THE RELEVANCE OF PRICING STRATEGIES ON CORPORATE PERFORMANCES IN NIGERIA

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Abstract
This paper examined the relevance of pricing strategies on the corporate performance of brewery industry in Nigeria for the period 2005-2013. The study adopted descriptive research design and the secondary data gathered from the quoted brewery industries was analysed using panel data regression model. The result revealed that pricing strategies have a great influence on the performance of brewery as it was showed that 91 percent in the performance of the industry can be explained by the pricing strategy. This further revealed the degree or extent to which both variables are correlated. However, the adopted sales strategy was revealed to be negatively related to the performance of the brewery industry in Nigeria as its limitation was showed from the level of net revenue of the industries. This negative effect was more visible in International Brewery as revealed by the fixed effect panel model. Thus, this study concluded that brewery industry should adopted a value based communication to bridge the communication gaps between the sales and marketing unit that caused the impact of sales
growth on the net revenue to be negative; effective market segmentation must be encouraged in order to boost the sales growth that can lead to enhanced and improved revenue generation; effective cost and discounting system should be adopted to attract more customers under the condition that product quality will not be compromised.

Keywords: Pricing Strategy, Corporate Performance, Discounting System, Costing System, Sales Growth

INTRODUCTION
The performance of a brewery industry is attributed to varieties of possible reasons within sales and marketing which include failures of proper product development, ineffective promotion and misidentified target markets resulting from the negative effect of pricing strategy (Rouzies, Anderson, Kohli, Michaels, Weitz & Zoltners, 2005). Pricing strategy adopted by the brewery industry affects their performance if a communication is lacking between Marketing and Sales unit in the industry. According to Hughes, Lebon & Malshe (2012); Maltz & Kohli (1996) and Ritz (2013), pricing strategy has been suggested as a root cause of performance level in the brewery industry.

Cespedes and Piercy (1996); Menon, Bharadwaj and Howell (1996) opined that pricing policy has been a reliable and necessary tool for coordinating decisions across all channel of marketing and sales of goods and services in other to maximize profitability. A diagnostics analysis of performance of any organization may be impeded by the kind of marketing and sales strategies adopted which are influenced by the forces of pricing and sales compensation strategies. These are important and therefore aligned toward the same types of goals, such as market share growth and profit maximization and it makes pricing strategies the main determinant of organization performances.

Hutt (1995); Menon, Bhardwaj, Adidam and Edison (1999); Malshe and Sohi (2009) suggested that to enhance communication between the marketing and sales, sound pricing strategy must be put in place. However, poor performance of brewery industry may persist if the marketing and sales are not communicating well enough about the fundamental elements of pricing strategy. The marketing and sales functions are principally responsible for manufacturing organization performance through enhanced revenue generation. In particular, pricing strategy must be considered for a competitive pressures and customer preferences when establishing the revenue per unit for a company’s products and services.

Homburg, Jensen and Hahn (2012); Lancioni and Gattorna (1993) in their study affirmed that pricing strategy has a positive relationship with the initiation and implementation of an
advertisement and sales strategies that is expected to improve performance whenever there is a synergy between marketing and sales duty and moreso, the organization benefits. But when chaos occurs between these two functional areas, it posts inverse influence on the organization and as a result hampered their overall performance (Crepedes & Piercy, 1996; Strahle, Spiro & Acito, 1996; Dewsnup & Jobber 2000). Therefore, pricing strategy is concluded to be a marketing strategy (Varadarajan 2010).

Similarly, Ramaswamy, Gatignon and Reibstein (1994); Palazon and Delgado-Ballester (2009) and Gu, Kim, Tse and Wang (2010) said that competitive market response to a pricing communication or signal may lead to unpleasant behavior involving a price war, or cooperative behavior in which the competitor raises prices to the new established considerable level. While, Lancioni & Gattorna (1993) opined that for a firm to witness an increase market share, firms may choose the fast approach of buying market share through deeply discounting price or the slower approach of gaining and holding market share by adding value or service at no additional charge to the customer.

