

INTERNATIONAL JOURNAL OF MANAGEMENT AND DEVELOPMENT STUDIES

VOLUME 1 NUMBER 1 2012

CONTENTS

Editorial Board-----	V
Editorial Advisory Board-----	V
AN ASSESSMENT OF THE CRITICAL FACTORS INFLUENCING INVESTMENT IN BANK STOCKS IN THE NIGERIAN CAPITAL MARKET -----	1-14
<i>Okpokpo U. Godwin, Oyatoye, E.O. and Oluwafemi, O. J.</i>	
SELF- ESTEEM AND ACHIEVEMENT MOTIVATION: -----	15-20
<i>Adedeeji J. Ogunleye, Ph.D.</i>	
QUALITY ASSURANCE IN NIGERIAN UNIVERSITIES: CHALLENGES AND PROSPECTS -----	21-32
<i>Etejere, Patricia Agnes Ovigueraye (Ph.D)</i>	
ATTITUDE OF WORKERS TOWARDS NATIONAL HEALTH INSURANCE SCHEME: IMPLICATIONS FOR VISION 2020 -----	33-44
<i>Amoo, Emmanuel Olagunju</i>	
FINANCIAL SECTOR DEVELOPMENT AND ECONOMIC GROWTH 1981-2008: THE CASE OF NIGERIA -----	45-61
<i>Onanuga, Abayomi Toyin.</i>	
INFORMATION COMMUNICATION TECHNOLOGY (ICT), HUMAN CAPITAL AND ECONOMIC DEVELOPMENT FOR SUSTAINABLE HIGHER EDUCATION IN NIGERIA -----	62-74
<i>Gabadeen, W. O. (PhD) And Mobolaji, H. I. (PhD)</i>	
A DIALECTICAL DISCOURSE ON THEATRE ARTS AS A VOCATIONAL COURSE FOR YOUTH DEVELOPMENT. -----	75-82
<i>Olaniyan, Modupe, Elizabeth (Ph.D).</i>	
ENTREPRENEURSHIP DEVELOPMENT IN NIGERIA: PROBLEMS AND PANACEA. -----	83-93
<i>Ajayi, S. O. and Asaolu, O.</i>	
THE ROLE OF GOVERNMENT AND PRIVATE EDUCATION PARTNERSHIP IN THE GROWTH AND DEVELOPMENT OF SCIENCE AND TECHNOLOGY IN NIGERIA -----	94-98
<i>Onah, Fredrick Ekene (Ph.D)</i>	
ENTREPRENEURSHIP DEVELOPMENT AND ENTREPRENEURIAL BEHAVIOUR IN NIGERIA: THE HISTORICAL PERSPECTIVE -----	99-114
<i>Oyetayo, Oluwatosin and Adigun, Oludele</i>	
MATERIALS MANAGEMENT PRACTICES OF SELECTED MANUFACTURING FIRMS IN NIGERIA. -----	115-125
<i>Oyatoye, E. O. and Ajuyah Alex</i>	
PRICING DECISION-MAKING IN A MANUFACTURING ORGANISATION IN OYO STATE, NIGERIA -----	126-141
<i>Osemene, Olubunmi Florence, Olaniyi, Taiwo Azeez and Aliu, A. O. -</i>	
ASSESSMENT OF CUSTOMERS' PERCEPTION OF QUALITY SERVICE DELIVERY OF BANKS IN NIGERIA -----	142-148
<i>Osemene, O.F., Okafor, L.I., Adetayo, H.O., Opele, A.M. & Onifade, T.A.</i>	
THE CHALLENGES OF STAKEHOLDERS IN NIGERIAN BANKS OF TODAY--	149-167
<i>Akinola, G. O., Akande, W. O. & Williams, Y. B.</i>	

pages 126 - 141

**INTERNATIONAL JOURNAL OF
MANAGEMENT AND
DEVELOPMENT STUDIES**

VOLUME 1, ISSUE 1

PRICING DECISION-MAKING IN A MANUFACTURING ORGANISATION IN OYO STATE, NIGERIA

By

Osemene, Olubunmi Florence, Olaniyi, Taiwo Azeez and Aliu, A. O.
Department of Accounting and finance,
University of Ilorin

