The Effects of Marketing Expenses on the Firm Performance of Quoted Consumer Goods Firms in the Nigerian Exchange Group (NGX)

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ABSTRACT

The study investigated the effects of marketing expenses on the firm performance of quoted consumer goods firms in the Nigerian Exchange Group (NGX). The study acknowledged that a firm's value is a reflection of the company's expected future worth, which is primarily determined by its marketing efforts. Thus, a company's value represents its anticipated future worth, which primarily depends on its marketing initiatives. Short-term profitability is also negatively impacted by marketing and advertising expenses. The analysis modifies the previous approach employed in research of the BIST Textile, Leather Index and the secondary data is utilized on 22 quoted companies between 2020 - 2024. This was done by cross-sectional time series analysis and pooled Ordinary Least Squares (OLS) regression. This study's finding is that marketing must be considered by the consumer goods companies in Nigeria as an investment that will yield profits, especially when operational measurements, including ROA and ROE, are taken into account. Managers must also remember that the response of the stock market to marketing efforts cannot always be instantaneous, as accounting performance and thus long-term preparation and patience must be planned. The study concluded that the size of the firm also contributed to the moderated performance results, especially in the way the market views the value. It was recommended in the study that to achieve performance benefits and prevent damaging underinvestment, firms have to achieve minimum levels of effective marketing investments.

Keywords: Consumer Goods Firms, Firm Performance, Marketing Expenses, NGX, Return on Assets

1. INTRODUCTION

The maximization of shareholder wealth is one of the main goals of corporate management. As Demir (2005) stated, companies should not only concentrate on short-term profit, which is frequently gauged by sales revenue, but also on maximizing firm value in the marketplace. Firm value is a reflection of the company's expected future worth, which is primarily determined by its marketing efforts (Peterson & Jeong, 2010). Once more, according to Konak (2015), a company's value represents its anticipated future worth, which primarily depends on its marketing initiatives. Short-term profitability is also negatively impacted by marketing and advertising expenses. According to Hirschey & Weygandt (1985), marketing and advertising expenditures are generally considered to be strategic investments that increase firm value over time, even though they may temporarily lower profitability. For decades, academics have been interested in the relationship between marketing spending and company performance, and a sizable amount of research has examined the direction and validity of this relationship. Some researchers argue that there is no significant relationship (Chan et al., 2000), while others suggest that there may be a positive correlation (Chauvin & Hirschey, 1993) or a negative correlation (Jose et al., 1986). The possibility of such a relationship offers managers a strategic chance to affect firm value through marketing choices, regardless of the direction (Umboh & Yanti, 2025).

Therefore, this research aims to explore the connection between marketing spending and the financial performance of consumer goods firms listed on the Nigerian Exchange Group (NGX). The analysis modifies the previous approach employed in research of the BIST Textile, Leather Index and the secondary data is utilized on 22 quoted companies between 2020 - 2024. This was done by cross-sectional time series analysis and pooled Ordinary Least Squares (OLS) regression.

Financial performance metrics that will be considered include the Tobin Q, return on equity (ROE), return on assets (ROA), market-to-book ratio and other profitability indicators. Barth et al. (1998) found that brand equity, as a significant outcome of marketing investment, should be considered when valuing the stock of a company. To back this up, Haryanto & Retnaningrum (2020) found out that marketing and research and development (R&D) spending positively influence firm value. Han & Manry (2004) make a counterargument in that a firm could be overly marketed and overly engaged in R&D activities, which would hurt its valuation. Further studies give contradictory findings. Indicatively, O'Brien (2003) had observed that there was a strong positive correlation between the intensity of marketing and to market-to-book ratio and Konak (2015) studied the effects of marketing and R&D expenditures on listed companies. Srinivasan & Hanssens (2008) however, noted that there was a negative relationship between promotional pricing strategies and firm value due to the fact that promotional pricing strategies decrease long-term profitability. Lustgarten & Thomadakis (1987) posit that the effects of marketing activities such as R and D and advertisements on the value of the firm can vary with the time horizons.

Equally, R&D is believed to create long-term value, whereas advertising is assumed to create short-term outcomes (Bublitz & Ettredge, 1989) with the help of cumulative abnormal returns and lagged variables. Conversely, Chan et al. (2000) applied a portfolio analysis method and established no important relationship between marketing expenditure and the value of firms. Han & Manry (2004) found that R&D expenditure and stock price had a negative relationship; however, Konak (2015) also demonstrated that marketing expenses to facilitate product differentiation may cause firm value to rise. Finally, but not the least, Shah & Akbar (2008) defined marketing expenditures as the investments in future profits and found that they significantly increased the market value of the firms. This research was based on consumer goods companies in Nigeria, so the official websites of the companies, the Nigerian Exchange Group (NGX), and the Nigerian Corporate Affairs Commission (CAC) served as a source of data.

