

Factors Influencing Pricing Strategies of Commodities in Supermarkets in Nairobi City, Kenya

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Abstract: Supermarkets are in the dubious position of providing products that customers need on an everyday basis, while also needing to offer prices that are low and appealing enough to draw customers inside to buy. For this reason, many supermarkets opt for more complex strategies to ensure profitability while still appealing to price-conscious consumers.

Objective: Factors influencing pricing strategies among supermarkets in Nairobi city. Specifically, the researcher sought to establish the influence of competition, VAT, demand and type of products on the prices in supermarkets.

Design: Cross sectional survey.

Participants: Middle and top managers of supermarkets in Nairobi city involving 5 top and 5 middle level managers in each of the supermarkets.

Results: Majority (75%) of the respondents in the study indicated that rivalry among supermarkets in the study area was high. Majority (88%) of the respondents agreed that their supermarket faced rivalry from other businesses that offer the same primary services to the same customer base. An overwhelming majority (96%) agreed that their supermarket faced rivalry from other businesses which offer services slightly different products and services, but target the same group of customers. Correlation analysis showed that competition had a strong positive correlation ($r=0.73$, $p<0.05$) with pricing. The study found that Majority (92%) of the respondents in the interview felt that the rate of VAT was high. Majority (85%) of the respondents in the study indicated that the number of VATable products was very high with 64% indicating that the number was very high. All (100%) respondents agreed with 89% strongly agreeing that their supermarket adhered to VAT regulations. VAT had a strong positive correlation ($r=0.64$, $p=0.004$) with pricing. Majority (58%) of the respondents indicated that the rate of demand for products and services sold in their supermarket was very high. Majority (85%) of the respondents indicated that demand had large effect on pricing strategies with 50% indicating that the effect was to a very a large extent. Demand had moderate positive correlation ($r=0.55$, $p>0.05$) with pricing. That all the supermarkets in the study sold groceries, electronics, clothes, shoes and mobile phones and accessories. Home utensils and pharmaceutical products were also sold by a majority of supermarkets in the study. An overwhelming majority (98%) of respondents indicated that the brand of product affected its pricing. There was no relationship between type of product ($F=0.363$, $p=0.708$) and pricing.

Conclusion: The study concluded that there exist various factors that influence pricing strategies of supermarkets in Nairobi city. These factors include competition, VAT, demand and type of products. Overall, competition had the greatest influence, followed by VAT. Demand had a modest influence on pricing strategies whereas type of products had little influence. It was recommended that supermarkets should invest in market research to better understand the needs of the market and therefore offer the type of products that are highly sought by customers.

Keywords: Cost, Goods, Malls, Kenya, Nairobi, Price, Products, Shops, Supermarkets.

1. INTRODUCTION

Price is defined as the sum of all values such as money, time, energy, and psychic costs that buyers exchange for the benefits of having or using a good or service (Strauss et al. 2006). Pricing is the process of determining the price, that is, what a company will receive in exchange for its products (Jain, 2004) Pricing factors are manufacturing costs, market place, competition, market condition, and quality of product. Pricing strategies are the means by which the firm's pricing objectives are to be achieved. To formulate them, a manager ought to be guided by the internal and external conditions faced by the firm in order to select the best choice of strategies. Many companies do not handle pricing well when setting strategies (Kotler, 2006; Hoffman, 2002). Supermarkets are in the dubious position of providing products that customers need on an everyday basis, while also needing to offer prices that are low and appealing enough to draw customers inside to buy (Gartenstein, 2015).

Supermarkets are in the dubious position of providing products that customers need on an everyday basis, while also needing to offer prices that are low and appealing enough to draw customers inside to buy (Gartenstein, 2015). Emerging evidence now suggests that even in the poverty stricken setting of Sub-Saharan Africa, supermarkets are rapidly growing (Robinson 2001). South African supermarkets chains have been the most active with chains like ShopRite, pick n pay and metro expanding throughout southern and east African (Weather & Reardon, 2003).