However, a critical examination of various researches and literatures on pricing strategy and performance particularly in brewery industry revealed that much had not been said about the existing relationship between these two key elements in Nigeria. Hence, to contribute to the body of knowledge based on this discovery; this research will be carried out to investigate the existing relationship and the impact of pricing strategy on the performance of brewery industry in Nigeria filling the identified gaps in literature. This is done using comparative analysis of pooled least square regression technique and fixed effect panel regression model. Thus, this study is arranged in such a way that review of literature is done in section two, section three deals with methodology, model specification and variables description. The analysis and discussions of result is dealt with in section four and conclusion of the study is addressed in section five.

REVIEW OF RELATED EMPIRICAL LITERATURE
Donald (1985) affirmed that, when the relative price of a commodity goes up the quantity demanded of that commodity will go down. However, it does not necessarily means that the cheaper good will be demanded nor implies that changes in dollar prices will change demand’s attitude. The income and prices of goods made available to the consumers limit their choices, but within these limits the exact amounts of goods they bought are determined by taste. A consumer’s taste for two different goods is measured by the amount of utility derived from the consumption. It is not always true that when the price of goods is been subsidized the amount and the quantity consumed will be increased.
According to Shiple y and Jobber (2001), Pricing and price control is a critical factor that must be well considered in marketing and competitive strategy and it is a major determinant of industrial performance. Price is the measure through which industrial and commercial customers adjudged the value of a product and it has a strongly impacts on brand selection among competitive and alternatives product that are available for consumption. Apart from advanced product development, pricing is a key to success and profitability of an industry. They concluded that pricing is crucial to the growth and expansion of sales product as it attracts and captures demand.

Yeoman and McMahon-Beattie (2004) observed that in a real market the fundamental way of product optimization is pricing. Furthermore, pricing is one of the element of the marketing mix that enhances revenue generation for an industry, pricing decisions which results to price changes can be implemented relatively quickly and be adapted easily to the conditions surrounding a company’s internal or external environment because it is the most flexible element of the mix. Diamantopoulos (1991) asserted that company’s objectives and functions are usually multifaceted in such a way that the viability and sustainability of companies are resolutely on the combination of different pricing systems. These objectives are flexible and change over time due to environmental or organizational conditions. Thus, pricing objectives may be either supportive or detrimental.

Myers, Cavusgil and Diamantopoulos (2002) cited that there are objectives that are compatible with each other. For example market share increase and sales increase, on the contrary, sales maximizations versus profit maximization are two opposing objectives. In Paul, Ivo & Van (2013) study, related price strategies and price setting methods was done using survey designed technique and testing hypothesis on 95 respondents, the result showed that price strategies and price setting are related because strategies are implemented through price setting methods. Howard and James (2013) based their study on the effect of decision context on perceived risk in pricing strategies and attribution theory where more than 100 business managers were used and findings suggest that when pricing are dominated by an uncontrollable environmental factors, managers themselves tend to select pricing strategies with external orientations to avoid risk.

Kostis and George (2011) conducted a study on new industrial service pricing strategies and their antecedents where data were collected through a mail survey from 129 transportation and 48 information technology companies. Moreover, 20 in-depth personal interviews were conducted in the initial phase of the research and concluded that skimming pricing and penetration pricing relate to the company’s corporate and marketing strategy and the service characteristics, while market conditions influence the adoption of pricing similar to competitive
prices. Similarly, David & David (2012) adopted exploratory research design on a mail survey that was conducted using a questionnaire based on the dual scenario technique on marketing-orientated pricing: Understanding and applying factors that discriminate between successful high and low price strategies, found out that six marketing-orientated factors – ability of customers to pay; brand value; degree of competition; price acting as a barrier to entry; demand compared to supply and the use of a building market share objective. These factors are significantly discriminated between the uses of successful high versus low pricing strategies.

Anna, Nicola and Alessandro (2012) conducted a study on the relationship between customer value and pricing strategies by selecting 129 samples of washing machine models which assessed through the conjoint analysis technique. The output was then regressed on the market prices of the products and the result revealed that the alignment between price and value for the customer is limited, only one of the two subsamples presented had positive impact among the variables.