2. RESEARCH METHODS

The dependent, independent, and control variables that were considered for the study are displayed in Table I. The dependent variables listed below were chosen as performance indicators, which is noteworthy.

Table 1. Dependent, Independent and Control Variables

Variable Type	Variable	Definition	Formula / Notation
Dependent	Tobin's Q (TQ)	Market valuation relative to the asset base of consumer goods firms	(Total Liabilities - Equity + Market Value) / Total Assets
	ROA	Profitability from total assets	Net Profit / Total Assets
	ROE	Profitability from shareholders' equity	Net Profit / Equity
Independent	ME	Change in annual marketing Expenditures of consumer goods firms	Δ Marketing Expenses (year-over-year change)
	ME²	Squared value of ME to assess non-linear effects	(Change in Marketing Expenditure)²
	R(CGF Index)	Return on sector index (or proxy index) for consumer goods firms	$Rs = \log(Pt/(Pt-1))$
Control	Ln(S)	Firm size is measured by the natural log of net sales	ln(Net Sales)
	LE	Leverage ratio to measure financial structure	Total Debt / Total Assets

2.1. Model Specification

In the model, the study employed the cross-sectional time series analysis technique in order to figure out the relationship between the marketing expenses and firm performance. In this circumstance, the regression models used for the study investigation are specified as shown below:

$$ROA_{it} = \alpha_{it} + \beta_1 ME_{it} + \beta_2 ME2_{it} + \beta_3 R(CGF)_{it} + \beta_4 Ln(s)_{it} + \beta_5 LE_{it} + \varepsilon_{it} \dots\dots\dots\dots\dots\dots(1)$$

$$ROE_{it} = \alpha_{it} + \beta_1 ME_{it} + \beta_2 ME2_{it} + \beta_3\beta_3 R(CGF)_{it} + \beta_4 Ln(s)_{it} + \beta_5 LE_{it} + \varepsilon_{it} \dots\dots\dots\dots..(2)$$

$$Tobins\ Q_{it} = \alpha_{it} + \beta_1 ME_{it} + \beta_2 ME2_{it} + \beta_3\beta_3 R(CGF)_{it} + \beta_4 Ln(s)_{it} + \beta_5 LE_{it} + \varepsilon_{it} \dots\dots\dots..(3)$$

Shown in the Equation, the Tobin's Q, ROA and ROE performance criteria, and dependent variables are ME, ME2 and R(CGF). Also, Ln (S) and LE represent the control variables. 'I' represents firms, 't' period and 'N' represents the total number of enterprises

3. RESULTS AND DISCUSSION

Initially, pooled Ordinary Least Squares (OLS) regression was used to investigate the possible influence of marketing expenditures on firm performance among Nigerian consumer goods firms. Either fixed effects models or random effects models were then chosen as appropriate based on the Hausman specification test results. The pooled OLS results are shown in Table 2 under the baseline assumption that every firm in the sample has the same characteristics. Marketing expenditures and Return on Equity (ROE) and Return on Assets (ROA) have a statistically significant positive relationship, according to the analysis, with significance noted at the 5% level. Market-based valuation was less sensitive to changes in marketing investment over the period, even though a negative correlation between Tobin's Q and marketing expenses was found, but this relationship was not statistically significant.

The results imply that marketing expenditures can improve firm performance, which is in line with the findings of Coşkun et al. (2010). Their research did, however, warn that this beneficial effect could reverse after a certain point. To test for non-linear effects, the squared marketing expenditure term (ME2) was added in accordance with this realization. The findings show that ME and ME2 have a positive and statistically significant effect on ROA and ROE. Significantly, for ROE, the effect grew stronger at higher marketing investment levels, defying the concave (inverted-U) relationship hypothesis and pointing to a sustained or potentially convex effect instead.