Jonker and Blijenberg (2004) investigated price setting behavior in the Netherlands. They also discussed the effect of the VAT increase of January 2001 on Dutch inflation. On January 1, 2001 the Dutch general VAT rate was increased from 17.5% to 19%. They found that the 1.5 percent point increase in the VAT was almost completely passed through into consumer prices. Carare(2008) found that Inflationary profile of a tax hike is likely to be affected by the length of the announcement period.

Kenya has over 200 supermarkets and the most advanced country in terms of supermarket development in sub Saharan Africa. In main urban areas (Nairobi, Mombasa, Kisumu) we find hypermarkets. The fruit and vegetable subsector provides a good example of how important supermarkets have become in Kenya. Based on Okando, M. (2001) and primary data gathered, it is estimated that roughly 5% of the domestically produced fresh fruits and vegetables is sold to supermarkets in Kenya. Growth of Kenya's supermarkets has also taken on a regional character with outward foreign direct investment by regional investments regulations liberalization e.g. Nakumatt has opened several branches in Uganda, Zambia and Zimbabwe (Business report, 2014).

2. MATERIALS AND METHODS

This was a cross-sectional survey of 5 top and 5 middle level managers in each of the 7 supermarkets making a total sample of 70 respondents. The study targeted only the top and middle level managers in each supermarket as they were conversant with pricing of commodities. On average, there were 10 top and 15 middle level managers in each of the 7 supermarkets. In this case, the sampling technique was purposive sampling.

Data Collection Procedure:

Questionnaires were used to collect data, Interview guide was used to confirm whether the respondents answered the questions appropriately and a document analysis was used to collect secondary data and to compare the prices of products sold in those supermarkets. The researcher administered questionnaires in person to all the respondents to ensure there is personal contact with the respondent and clarify where necessary. After two weeks, brief interview with the respondents was done to confirm whether answers given in the questionnaires were correct.

Data Management and Analysis:

After data collection a document analysis was used to collect secondary data and to compare the prices of products sold in those supermarkets. The researcher went through the questionnaires, count how many they are and check for completion and adequacy. The questionnaires were sorted based on adequacy. Unique codes were assigned to every question then scored. The data was then keyed in the computer in the Microsoft excel software. SPSS was used to conduct analysis.

Descriptive statistics which comprised of frequencies, percentages, mean and standard deviation were used to organize findings. Correlation analysis and ANOVA were used to establish whether there was any relationship and the strength and magnitude of the relationship. The findings were presented using tables and figures.

Ethical Consideration:

The researcher sought permission to collect the data from the 7 supermarkets with an authorization letter from Jomo Kenyatta University of Agriculture and Technology.

3. RESULTS

Majority (79%) of the respondents in the study were male while females accounted for 21%. The findings also showed that majority (64%) of respondents had acquired a diploma while 27% had a bachelor’s degree. Majority (68%) of the respondents also had a working experience of between 6 and 10 years while 32% had an experience of between 1 and 5 years (Table 1).

Table I. Socio-demographic profile of respondents

Characteristic	Category	Frequency	Percentage
Gender	Male	52	79%
	Female	14	21%
	Total	66	100%
Level of education	Diploma	42	64%
	Bachelor’s degree	18	27%
	Postgraduate degree	6	9%
	Total	66	100%
Working experience (years)	1-5	21	32%
	6-10	45	68%
	Total	66	100%

Intensity of rivalry among supermarkets:

Majority (52%) of the respondents in the study indicated the rivalry among supermarkets study area was high. A low mean of 1.9 and standard deviation of 1.03 signify a convergence of view (table II).