Spyros, George and Nikos (2012) carried out their research on wholesale provision of broadband services, an alternative pricing strategies and associated policies using a cost model created from actual market data. It showed that there are several factors that should be considered when new producers design their broadband deployment strategy. Ruiliang (2009) investigated pricing strategies and firm performances under alliance brand using game-theoretic model and concluded that optimal pricing and brand management strategies exist in a competitive market for firms.

Andreas (2008) conducted a study on customer value-based pricing strategies and why companies resist it by adopting a two-stage empirical approach and identified five main obstacles to the implementation of value-based pricing strategies which are: deficits in value assessment; deficits in value communication; lack of effective market segmentation; deficits in sales force management; and lack of support from senior management.

Robert (2004) believed that organizational performance can be examined by many different financial and economic factors or variables, given many different results and interpretations of successful performance. Each of these measures of organizational performance can be arguably unique. Performance management can take various forms in dealing with internal organization issues to cater for the stakeholders or handling issues relating to its environment.

Gary (2003) and Arie (2005) concern is that performance management involves the use of both quantitative and qualitative techniques and a due attention has to be paid to the human behavior aspect of the enterprise. Every organization should make an ideal standard of performance their target in the forms of consistent, competent, ethical and energetic behavior.
that always produce the best results for organization to succeed. Mohammad, Mona & Morteza (2012) was of the opinion that planning, performance forecasting and target setting enables managers to develop systematic ways to manage future performance. Barney (2001) observed that the concept of organizational performance is based upon the idea that an organization as a voluntary association dealing with production of assets which is not limited to human resources but also includes physical and capital resources, for the purpose of achieving developmental and profitability goals. When those responsible for the provision of the assets is satisfied with the value they receive in exchange, relative to alternative assets been used, they are committed to serve the organization.

Consequently, Robert (2004) concluded in his study that the essence of performance is to create value and as long as the values derived from the assets used is equal to or greater than the value expected from those contributing the assets, the assets will continue to be made available to ensure the organization sustainability and relevancy.

In order for companies to operate on a larger scale and also grow, they must have a strategic process for identifying potential customers, generating leads, closing leads and finally keep customers happy so they do not go to the competitors. Sales growth model helps organization to focus on all required elements of sales success such as lead generation and sales execution to enhance effectiveness of untapped potentials and sales process for revenue generation. Through this model, companies understand their current state sales process, open up new possibilities for sales growth and effectiveness and provide a structure for proven sales growth.

**Research Gap**

Examination of various research works and literatures revealed that several studies had been done on pricing, pricing strategies and organizational performances by different researchers such as Donald (1985); Diamantopoulos (1991); Shipley and Jobber (2001); Myers, et al. (2002); Gary (2003); Robert (2004); Yeoman and McMahon-Beattie (2004); Arie (2005); Andreas (2008); Ruiliang (2009); Kostis and George (2011); Anna et al. (2012); David & David (2012); Spyros et al. (2012); Paul et al (2013); Howard and James (2013) using different approaches and methodologies ranging from descriptive, explanatory survey and regression techniques which resulted to various findings and conclusions. Despite all these studies, the relevance of pricing strategy on the performance of brewery industry in Nigeria using panel data regression model is still lacking in literatures which constitute the major gap intended to be filled by this study.
METHODOLOGY

This research paper obtains consistent estimate of fixed effect models for panel data regression applied to data from brewery industry pricing strategy and performance in Nigeria between 2005 and 2013 in the three purposively selected brewery industries: Nigerian breweries plc, Guinness plc and International breweries plc based on the require information on the financial variables considered for this study. 2005 was chosen as a base year because after the much publicized recapitalization of banks and insurance companies, manufacturing companies also sat down to effect diverse changes in their pricing strategy so as to be able to face the existing challenges in the economy. Therefore, the secondary data used was obtained from financial statement of the brewery industries listed on the Nigeria stock exchange. The selected industries serve as cross-section units and the involved years as time periods.