The regression estimates for the three models, Model 1 (ROA), Model 2 (ROE), and Model 3 (Tobin's Q), are summarized in Table 2. Both ME and ME2 showed significant positive coefficients for Models 1 and 2, indicating that marketing spending is relevant in influencing accounting-based performance. On the other hand, Tobin's Q indicated a negative correlation, but the effect was not statistically significant. To find the better model between fixed and random effects, the Hausman test was used because the pooled OLS assumes firm homogeneity, which is rarely met in actual market conditions. At the 1% significance level, the test preferred the random effects model for ROA (Model 1), whereas fixed effects were better suited for both ROE (Model 2) and Tobin's Q (Model 3), as shown in Table 3. In order to ensure robustness and account for individual firm heterogeneity across the sampled Nigerian consumer goods firms, final estimations were carried out using the fixed effects model for ROE and Tobin's Q and the random effects model for ROA.

Table 2. Pooled Regression Models Outcomes

	Model -1-			Model -2-			Model -3-		
	Dependent Variable: ROA			Dependent Variable: ROA			Dependent Variable: Tobin's Q		
	Coeff.	T-stat	Sig.	Coeff.	T-stat	Sig.	Coeff.	T-stat	Sig.
C	0.087	0.514	0.609	2.444	0.534	0.594	88.902	2.184	0.0328**
ME	0.079	2.474	0.0156**	2.068	2.392	0.0196**	-1.002	-1.551	0.126
ME2	0.091	2.337	0.0219**	8.154	8.945	0.001***	4.612	0.657	0.512
R(CGF)	0.014	0.527	0.599	0.765	1.209	0.230	0.642	0.131	0.896
Ln(s)	0.005	0.296	0.768	-0.148	-0.611	0.543	-4.617	-2.136	0.0356**
CG	-0.365	-6.095	0.000***	-1.508	-1.025	0.308	2.024	0.176	0.861
R 2		0.435			0.618			0.130	

Adj. R2		0.400			0.594		0.078	
Obser.		88			88		88	

Note: ***, ** and * indicate statistical significance at level 1%, 5% and %10 respectively.

Table 3. Statistical Testing of Regression Models

	Model-1	Model-2	Model-3
Hausman Test	27.61	6.02	4.78
P-Value	0.000***	0.312	0.910

Note: ***, ** and * indicate statistical significance at level 1%, 5% and %10 respectively.

Table 4. Fixed Effects and Random Effects Model Estimation Results

	Model 1			Model 2			Model 3		
	Dependent Variable: ROA			Dependent Variable: ROA			Dependent Variable: Tobin's Q		
	Coeff.	T-stat	Sig.	Coeff.	T-stat	Sig.	Coeff.	T-stat	Sig.
C	-0.218	-0.342	0.734	2.108	0.403	0.689	10.012	2.264	0.0278**
ME	0.004	0.059	0.953	1.844	2.204	0.0304**	7.688	1.592	0.113
ME2	0.108	2.891	0.0050***	8.016	9.022	0.000***	-4.433	-1.027	0.307
R(CGF)	0.008	0.341	0.733	0.778	1.253	0.213	2.248	0.779	0.437
Ln(s)	0.029	0.801	0.423	-0.144	-0.496	0.620	-4.872	-1.819	0.0723*
CG	-0.581	-7.322	0.000***	-1.295	-0.814	0.416	-20.922	-2.295	0.0239**
R 2			0.638			0.637			0.092
Adj. R2			0.517			0.618			0.041
Obser.			88			88			88

Note: ***, ** and * indicate statistical significance at level 1%, 5% and %10 respectively.

The results indicated in Table 2 indicate that marketing expenditures (ME) and its squared value (ME²) have a statistically significant and positive correlation with ROA (Return on Assets) and ROE (Return on Equity) at the 5% level of significance. It means that marketing spending not only enhances profitability, but it can also be more effective in case the spending is made strategically. The value of ME2 is a non-linear relationship, implying the fact that once marketing initiatives go above a specific threshold, companies can have increased returns on performance. This result is consistent with the results of Chauvin & Hirschey (1993), which concluded that there was a high correlation between the amount invested in advertising and the profitability of the firm. The same effect was also observed in Turkish manufacturing companies by Doğan & Mecek (2021). As Haryanto & Retnaningrum (2020) observe, a well-scaled marketing spending yields significant returns on assets (ROA) of consumer-focused enterprises.

The importance of ME2 to your study is supported by the theory of non-linear returns, which opines that profitability rises as the marketing investment breaches a certain level. The ME coefficient value is negative, but does not have a statistically significant value of Q of Tobin, which is a market-based valuation. This implies that the market may not immediately respond to the improvement in the marketing expenditure or will underestimate it in the near future. This research goes hand in hand with the results of Jose et al. (1986), who reported that the response of the market towards marketing intensity was either poor or irregular. On the same note, Srinivasan & Hanssens (2008) noted that the market responses to marketing inputs are often slow in relation to accounting performance and Han & Manry (2004) found that advertising capital was not fully collected in market values in Korea.