Table II. Intensity of rivalry among supermarkets

Intensity	Frequency	Percentage	\bar{x}	SD
Very high	34	52%	1.9	1.03
High	15	23%		
Fair	17	25%		
Total	66	100%		

Effect of competition on pricing strategies:

Majority (58%) of the respondents indicated that rivalry affected pricing to a large extent with 4% indicating that the effect was to a very small extent. (Fig. I)

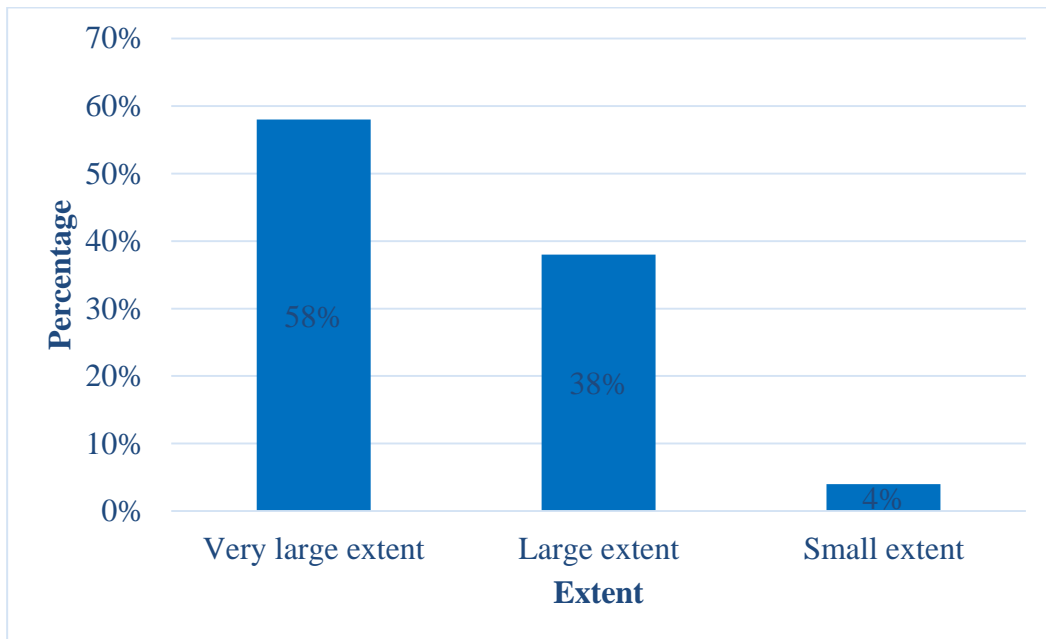


Fig. I

Effect of VAT on pricing strategies:

Majority (36%) of the respondents indicated that VAT affected pricing to a very large extent while 20% indicated that the effect was to a large extent. However, 12% of the respondents indicated that VAT had a small extent effect on pricing strategies signifying that the respondents were not in agreement on the effect of VAT on pricing strategies (Fig. II).

