can generate a margin level of 8.4% per annum with a minimum margin rate of -102%

and a maximum rate of 138%. It could be inferred from this information that average consumer goods manufacturing firms in Nigeria are generating a profit margin of 8.40% per annum and Sales growth (SALES_GR) has a mean value of 0.115868 and a minimum value of -1.0000 and a maximum of 1.6400. This means that on average, the sales level of listed consumer goods manufacturing firms in Nigeria grows at a rate of 11.6% per annum

Table 1 Descriptive Statistics

	DPS	ASSET_UT	AGE	LIQ	PROF	SALES_GR
Mean	1.898125	0.938194	18.30903	1.100903	0.074306	0.115868
Median	0.000000	0.915000	18.00000	1.055000	0.070000	0.090000
Maximum	70.00000	2.620000	47.00000	3.250000	1.380000	1.640000
Minimum	0.000000	0.000000	0.000000	0.000000	-1.020000	-1.000000
Std. Dev.	7.660983	0.542500	9.107468	0.624173	0.210051	0.253939
Skewness	6.626103	0.426411	0.570698	0.600563	-0.246561	1.051198
Kurtosis	50.87579	3.081044	3.693200	3.954223	18.56340	12.38008
Jarque-Bera	29612.54	8.806493	21.39974	28.23895	2909.550	1108.872
Probability	0.000000	0.012238	0.000023	0.000001	0.000000	0.000000
Sum	546.6600	270.2000	5273.000	317.0600	21.40000	33.37000
Sum Sq. Dev.	16844.22	84.46586	23805.50	111.8128	12.66286	18.50718
Observations	288	288	288	288	288	288

Source: Author's computation, 2022

The results of the regression analysis of the effects of asset utilization on the dividend per share of quoted manufacturing firms using pooled, fixed and random effect panel methods were as presented in Table 2 and the Hausman (1978) test in Table 3 showed that the random effect had a better result which showed that the null-hypothesis that fixed effect is the most appropriate model was rejected (Chi-sq. = 6.182859; Prob. = 0.2888) hence, concluded that the random effect was the more appropriate model.

Table 2 indicated that the independent variables were seen to explain variations in dividend per share to the tune of 50% as shown in the adjusted R^2 of the random method. Besides this, the Dubin-Watson with the value of 0.179460 implies that there is a presence of positive serial correlation. However, the absence or presence of Durbin Watson will not have affected the result of the regression. Also, the f-statistics with its probability (f-stat = 4.087; prob = 0.0013) show that all included variables jointly and significantly explain variations in share value at a 1% significance level.

4.2 Regression result of the effect of asset utilization on dividend per share

Furthermore, the findings indicated that three of the explanatory factors impacting the dividend per share i.e., ASSET_UT (asset utilisation), AGE (age of listing), and PROF (profitability) has a positive relationship with Dividend per share (DPS) as depicted by the sign of coefficient in regression analysis. This means the higher the Asset Utilization, Age and Profitability of listed consumer goods manufacturing firms in Nigeria, the higher the Dividend per share of the firms. The rest of the observed variables like LIQ (liquidity), and SALES_GR (sales growth), reflected a negative relationship with the dividend per share resulting in a reduction in dividend per share when these two variable increases.

Nevertheless, asset utilization has a positive insignificant effect on the Dividend per share of quoted consumer goods manufacturing firms in Nigeria. This shows that a one-unit increase in asset utilization of quoted consumer goods manufacturing firms will lead to a 0.28 or 28%

increase in the dividend per share. That is there is a direct relationship between Asset Utilization and the Dividend per share of quoted consumer goods manufacturing firms in Nigeria

Table 2: Regression result of the effect of asset utilization on dividend per share