The implications of this study finding are that marketing must be considered by the consumer goods companies in Nigeria as an investment that will yield profits, especially when operational measurements, including ROA and ROE, are taken into account. Managers must also remember that the response of the stock market to marketing efforts cannot always be instantaneous, as accounting performance and thus long-term preparation and patience must be planned. Table 3 presents the findings of the Hausman test that evaluates the suitability of fixed and random effects models to each of the performance measures. The p-value of Model 1 (ROA) (0.000) is very important and indicates that the fixed effects will provide more accurate estimates. Nonetheless, the p-values of the Models 2 (ROE) and 3 (Tobin Q) are not significant, and this validates the choice of the random effects models. This difference matters to firm-level strategy as it implies that firm-level variations (such as market segment, management style or firm age) are more significant in profitability as compared to market valuation or equity performance. Therefore, even though the greater market forces can

contribute more to the equity returns and investor impression, the firm-specific strategies are crucial when one attempts to boost asset efficiency (ROA).

The results of the regression analysis using fixed and random effects are presented in Table IV. This table gives a more detailed analysis with panel data methods. The definition that the returns of marketing investment increase only when spending lies within a given range is confirmed by the fact that, although marketing expenditure (ME) has no significant impact on ROA (Model 1, Fixed Effects), ME2 has a very significant and positive impact. Also, leverage (CG) has a great negative impact, which implies that the higher the level of debt, the more companies struggle to convert marketing spending into operational profits. The previously obtained result that marketing influences returns to equity holders positively is confirmed by the fact that ME as well as ME2 is positive and statistically significant in Model 2 (ROE, Random Effects).

Considering that ME2 is such a powerhouse, one can significantly increase the perceived value of the firm among the shareholders through a strategic upscaling of the marketing activities. The correlation between market valuation and marketing expenditure is not statistically significant according to Model 3 (Tobin Q, Random Effects). On the other hand, both firm size (Ln(s)) and leverage seem to play a major role in Tobin Q in which leverage has a particularly negative impact. This finding confirms the conclusion of Doğan & Mecek (2021) that the positive relation between profitability and continuous and planned marketing investment is observed. Nevertheless, ME does not have a significant implication on the Q of Tobin, as it is in line with claims by Han & Manry (2004) and Jose et al. (1986) regarding late market recognition. It is also evident that leverage is often associated with negative effects on all models, implying that financial risks and investments in marketing should be balanced. This theme was also highlighted in the study of Chauvin & Hirschey (1993).

These findings give a clear direction to the consumer goods companies in Nigeria. To begin with, marketing must be viewed not only as an unchangeable expense but also as an investment instrument that can be easily upgraded, particularly in enhancing profitability. Secondly, better returns on marketing strategies can be achieved by controlling financial structure, especially excessive leverage. Lastly, though marketing might not have an instant impact on the market valuation, well-coordinated and regular investment in promotional efforts might, however, bring credibility and enhanced financial performance in the long term.

4. CONCLUSIONS

This study presents strong support that marketing spending has a very strong, positive impact on accounting-based performance measures like Return on Assets (ROA) and Return on Equity (ROE). The statistical significance of the squared marketing expenditure variable (ME 2) indicates the possibility of a non-linear, positive-reunifying effect, i.e. higher and continued marketing investment can provide increasingly better returns, not worse returns. The correlation between marketing spending and market-based performance (Tobin Q) was, however, found statistically insignificant. It means that marketing does not have such an immediate effect on investor sentiment or market valuation, but its advantages are more significant in internal profitability and operational efficiency. Moreover, there was always a negative correlation between high leverage and firm performance, which supports the significance of balanced capital structures. The size of the firm also contributed to the moderated performance results, especially on the way the market views the value.

The following recommendations were made in the study. First, marketing must not be viewed as a mere expense, but as a long-term value creator. Second, to achieve performance benefits and prevent damaging underinvestment, firms have to achieve minimum levels of effective marketing investments. Third, to minimise risks associated with debt, companies must focus on using equity financing or retained earnings as growth and marketing sources. Fourth, to bridge the gap in valuation, better communication of the investor on brand-building, customer strategy and long-term ROI is required. Lastly, the marketing strategies are supposed to be firm specific (management, market segment, competition) rather than generic.

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