Abstract

Relevant information on cost as input for effective pricing decision making is necessary if organizational goals and objectives are to be attained. The quality of decision taken depends on the strength of the information received especially on pricing decision-making. Hence, this work seeks to establish the necessity of cost information in managerial decision making as it relates to the fixing of selling prices of manufactured goods, using a manufacturing pharmaceutical firm located in Oyo State as a case study. Secondary data were collected from the firms' official books on prices for five years (2006-2011). The firm employed total cost plus method to compute the prices of its products. The secondary data also contained the prevailing market prices of other firms' products for the same period (2006-2011). The mean prices of the firm's product and the mean prices of same product by other firms in the open market were statistically analyzed to see whether there is a relationship between them. Results revealed that the prices set by the firm, were within the same range with what obtained in the market. This suggests that some vital information on cost from the open market may have influenced the computation of prices set by the pharmaceutical firm examined. Hence, the upward and downward review of prices by the firm is a survival strategy. Consequently, we recommend as a policy option, that firms should embark on adequate data collection as it relates to cost before using them to fix prices of their products.

Keywords: Pricing, Decision-making, Costs, Objectives, Nigeria.

Introduction

Managerial decision making is usually based on relevant cost and other related information which will affect the decision. This is with the aim of attaining the goals and objectives of the organization. However, information that pertains to cost falls on an organization's cost accountant who collates the financial information of the company for decision-making purposes. Information is not only vital for effective decision-making, but also should meet the company's needs. At all times, relevant information on cost and revenue must be supplied to the management. This is because decision-making is a critical factor that determines to a large extent the standing of the organization.

Just like decision-making, information gathering is a step-care approach that is usually meticulously put together to ensure that it is relevant or useful. The closeness between information and decision-making are close enough to the extent that decision-making can be a part of the information system. Good decision-making depends on the availability of relevant information which will enable the decision maker to select a choice in the midst of alternative choices. Petu (1999) opined that the process of selecting a choice among alternatives must be strategic and should incorporate the ABC's that is, Assumption, Beliefs and Consequences; the three Fs, that is, Force, Focus and Fit; and finally, the three S, which are: Strategy, Structure and Style. All of these influence the choice to be made because decisions about the future are based on assumptions. When it comes to evaluating the desirability of the outcome of a decision, belief and operational values come into play.

To avoid possible pitfalls, managers must examine every possible consequence of their decision to ensure that their assumptions and beliefs will not lead them into making unrealistic choices. To force, focus and fit will help decision-makers to choose alternatives that are consistent with the organization's present capabilities and direction. The decision should reflect the organization's focus and it should fit into the organization's ability to align itself with the demands of the external environment and expectation of shareholders.

The strategy, structure and style should be compatible if the decision must be successful. The structure of an organization determines how it operates to accomplish its goals, strategy represents the course of action chosen, while style is the manner in which top managers evaluate alternatives, make decisions and provide leadership.

Pricing decision cannot be made without relevant information. However, not all financial data are relevant for the determination of product prices. More often than not, accountants are faced with the problem of the determination of what items of expenses constitute relevant input for pricing decision. It is on this note that "cost" which is the cardinal issue in pricing is deemed worthy of an empirical study of this nature to assist management in pricing decision process.

The prime focus of this study is to describe the essence of cost information for managerial decision-making and to demonstrate that relevant cost information is indeed a necessary tool for managerial decision-making. The secondary objective is to determine the effect of the open market price on the prices of the products of the company chosen as a case study. The work seeks to establish the effectiveness of information on cost in determining the pricing of a firm's product. In this case, five pharmaceutical products produced by a pharmaceutical firm located in Oyo State were used as a case study.

The pricing decisions of organizations involve important strategic variables of key relevance to organizational success. The pricing policies available to decision-makers will depend crucially on the types of market into which products and services are sold. The pricing strategy will also depend on the organization's overall strategic aims.