Specification of Model

Panel Data Models

A general linear model for panel data permits the intercept and slope coefficients to vary over both individual and time, with

\[ Y_{it} = a_{it} + X_{it}'B + U_{it} \quad i = 1, \ldots, N, \quad t = 1, \ldots, T \]  

Where \( Y_{it} \) is a scalar dependent variable, \( X_{it} \) is a kx1 vector of independent variable, \( U_{it} \) is a scalar disturbance term, I indexes individual in a cross section, and t indexes time. This model is too general and is not estimable as there are more parameters to be estimated than observations. Further restrictions need to be placed on the extent to which \( a_{it} \) and \( B_{it} \) vary with \( i \) and \( t \), and on the behavior of the error \( U_{it} \).

Fixed Effects Model

The fixed effects model specifies

\[ Y_{it} = a_{i} + X_{it}'B + U_{it} \quad i = 1, \ldots, N, \quad t = 1, \ldots, T \]  

Where the individual-specific effects \( a_{1}, a_{2}, \ldots, a_{N} \) measure unobserved heterogeneity that is possibly correlated with the regressors, \( X_{it} \) and \( B \) are k x1 vectors, and to start with the errors \( U_{it} \) are iid \((0, \sigma^2)\).

The major challenge for estimation is the increase in N individual-specific effects as N becomes large. For this research we are interested in the slope parameter B. The N parameters \( a_{1}, a_{2}, \ldots, a_{N} \) were nuisance parameters or incidental parameters that are not of intrinsic interest.
The fixed effect model used for this analysis is thus expressed as

\[ Y_{it} = a_i + B'X_{ijt} + U_{it} \quad i = 1, \ldots, 3, \quad j = 1, \ldots, 3, \quad t = 1, \ldots, 9 \]  

(iii)

Where;

\( X_{ijk} \) is a \( k \times j \) vector of regressors and \( B' = (B_1, B_2, B_3) \)

\( X_{it}' = (SGR, TAX, DIV)_{it} \)

That is;

\( (NREV)_{it} = a_i + B_1SGR_{it} + B_2TAX_{it} + B_3DIV_{it} + U_{it} \)  

(iv)

Here, we represent

\( Y_{it} = NREV, X_1 = SGR, X_2 = TAX, X_3 = DIV \)

\( U_{it} = \text{error term in matrix form.} \)

**Variables Description**

The variables used in this research are brewery industry performance measure captured by industries’ net revenue (NREV) and the pricing strategy is captured by sales growth (SGR), tax paid by the industries (TAX) and dividend shared by the shareholders (DIV). These variables is used because the amount realized from the sales of product, the amount paid as taxes and the amount of dividend share among the shareholder of the firm is determined by the patronage of the customers which is influenced by the price affordability (pricing strategy).

Equation (3) above is expressed as

\[ Y_{it} = a_i + B'X_{ijt} + U_{it} \]  

(v)

In order to avoid the problem of outliers, there is need for linear transformation of the variables. That is

\[ \log Y_{it} = a_i + B'\log X_{ijt} + U_{it} \]  

(vi)

Let \( \log Y_{it} = Y'_{it} \) and \( \log X_{ijt} = X'_{ijt} \)

Now the equation (vi) become

\[ Y'_{it} = a_i + B' X'_{ijt} + U_{it} \quad i = 1 \ldots 3, \quad t = 1 \ldots 9 \]  

(vii)

And \( B = 1 \ldots 3 \) where \( a_1 = a_2 = a_3 = 0 \)

**ANALYSIS AND RESULTS**

This section deals with the analysis of descriptive analysis, panel regression (common and fixed or cross sectional effect) model of Pricing strategy on the performance of Brewery Industry in Nigeria.
Table 1: Descriptive Analysis of Brewery Industry in Nigeria