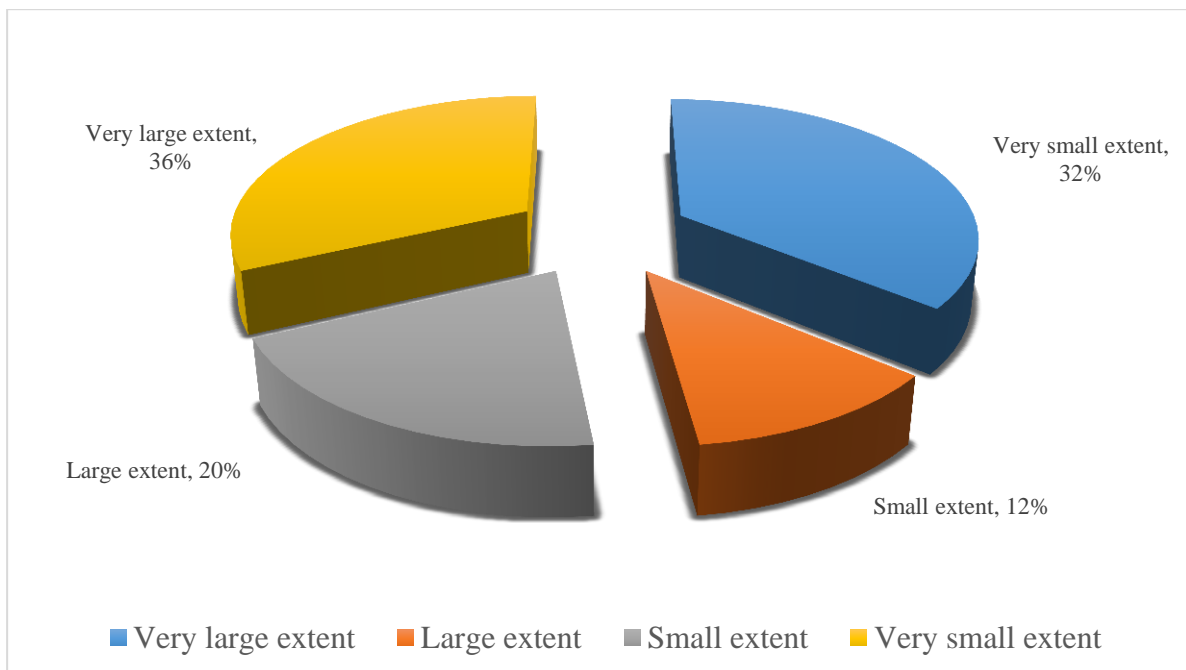


Fig II: Effect of VAT on pricing strategies

Respondents view on amount of VAT charged:

Majority (54%) of the respondents indicated that the VAT charged on certain products was high with 33% indicating that it was very high. A mean of 2.1 and a high SD of 1.606 signified a divergence of views indicating that respondents were not in agreement on the level of amount of VAT charged (Table III).

Table III. Respondents view on amount of VAT charged

Amount	Frequency	Percentage	\bar{x}	SD
Very high	22	33%	2.1	1.606
High	14	21%		
Fair	18	27%		
Low	12	19%		
Total	66	100%		

Respondents view on number of VATable products:

Majority (85%) of the respondents in the study indicated that the number of VATable products was very high with 64% indicating that the number was very high. A mean of 1.6 and standard deviation of 1.01 signifies a fair convergence of views (Table IV).

Table IV. Respondents view on number of VATable products

Amount	Frequency	Percentage	\bar{x}	SD
Very high	42	64%	1.6	1.011
High	14	21%		
Fair	6	9%		
Low	4	6%		
Total	66	100%		

Level of demand for products and services:

Majority (38%) of the respondents indicated that the rate of demand for products and services sold in their supermarket was very high. The finding shows that 20% indicated that demand was very high whereas 28% indicated that it was fair (Fig.III).

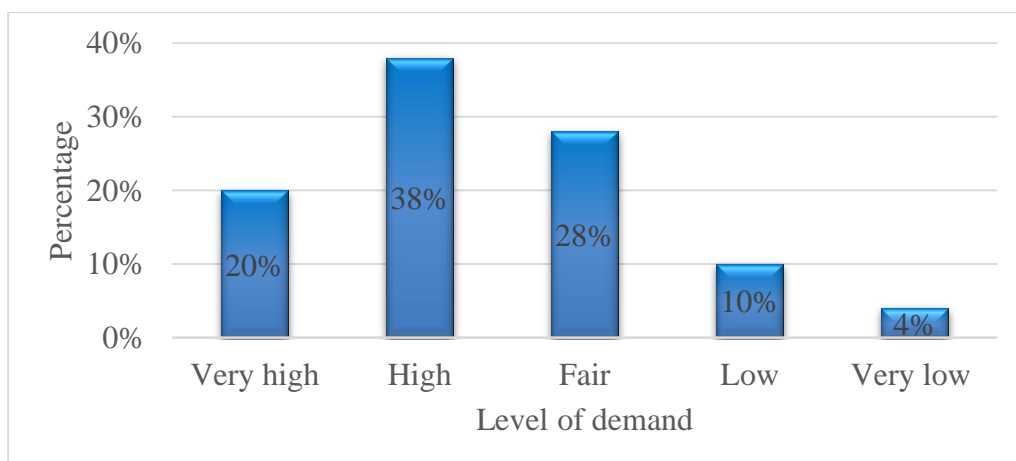


Fig III. Level of demand for products and services

Effect of demand on pricing strategies:

Majority (85%) of the respondents indicate that demand had large effect on pricing strategies with 50% indicating that the effect was to a very a large. A small mean of 1.5 and standard deviation of 0.997 signify a fairly large convergence of views (Table V)

Table V. Effect of demand on pricing strategies

Extent	Frequency	Percentage	\bar{x}	SD
Very large	33	50%	1.5	0.997
Large	23	35%		
Fair	4	6%		
Low	6	9%		
Total	66	100%		

Effect of type of product on pricing strategy:

Majority (80%) of the respondents indicated that the type of product had large effect on the pricing strategy with 65% indicating that the effect was very large (Table VI).

Table VI. Effect of type of products on pricing strategy

Extent	Frequency	Percentage	\bar{x}	SD
Very large	43	65%	1.4	0.803
Large	10	15%		
Low	3	20%		
Total	66	100%		

Type of products sold:

Findings showed that all the supermarkets in the study sold groceries, electronics, clothes, shoes and mobile phones and accessories. Home utensils and pharmaceutical products were also sold by a majority of supermarkets in the study (table 7).

Table VII. Type of products sold

Product	Yes	No
Groceries	100%	
Electronics	100%	
Clothes and shoes	100%	
Ready food and drinks	94%	6%
Alcohol	90%	10%
Home, office and farm appliances	92%	8%
Pharmaceuticals	95%	5%
Utensils	98%	2%
Mobile phones and related accessories	100%	

Correlation analysis on factors influencing pricing strategies:

Findings showed that competition had a strong positive correlation ($r=0.73$, $p<0.05$) on pricing. Similarly, VAT had a strong positive correlation ($r=0.64$, $p=0.004$) with pricing. Demand had moderate positive correlation ($r=0.55$, $p>0.05$) with pricing (Table VIII).

Table VIII. Correlation analysis

Factor	Correlation coefficient	Significance value
Competition	0.73	0.00
VAT	0.64	0.04
Demand	0.55	0.17

Type of product on pricing:

Anova test for this analysis showed the F Value of 0.363 which was not significant ($p=0.708$) at 95% confidence level indicating that there is no influence of type of product on pricing (table IX).

Table IX. ANOVA Test

Factor	F	Significance value
Type of product	0.363	0.708

4. DISCUSSION

The purpose of this study was to find out the factors influencing pricing strategies of commodities among supermarkets within Nairobi city. Findings from this study indicated that majority (79%) of the respondents in the study were male while females accounted for 21%. This shows that there was a gender disparity among managers in supermarkets in Nairobi where females were heavily under represented. The findings also show that majority (64%) of respondents had acquired a diploma. While 27% had a bachelor’s degree. This shows that middle and top level managers in supermarkets in Nairobi were highly educated. Majority (68%) of the respondents also had a working experience of between 6 and 10 years while 32% had an experience of between 1 and 5 years. This shows that the study comprised of highly experienced, educated men working in supermarkets in Nairobi. The findings therefore show that the respondents were in a position to give resourceful information on pricing strategies in their supermarket and the factors affecting the same owing to their high education and working experience.

Majority (52%) of the respondents in the study indicated that the rivalry among supermarkets study area was high .These findings showed that competition was high among supermarkets in Nairobi City. This is consistent with findings of Smit and Van Niekerk (2014) and Ngarava (2016) who indicated that modern day supermarkets face stiff competition from other supermarkets and from business offering same or alternative products and services.

Majority (54%) of the respondents indicated that the VAT charged on certain products was high with 33% indicating that it was very high. A mean of 2.1 and a high SD of 1.606 signified a divergence of views indicating that respondents were not in agreement on the level of amount of VAT charged. The finding indicates that respondents felt that VAT charged was very high. This is consistent with findings of Andae (2013) that the value added tax had increased.