Rayburn (1979) stated that merely collecting cost-accounting data does not

completely fulfill the accountant's responsibility for recommending solutions to cost-profit problems. He went further to state that the accountant should employ personal skill, professional knowledge and personal judgments to assess what data accumulation would be of utmost benefit to the management. Hinterhuber (2004) noted that management often believes that price is an important factor in drawing customers to one's products. However, price may not be the most important criteria for purchasing an item. The way and manner a product is priced, sold or services are rendered may depend on the supply and demand for such a product or service.

Most of the cost such as differential cost, opportunity costs and replacement costs are never entered into the formal accounting records. They are instead gathered for internal use in decision-making. Cost information is necessary for ascertaining profitability and deciding which products to produce and in what proportions. The type of cost information necessary for pricing decision varies with the decision time horizon of the firm.

Literature Review and Theoretical Framework

Accounting information for effective pricing decision making is the springboard upon which this study revolves. Valuable information should attract some cost, and the relationship between the costs and value of information has been highlighted by various researchers. Kelly and Pratt (1992) proposed that the information content of a message varies inversely with the probability of the occurrence of an event that is being reported.

Many models of pricing decisions based on cost have been proposed, and they range from economic pricing model, market based pricing model, to other accounting cost-based models which were highlighted by Fabiani, et al., (2007), Caplan (2006), Lucas (2003), Arnold (1977), Atkins and Skinner (1975). The economic pricing model assumes profit maximization, with firms operating in a perfect market situation. In a real sense, the model seems difficult to implement. However, other cost-based models like the cost plus pricing approach has gained much acceptability despite its constraints.

Baxter and Oxenfeldt (1961) noted that cost-based pricing model offers a means by which plausible prices can be found with ease and speed, no matter how many products the firm handles. The prices may well be seen as more defensible on moral grounds than prices established by other means. Guilding, et al., (2005) posited that a high degree of importance is attached to cost-plus pricing. A substantial number of companies use cost-plus pricing for a relatively small sub-set of products and services. Companies that are faced with high competition attach a high degree of importance to cost-plus pricing and manufacturing companies attach a relatively low degree of importance to cost-plus pricing.

Factors influencing Pricing Decisions

Many factors affect the pricing decisions in a manufacturing outfit. Such factors may be external or internal. The internal factors are such as are controllable

the available manufacturing facility. The external factors are those outside the control of the company but which impact pricing decisions (<http://www.wiki.answers.com>).

Five main factors which have strong influence on pricing are pricing objectives, costs, competition, customers and legal considerations. Pricing objective refers to how the pricing needs to contribute to marketing that product, which is either to penetrate the market to establish a long term-dominance in the market. In such a case prices are kept low to prevent competition. On the other hand, skimming can be done so as to maximize profit when there is no competition. Such pricing focuses on short term gains and competitors may come in at any time.

The willingness and capacity of customers to pay has major influence on the quantity produced and sold at different prices. A manufacturing company would consider the combination of prices and sales volume that would result in maximum profit for the organization. Cost of manufacturing and selling the product, packaging, storage and transportation are important factors in pricing. In fact, some companies may base their prices solely on the cost incurred. However, as cost per unit manufactured tends to vary with the volume of production and sale, it is better to try and fix a price that gives maximum profit, taking into consideration both demand and cost behaviour.

Another important factor in pricing decision is the nature of existing competition. Some companies fix their prices in relation to the competitor's price which may not portend well for the organization except for commodity products with many competitors. The shelf life of the medicines manufactured is another big factor due to the expiry nature of drugs. The brands versus generic items, with brand items due to research and company name also affect pricing decision. The political and company image cannot be over-emphasized in price determination (Agrawala, 2009, Guilding, et al., 2005).

Cost Information and Decision-Making

People have been concerned with costs ever since the use of money replaced barter. Brenner (1977) stated that this has formed the basis for evaluation of internal financial system of organizations. Valuable cost information is needed from the appropriate cost centers to enable management to plan, to control and to make useful decisions. Lucas (2003) observed that 'full cost' is often applied by a company's accounting system, prepared in accordance with financial reporting requirements based on the matching principle. A 'normal' profit mark-up is added to this cost. Lucas added further that full cost/normal cost pricing is typically used in manufacturing and service industries. Lee (1998) posited that full cost-based methods are used by organizations more than direct cost-based method.