<table>
<thead>
<tr>
<th></th>
<th>NREV?</th>
<th>SGR?</th>
<th>TAX?</th>
<th>DIV?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>9.749726</td>
<td>0.372333</td>
<td>9.476048</td>
<td>9.597078</td>
</tr>
<tr>
<td>Median</td>
<td>10.21580</td>
<td>0.217200</td>
<td>9.711400</td>
<td>9.975600</td>
</tr>
<tr>
<td>Maximum</td>
<td>10.79410</td>
<td>1.966200</td>
<td>10.28240</td>
<td>10.95790</td>
</tr>
<tr>
<td>Minimum</td>
<td>7.430000</td>
<td>0.011000</td>
<td>7.960500</td>
<td>6.892000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.999329</td>
<td>0.510826</td>
<td>0.691269</td>
<td>1.056644</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.917685</td>
<td>2.234619</td>
<td>-0.946750</td>
<td>-1.403257</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.407740</td>
<td>7.024428</td>
<td>2.781811</td>
<td>4.160225</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>4.184272</td>
<td>40.69137</td>
<td>4.087069</td>
<td>10.37548</td>
</tr>
<tr>
<td>Probability</td>
<td>0.123423</td>
<td>0.000000</td>
<td>0.129570</td>
<td>0.005585</td>
</tr>
<tr>
<td>Sum</td>
<td>263.2426</td>
<td>10.05300</td>
<td>255.8533</td>
<td>259.1211</td>
</tr>
<tr>
<td>Sum-Sq. Dev.</td>
<td>25.96510</td>
<td>6.784521</td>
<td>12.42416</td>
<td>29.02890</td>
</tr>
<tr>
<td>Observations</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Cross sections</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

The table above showed the descriptive results of all the activities regarding the pricing strategy and performance of Nigeria brewery industry for the period 2003-2013. The net revenue generation measured the performance of the industry while pricing strategy is captured by sales growth, tax paid by the industry and dividends shared among the shareholders. The result revealed that the average net revenue rate of the brewery industry in Nigeria is 9.75. The 0.37 percent sales growth implies that sales strategy adopted by the industry limits the level of revenue generated and as result have a negative impact on the performance of the industry. The tax deduction rate and dividend rate of 9.48 and 9.60 implies that the level of the industry compliance to tax obligation and responsiveness to compensate the shareholders as at when due is quite encouraging. The maximum and the minimum: level of revenue generated rate, sales growth rate, tax deduction rate and dividend rate to the shareholder are 10.79 and 7.43, 1.97 and 0.01, 10.28 and 7.96 and 10.96 and 6.89 respectively. The standard deviation values of 0.999, 0.511, 0.691 and 1.057 revealed the rate at which the net revenue, sales growth, tax deduction and dividend to shareholders of the brewery industry in Nigeria are been deviated from their respective average or expected value. Also, it was discovered that the net revenue, tax deduction and dividend to shareholders are negatively skewed which implies a better performance, encouraging tax compliance and a good morale booster for shareholders for more developmental support for the industry. However, it was showed from the result that sales growth is positively skewed which shows the poor return of the adopted sales strategy. The Jarque-Bera and probability values revealed that the adopted sales strategy and dividend to the shareholders have statistical and significant impact in determining the performance of brewery industry in Nigeria.
The table 2 showed the result of the pooled panel regression output. It was discovered from the result that linear relationship exists between the pricing strategy and the performance of the brewery industry in Nigeria. The result showed that a negative linear relationship exist between the sales growth and the net revenue of the industry while a positive linear relation was discovered between the net revenue, tax deduction and the dividend made available for the shareholders of the industry. This result further revealed that the compliance of the industry to tax obligation and timely response to the payment of shareholders dividends improved the performance of brewery industry in Nigeria by 77 and 26 percent respectively. The sales growth value of -0.65 implies that the sales strategy adopted or employed by the brewery industry in Nigeria have limit their performance level by 65 percent during the period under investigation. The probability values of 0.003, 0.000 and 0.035 respectively revealed that the estimated parameters for pricing strategy from the model are statistically significant in assessing and determining the performance of brewery industry. According to Shipley and Jobber (2001) Pricing and price control is a critical factor that must be well considered in marketing and competitive strategy and it is a major determinant of industrial performance. Apart from world-class product development, pricing is a key to success and profitability of an industry. Pricing is crucial to the growth and expansion of sales product as its attracting and capturing demand which will lead to generation of more revenue.