Variable	Fixed Effect Model	Random Effect Model	Pool OLS
C	-2.870323 (-1.592870) (0.1124)	-2.338480 (-1.100110) (0.2722)	-0.689299 (-0.466544) (0.6412)
ASSET_UT	-0.003329 (-0.002858) (0.9977)	0.276603 (0.253719) (0.7999)	2.505180 (2.841971) (0.0048)
AGE	0.333481 (4.463823) (0.0000)	0.286930 (4.208869) (0.0000)	0.097746 (1.958420) (0.0512)
LIQ	-1.347951 (-1.866833) (0.0630)	-1.295611 (-1.845087) (0.0661)	-1.614947 (-2.074457) (0.0389)
PROF	2.006506 (0.997212) (0.3196)	2.154275 (1.086481) (0.2782)	4.436601 (1.977677) (0.0489)
SALES_GR	0.006267 (0.004471) (0.9964)	-0.086743 (-0.062034) (0.9506)	-0.900333 (-0.488807) (0.6254)
R^2	0.519914	0.607562	0.550178
Adjusted R^2	0.480058	0.501030	0.380426
F. Statistics	13.04477	4.086615	3.293764
Pro (F statistics)	0.000000	0.001344	0.006591
Dubin-Watson	0.194161	0.179460	0.115181

Source: Author's Computation (2022)

Table 3: Hausman Test

Correlated Random Effects - Hausman Test
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.182859	5	0.2888

Source: Author's Computation (2022)

4.3 Multicollinearity Test

The data in the Table 4 showed the results of all possible bivariate combinations of the variables, namely ASSET_UT, AGE, LIQ, PROF and SALES_GR. The results showed that all variables had very low correlation coefficients, less than 0.8 both positive and negative. This showed that all variables influencing the dividend per share were independent of one another. This is therefore implied that all the five (5) variables can be included in the regression analysis as independent variables using the OLS method of estimation without obtaining spurious results.

Table 4: Correlation Table

	ASSET_UT	AGE	LIQ	PROF	SALES_GR
ASSET_UT	1.000000	-0.078553	0.313172	0.138001	0.231909
AGE		1.000000	-0.120265	-0.120179	-0.183715
LIQ			1.000000	0.292420	0.090221
PROF				1.000000	0.184597
SALES_GR					1.000000

Source: Author's computation, 2022

4.4 Variance Inflation Factor Test

In Table 4 the highest correlation is 0.313172 which led to the conclusion that there is no multicollinearity issue. Nevertheless, the VIFs show how much of the variance of a coefficient estimate of a regressor has been inflated due to collinearity with the other regressors. Table 5 shows that none of the independent variables has Variance inflation factors greater than 10 or tolerance value less than 10%. Therefore, it can be inferred that there is no multicollinearity and the result of the regression is not spurious.

Table 5: Variance Inflation Factor.

	Collinearity Statistics	
	Tolerance	VIF
ASSET_UT	0.777032	1.162969
AGE	0.002491	1.050778
LIQ	0.606049	1.200735
PROF	5.032570	1.129197
SALES_GR	3.392594	1.112552

Source: Author's Computation (2022)

4.5 Panel Unit Root Test

The variables used in the regression were subjected to a unit root test using ADF-Fischer Chi-Square and Levin, Lin & Chu t-test. This was to reinforce and ensure robustness in the reliability of the results. Unit root tests were carried out to determine whether the data series for all the variable(s) were stationary or non-stationary. The unit root test, therefore, helped to ensure that the estimate of the parameters obtained from regression models, using ordinary least squares are reliable, efficient and consistent. The result in the Table 6 showed that all the independent variables that determine dividend per share were stationary at level.

Table 6: Panel Unit Root Test

	ADF- Fisher Chi-Square		Levin, Lin & Chu t		
Variables	Statistics	Probability	Statistics	Probability	Order of Integration
ASSET_UT	55.1605	0.0215	-2.95069	0.0016	I (0)
AGE	0.23359	0.0099	0.51307	0.0169	I (0)
LIQ	44.8720	0.0475	-2.04057	0.0206	I (0)
PROF	58.4353	0.0104	-13.2987	0.0000	I (0)
SALES_GR	96.1727	0.0000	-6.10354	0.0000	I (0)

Source: Author's Computation (2022)

5. **Conclusions & Recommendations**

Based on the findings of this research work, it can be concluded that asset utilization has a positive but significant effect on the dividend per share of quoted consumer goods manufacturing firms in Nigeria. It can be concluded from this that asset utilization has predicting capability positive of dividends per share based on adjusted R^2 when the confounding factors, such as when we controlled for the age of the firm, the profitability and sales growth. It is therefore recommended that the management of quoted consumer goods manufacturing firms whose responsibility is to oversee the affairs of the company should optimize their asset utilization to further improve dividends per share since there is a positive relationship between asset utilization and dividends per share.

Management of firms should put everything in place to ensure that assets are maximized to achieve the fiduciary duties of the management.

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