In the two main forms of pricing, the external sales use various forms of pricing such as target pricing which is also competition-based pricing; cost plus pricing; variable cost pricing; customer based pricing (value-based pricing) and time and material pricing. The internal form of pricing which is used within an organization's various divisions can employ any of transfer prices such as cost based, negotiated, market based and transfers between divisions in different countries.

Many manufacturing companies today are faced with the problem of choosing between alternative and valuable related data which will fit into the organization's goals and objectives. Odozi (2001) asked rhetorically why indigenous companies are closing shop. Is it a problem of inappropriate pricing of their products or a problem of poor leadership in these companies who cannot take appropriate decisions? He went further to propose that good decision should be made by taking into account the environment in which one operates.

It is not enough to make decision because decisions should stand the test of time, and should be based on sound information. It has been argued that sound management involves sound decision-making which is scientific information dependent (Owolabi, 2000). Information gathering on its own involves a step-care approach of raw data collection which is presented in this case, according to costing principles, using one of the costing techniques to produce cost information. Lucey (1992) noted that cost information serves as a guide to actions directed towards the attainment of organizational goals and objectives. They indicate how resources are to be allocated and how tasks assigned to the organization might be accomplished. The relevance of such information depends on the desired results they are intended to produce, (Drury, 1996). He added further that data represent facts of any kind, in most cases, in meaningless forms, while information itself is a subset of data.

Ackoff (1975) noted that the cost accountants should always concentrate on the provision of relevant information that is valuable to the recipient, that is, the decision-maker. This position was corroborated by Kaplan (1984), when he admonished that accountants should aim at providing the right information to the right people, in the right quantity, at the right time, and at minimal cost. Again, this has raised another question as to what is optimal quantity, content, accuracy and speed of transmitting information.

Relevant Cost, Pricing and decision-making

Cooper and Kaplan (1987) elaborated on accounting costs used in the decision-making process. The relevant costs are essential for decision making. Costs already spent in the past are irrelevant to decision-making. Staubus (1991) classified such as sunk or historical cost, all are not irrelevant and he assigned no economic relevance because they are irrevocable. Avoidable and unavoidable costs may represent alternative ways of stating relevant and irrelevant costs. Avoidable costs may be saved by not adopting a given alternative, whereas unavoidable costs cannot be saved (Rayburn, 1979, Lucey, 1996). Opportunity cost is the cost or value of the next best alternative. Wright (2001) noted that where a firm has no spare capacity due to constraints on its resources, the relevant cost will include opportunity cost, consisting of the contribution that will be forgone on other products. This cost is necessary for decision-making because imputed cost does not require initial outlay.

Incremental and marginal cost are very useful in planning and decision-making especially when management is faced with the decision of finding the most

choice problems such as accepting and rejecting orders, make or buy decisions, and increasing or abandoning operations. Arnold and Scapens (1998) explained that there is a similarity in principle of incremental cost in accounting with the economist concept of marginal cost. They highlighted the differences by stating that marginal costs represent the additional cost of one extra unit of output whereas incremental cost represents the additional cost resulting from a group of additional units of output.

Since decision-making entails making a choice in the face of many alternative choices, the decision-maker should justify the desirability of favouring one course of action over the other. Therefore, the process should first and foremost seek to identify the goals of the organization. A further justification of choosing objectives was provided by Brealey and Meyers (1984) as a survival strategy for the organization in the future; learning possible ways of increasing cash flow; cost of pursuit of other goal. The second stage is to search for alternative course(s) of action that might enable the objective to be accomplished. Relying on one type of strategy might be risky. If management concentrates on a single product range, market shares and cash flow may decline because the problem of not generating enough cash to sustain the company may arise. In order to maximize future cash flow, it is essential that management identifies potential opportunities and threats in the current environment. There may be the need to develop a product in an existing market, develop a product in a new market or develop new market for existing product. Data gathering about contending alternatives become imperative so as to determine the alternative to pursue. Then the implementation of the selected alternative is undertaken, thereafter comparison of actual and planned outcomes are done.