The adjusted R-squared of 0.90 shows the proportion of variations or improvement in the performance of the brewery industry in Nigeria as witnessed in the level of net revenue can be explained by the pricing strategy. Thus, it implies the relevance and the importance of pricing strategy in enhancing industrial performance and growth sustainability in Nigeria.

Above all, the probability of the F-statistics 0.000 showed that the pooled panel regression fitted is valid, reliable, appropriate and acceptable for determining the relevance of pricing strategy and the performance of brewery industry in Nigeria.
In table 3, the result of the fixed effect panel regression model on the relevance of pricing strategy on performance of brewery industry was presented and it was revealed that negative linear relationship exists between sales growth and the net revenue as a measure of performance in brewery industry. It was discovered that a positive linear relationship exist between the tax deduction, dividend share by the shareholders and the net revenue. The result further showed that the adopted sales strategy limit the net revenue of the brewery industry in Nigeria by 46.7 percent. Tax deduction paid by the industry and the dividend made available to the shareholders improve the performance of brewery industry by increasing the net revenue by 66.7 and 16.4 percent respectively. The test for the statistical significant of these estimated parameters using the standard error test and the probability value revealed that the sales growth and tax compliance level of the brewery industry in Nigeria have great influence the net revenue generated and thereby enhance the performance of the industry in Nigeria. A thorough examination of the result based on individual industry shows that pricing strategy improved the performance of the Nigeria brewery plc and Guinness Nigeria plc by 18.2 and 14.9 percent respectively. Meanwhile, the result revealed that the adopted pricing strategy limit the performance of International brewery in Nigeria by 33.1 percent. This result affirm the opinion of Homburg, Jensen and Hahn (2012); Lancioni and Gattorna (1993) that pricing strategy has a direct relationship with the creation and implementation of an advertisement and sales strategies that is expected to improve performance. Thus, when there is a well synergy between marketing and sales duty, the organization benefits. But when discord occurs between these two functional areas, it produces negative effect on the organization and as a result hampered their overall performance according to Crepedes F. and Piercy (1996); Strahle, Spiro & Acito (1996) and Dewsnup & Jobber (2000). The proportion of variation and improvement in the performance of brewery industry in Nigeria that can be explained by the relevance of pricing strategy employed by these industries is 91 percent. The probability of F-statistics and the F-
statistics value revealed that fixed effect panel regression model is statistically significant and thus valid, reliable, appropriate and acceptable for this study. In comparing the pooled panel regression model with the fixed effect panel regression model used for this research, it was discovered that pooled panel regression model is more efficient, consistent, sufficient and unbiased for determining the relevance of pricing strategy on the performance of brewery industry in Nigeria. This decision was based on the model with the highest value of F-statistics.

CONCLUSION
Having examining thoroughly the relevance of pricing strategy on the performance of brewery industry in Nigeria, it was discovered from the descriptive and inferential analysis using panel regression model and all the various diagnostics evaluation that pricing strategies have a great influence on the performance of brewery as it was showed that 91 percent in the performance of the industry can be explained by the pricing strategy. This also revealed the degree or extent to which both variables are correlated. However, the adopted sales strategy was revealed to be negatively related to the performance of the brewery industry in Nigeria as its limitation was revealed from the level of net revenue of the organizations. This negative effect was more visible in International Brewery as revealed by the fixed effect panel model. Thus, this study concluded that brewery industry should adopted a value based assessment pricing strategy; value based communication to bridge the communication gap between the sales and marketing unit that result into negative impact of sales growth on the net revenue; effective market segmentation must be encouraged in order to boost the sales growth that can lead to enhanced and improved revenue generation; effective cost and discounting system should adopted to attract more customers under the condition that product quality will not be compromised.

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