Hinterhuber (2004) noted that prices are determined in two ways, viz: by price takers and by price makers. The price takers occur in a situation where there is competitive market and the company has no influence on price while for price makers, they have more difficulty since there is no existing price for new products or service. Hence they influence the price by offering innovative products and services.

Decision-Making and Pricing Models

Various pricing models have been proposed with the aim of establishing the optimum selling price for a product. Some of the pricing methods are economic pricing model and the cost-based pricing methods.

The economic pricing model explains how the optimum price is determined. Oyeniyi (1990) stated that the assumption in this model is that firms will always fix their products' prices at a level where profits are maximized. This is in agreement with Wright's (2001) assertion. In order to operationalize this model, a firm needs estimates of demand curve and cost curve of the product/service. By calculating profit at each sales level, and selecting the most profitable price-volume combination gives the appropriate selling price. Graphically, optimum price can be determined by plotting price against output and determine where marginal cost equals to marginal revenue.

Optimum selling price can be determined using the simple relationship of

$$\pi(Q) = R(Q) - C(Q) \dots\dots\dots(i)$$

Where $\pi(Q)$ = Profit

$R(Q)$ = Total Revenue

$C(Q)$ = Total Cost

To maximize $\pi(Q)$ we set the first order derivative to zero

$$\frac{d\pi(Q)}{dQ} = \frac{dR(Q)}{dQ} - \frac{dC(Q)}{dQ} = 0 \dots\dots\dots(ii)$$

$$\frac{dR(Q)}{dQ} = \frac{dC(Q)}{dQ} \dots\dots\dots(iii)$$

i.e. = MR = MC

where MR - Marginal Revenue and MC = Marginal Cost

The second order derivative of equation (ii) is

$$\frac{d^2 R(Q)}{dQ^2} < \frac{d^2 C(Q)}{dQ^2} \text{ and } \frac{d^2 R_2(Q)}{dQ^2} < \frac{\partial^2 C(Q)}{\partial Q^2} \dots\dots\dots(iv)$$

MR in each market must be increasing less rapidly than the MC for the output as a whole. Once the revenue and cost functions are known, the selling price can be computed. This method works for perfect competition, monopolistic competition and monopoly. Problems arise in the case of oligopoly, as its demand curve will be kinked at current market price and competition tends not to be based on price (Wright, 2001).

However, there are problems associated with the economists' pricing model according to Koutsoyiannis, (1985) Some of which are estimating cost/demand curves; information cost may be prohibitively expensive; total and marginal cost curve estimates are only approximate and involve arbitrary allocations; factors other than price can affect sales demand, and the model assumes profit maximization for all firms, ignoring that a firm may be interested in market penetration, and thus charge less than the short-run profit maximizing price. Many legal and social responsibilities goals may also influence management desire to make profit. Thus, in practice, most firms do not fix price using marginal principles, and will prefer, instead, to employ a simplified approach.

Cost-based pricing models incorporate (a) Total cost – plus method (b) Manufacturing cost – plus method (c) Activity – based cost pricing method and (d) Establishing target mark – up percentages (e) Variable cost – plus method. This involves computing all costs for making a product and adding a certain percentage to the costs as mark – up to arrive at the selling price. Generally, it is a most widely

used method by organizations in determining prices (Skinner, 1970; Atkins and Skinner, 1975).

Methodology

Study design

Historical research method was employed to examine the role of cost in pricing decision – making. Secondary data were obtained from the company's official books. The production pharmacist and the company's accountant were responsible for fixing prices of products and relay same to the marketing department. Method used for fixing the prices was by adding certain percentage or profit margin on total cost expended for making each product. The secondary data also contained the list of competitor's market prices of similar products for a five year period (2006 - 2011).

Data Analysis

A summary of prices fixed for the company's five products, on quarterly basis for the five years were analyzed with descriptive statistics such as percentages, mean, standard deviation and coefficient of variation. Student t-test was used to examine if there were any significant statistically differences in the means for the prices set by the company and the prices of competitors' in the market. The hypothesis below stated in null and alternative form was tested:

H_0 : Mean price of products in company A = Mean price of products in the open market (company B)

H_1 : Mean price of product in company A $\neq$ Mean price of products in the open market (company B).

Decision Rule: Accept H_0 if calculated $t < 2.069$ otherwise accept H_1 . At 5% level of significance, t-distribution is given as:

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{S(\bar{X}_1 - \bar{X}_2)}$$

With $n = 1$ degree of freedom, where $n = 24$ (a one tail test), the degree of freedom is 23.

X_1 = mean price of product in (Company A)

X_2 = mean price of product in the open market (Company B)

$S(x_1 - x_2)$ = sampling error of the distribution of differences in sample means.

Discussion of Results

The prices of products of company A (2006 – 2011) which were computed quarterly are presented in Table 1. These prices were computed by the company using the cost – plus method. Table 2 represents the quarterly computed market

prices for similar products made by competitors (company B) in the same period. The statistical Package for Social Sciences (SPSS) version 15 for windows was used to compute the t-values for all the prices of products presented in Tables 1 and 2. Results obtained in Table 3 showed that all the calculated t-values were below the critical t-value of 2.069. Therefore, we can infer that there is nothing to suggest than the mean of prices of products manufactured by the pharmaceutical company A are the same with the mean of prices of similar products in the market (Company B). Hence, H_0 is accepted and H_1 is rejected. Therefore, the differences in the means for prices of company A and company B products are not statistically significant at the 5% level.

Tables 1 and 2 showed a very close relationship or similarity in prices throughout the period of study (2006 - 2011) for the entire product lines. The same relationship or closeness was also observed in other variables presented in Table 4 such as the mean, standard deviation, coefficient of variation and t-test analysis despite quarterly changes in the percentages of profit margin added unto total cost.

Table 1: Company A' Quarterly Computed Selling Price in (N) Using Cost-Plus Method (2006-2011)

Year	2006				2007				2008				2009				2010				2011				
Product Name																									
1.Tab Paracetamol x 100 (500mg)	180	185	183	186	191	195	190	190	193	195	195	195	195	210	205	205	210	210	220	230	230	235	240	238	240
2.Tab Vitamin Bco x 1000	36	36	32	32	40	38	40	38	40	41	42	45	42	53	56	56	56	56	60	63	63	74	78	74	74
3.Tab Chloroquine Phosphate (25mm)	315	315	315	315	340	430	340	315	380	385	385	385	400	410	415	440	550	550	570	570	630	630	630	680	680
4.Tab folic Acid x 100(5gm)	28	32	32	38	38	38	38	40	41	43	45	45	46	53	53	58	58	58	60	60	65	65	73	73	75
5.Tab Ferrous sulphate x 1000	32	38	38	38	38	40	41	43	45	45	46	53	53	58	58	60	60	60	65	65	65	71	70	70	70

Source: Field Survey, 2011.

Table 1: Company B' Quarterly Computed Market or Competitors Price (2006-2011) in Naira (N)

Year	2006	2007	2008	2009	2010	2011
Product Name						
1. Tab Paracetamol x 100 (500mg)	185 185 186 180 193 193 194 185 189 1189 185 190 230 220 215 205 200 200 210 230 240 255 230 235					
2. Tab Vitamin Bco x 1000	32 32 32 32 39 39 40 38 38 41 45 41 54 55 55 58 630 65 75 70 74 75					
3. Tab Chloroquine Phosphate (25mm)	325 330 330 350 350 350 360 400 400 450 460 450 450 430 420 500 500 540 560 670 670 650 700					
4. Tab folic Acid x 100(5gm)	25 36 35 35 36 36 37 40 42 42 42 46 44 44 46 46 65 60 58 68 70 73 75					
5. Tab Ferrous sulphate x 1000	35 40 37 37 39 41 42 45 46 47 50 50 52 55 59 58 60 60 60 69 78 75 75					

Source: Field Survey, 2011.

Company	No. of	Products	Mean	Standard	Co-	t-
Observations(n)	(tablet)	(X)	Deviation	efficient	Distribution	
		Prices	(sd)	of		
		N:K		Variation		
A	24	Paracetamol	206.29	19.79	9.59	0.19
B	24	Paracetamol	205.17	21.50	10.48	0.19
A	24	Vitamin Bco	50.37	14.63	29.05	0.29
B	24	Vitamin Bco	46.17	14.37	29.22	0.29
A	24	Chloroquine	442.75	121.99	27.55	0.49
B	24	Chloroquine	459.96	120.52	26.20	0.49
A	25	Folic Acid	47.71	14.46	30.65	0.02
B	24	Folic Acid	47.62	13.89	29.17	0.02
A	24	Ferrous	52.04	12.32	23.65	0.23
B	24	Sulbhat	52.87	12.63	23.89	0.23

Source: Authors' Computation

Table 4:

Summary of Statistic and t-Test Distribution

Product	Company	% 2006 Variation	% 2007 Variation	% 2008 Variation	% 2009 Variation	% 2010 Variation	% 2011 Variation	Mean of Variation
Paracetamol	A	183.50	191.50	194.50	207.50	222.50	238.25	2.44
	B	184.00	191.25	188.25	217.50	210.10	240.00	0.83
B-complex	A	A<B	A>B	A>B	A<B	A>B	A<B	2.85
	B	34.00	39.00	42.00	51.75	60.50	75.00	
Chloroquine	A	32.00	39.25	40.50	51.25	59.50	73.50	2.00
	B	A>B	A<V	A>B	A>B	A>B	A>B	
Folic Acid	A	315.00	342.75	385.75	443.75	560.00	642.50	5.03
	B	328.75	352.00	427.50	437.50	520.00	672.50	4.46
Ferrous Sulphate	A	4.18	2.77	10.23	4.60	7.14	4.46	
	B	A<B	A<B	A<B	A>B	A>B	A<B	2.18
Folic Acid	A	31.75	35.75	43.50	45.00	57.25	71.50	0
	B	32.75	37.25	42.00	45.00	57.25	71.50	0
Ferrous Sulphate	A	A>B	A<B	A>B	A=B	A>B	A=B	3.71
	B	36.50	40.50	47.25	56.00	63.75	69.00	
Sulphate	A	37.25	41.75	48.25	56.00	59.75	74.00	6.761
	B	2.01	2.99	2.07	A>B	A>B	A<B	

Source: Authors' Computation

In Table 4, marginal variations in prices of all products of companies A and B were noticed throughout the five year period except in 2006 and 2011 where a product, folic acid showed no price deviation from the mean price of N45 and N71.50 respectively. Furthermore, the mean percentage variation in prices of products from companies A and B ranged from 2.18% (minimum) for folic to 5.03% (maximum) for chloroquine. Finally, the overall mean price profile as shown in Table 3, indicate that prices of products in Company A > prices of products in Company B with respect to the following namely

Paracetamol, Vitamin B complex and Folic acid. While prices of products in Company A < prices of products in Company B with respect to Chloroquine and Ferrous sulphate

Conclusion

The study revealed that relevant cost information is a pre-requisite to decision-making especially in fixing the prices of products. Therefore, every firm is at liberty to undertake downward or upward adjustments in prices for their products as a strategic option to remain afloat. This is in line with Petu (2000) assertion that firms adopt survival strategy by positioning themselves to meet the demands of the environment and expectations of shareholders.

Recommendations

Based on the foregoing, it is recommended that firms should embark on adequate data collection on inputs (costs) before fixing prices of their products. They should also explore the advantages of economies of scale to keep prices low as much as possible in order to enjoy high turnover and increase in sales volume.

References

- Ackoff, R.L. (1975) *Management Mis-information System in Information for Decision-Making* (Eds A. Rappaport). Prentice-Hall.
- Agrawala, K. (2009). What factors should be considered for pricing a product? <http://www.enotes.com/>
- Arnold, J. and Scapens, R. (1999) The British Contribution to Opportunity Cost Theory. *Essays in British Accounting Research* (Eds. M. Bromwich and A. G. Hopwood), Pitman, pp. 155-170.
- Arnold, J.; Atkins, B. and Skinner (1975) How British Industry Price. *Industrial Market Research*, pp.5.
- Baxter, W.T. and Oxenfeldt (1961) Costing and Pricing: The Cost Accounts Versus the Economist. *Business Horizons* Iva Winter pp. 77-90.
- Brealey, R. and Meyers, S. (1984) *Principles of Corporate Finance*. McGraw Hill Chpt. 1.
- Brenner, V.C. (1977) An Evaluation of Product Pricing Models in Contemporary Cost Accounting and Control (Ed. C. J. Benson). Dickewron Publishing Company, pp. 38-57.

- Caplan, D. (2006). The Role of Cost in Setting Prices in Management Accounting: Concepts and Techniques. Oregon State University, College of Business. <http://classes.bus.oregonstate.edu/fall>
- Cooper, R. and Kaplan, R. S. (1987) How Cost Accounting Systematically Distorts Product Cost in Accounting and Management. Field Study Perspectives (Ed. W. J. Brun and R. S. Kaplan). Harvard Business School. Pp. 204 – 228.
- Drury, C. (1996) Management Accounting 4th Edition. United Kingdom: International Thomson Business Press.
- Fabiani, S., Loupias, C.S., Monteiro, F.M. and Sabbatini, R. (2007) Pricing Decisions in the Euro Area <http://www.oxfordscholarship.com>
- Hinterhuber, A. (2004) Towards Value-based Pricing- An integrative framework for decision-making. *Industrial Marketing Management* 33. pp.765-778
- Horngren, C.T. and Sorter. G.H. (1961) Direct Costing for External Reporting. *The Accounting Review*. Vol. 36, pp 84-93
- Iwarere, H. T. (2010) "Special Pricing Decisions as Instrument for Improving Companies Performance in Nigeria". *International Business Management* 4(3), pp.99-104
- Kaplan, R.S. (1984) The Evolution of Management Accounting. *The Accounting Review*, Vol. 59 pp. 95-101.
- Kelly, M. and Pratt, M. (1992) Purposes and Paradigms of Management Accounting. Beyond Economic Reductionism. *Accounting Education* 1 (3), 225-46.
- Koutsoyiannis, A. (1985) *Modern Microeconomics*, 2nd Edition, pp. 197.
- Lee, F.S. (1998) Post Keynesian Price Theory. Cambridge University Press, Cambridge
- Lucas, M.R. (2003) Pricing Decisions and the Neoclassical Theory of the Firm. *Management Accounting Research*, 14. Pp.201-217. www.elsevier.com
- Lucey, T. (1996) *Management Accounting* 4th Edition. London: Ashford Colour Press.
- Lucey, T. (1992) *Costing* 3rd Edition. London: DP Publishing.
- Odozi, V. (2001) On the Economy. *The Concept*, p. 18
- Owolabi, A.A. (2000) Evaluation of the Perception of Managers and Accounting Performance to Environmental Performance and Reporting in South-West Nigeria. M Phil Thesis Submitted to O.A.U. Ile-Ife.
- Oyeniyi, J.A. (1998) *Micro-Economics* 2nd Edition. University of Ilorin.
- Petu, A.D. (1999) Overview of Strategic Management. A Paper Presented in a Workshop at AMTI, Ilorin.
- Pope, P.F. and Peel, D.A. (1981) Information Disclosure to Employees and Rational Expectations. *Journal of Business Finance and Accounting International Quarterly*. Basil Blackwell, Oxford.
- Rayburn, L.G. (1979) Principles of Cost Accounting with Managerial Implication. Pp 565-581. *Accounting Review* 57, July.
- Shipley, D.D. (1981) Pricing Objectives in British Manufacturing Industry. *The Journal of Industrial Economics* vol. XXIX (4) <http://www.jstor.org/stable/10.2307/2098256>

Staubus,
Wright, B
w

Staubus, G.J. (1991) *Activity Costing and Input – Output Account* R.O. Irwin

Wright, B. (2001) Pricing Decisions: Notes on the Lecture. On the Web Page <http://www.goggle.com>.