Majority (36%) of the respondents indicated that VAT affected pricing to a very large extent while 20% indicated that the effect was to a large extent. However, 12% of the respondents indicated that VAT had a small extent effect on pricing strategies signifying that the respondents were not in agreement on the effect of VAT on pricing strategies. The findings therefore show that taxation through VAT had a large effect on pricing strategies. This is consistent with Hall (2010) who indicated that if a business sells products or services that are liable for VAT, they will need to consider increasing their prices.

Majority (38%) of the respondents indicated that the rate of demand for products and services sold in their supermarket was very high. The finding shows that 20% indicated that demand was very high whereas 28% indicated that it was fair. The findings therefore show that the level of demand for products and services sold in supermarkets was high. The findings are therefore in agreement with findings of Ellickson and Misara (2009), Lim et al. (2013) and Gartenstein (2015) who indicated that supermarkets stock products and offer services that are in high demand for profit maximization.

Majority (85%) of the respondents indicate that demand had large effect on pricing strategies with 50% indicating that the effect was to a very a large. A small mean of 1.5 and standard deviation of 0.997 signify a fairly large convergence of views. The findings therefore show that the level of demand of products and services affected supermarket-pricing strategies to a great extent. The finding is in agreement with Sloman (2006) who indicated that change in demand will cause equilibrium price and output to change in the same direction.

Findings showed that supermarkets in Nairobi offered a wide variety of products and services. This is consistent with findings of Ellickson (2006) who indicated that supermarkets offer many products and services for profit maximization.

Majority (80%) of the respondents indicated that the type of product had large effect on the pricing strategy with 65% indicating that the effect was very large. A mean of 1.4 and a standard deviation of 0.803 signify a high convergence of views. The finding therefore shows that the type of product or service heavily influenced the pricing. This is consistent with findings of Ellickson (2006), Richards and Hamilton (2006) and Olivares and Cachon (2009) who showed that different supermarkets can offer varying pricing based on different products.

Further analysis showed that competition had a strong positive correlation ($r=0.73$, $p<0.05$) on pricing. Similarly, VAT had a strong positive correlation ($r=0.64$, $p=0.004$) with pricing. Demand had moderate positive correlation ($r=0.55$, $p>0.05$) with pricing. The findings are therefore in agreement to those of Wiley (2005) and Griffin (2015) who found that competition was a significant consideration of pricing strategies. The finding is also in agreement with Sloman (2006) who indicated that a change in demand will cause equilibrium price and output to change in the same direction. The finding is also in agreement with Hall (2010) who indicated that if a business sells products or services that are liable for VAT, they will need to consider increasing their prices. Type of product had no influence on pricing since the F Value of 0.363 was not significant ($p=0.708$, 95% CI) which is in contrast with findings of Ellickson (2006), Richards and Hamilton (2006) and Olivares and Cachon (2009) who showed that different supermarkets can offer varying pricing based on different products.

In conclusion, the study showed there exist various factors that influence pricing strategies of supermarkets in Nairobi city. These factors include competition, VAT, demand and type of products in that order. The level of competition among supermarkets in Nairobi city is very high with an ever growing number of supermarkets and alternative sources of products and services. Supermarkets are therefore forced to adjust prices accordingly to compete while making returns. The government has in the last few years increased VAT and also increased the number of VATable products. This has left supermarkets with no choice but to increase prices accordingly in compliance with the said regulations.

Demand for products and services are high with an increasing array of brands and a growing population. However, demand has a modest influence on pricing due to the ever growing competition in the market. The type of product was also found to have little influence on pricing strategy. This was attributed to intense competition and stricter regulation in the form of VAT increases.

It is recommended that Supermarkets should invest in innovation thereby ensuring that they have competitive advantage over their rivals. The government should seek to stabilize the VAT rate since frequent increases are accompanied by price increases for goods and services for the customer.

Supermarkets should employ demand-based pricing to attract more customers. Supermarkets should also invest in market research to better understand the needs of the market and therefore offer the type of products that are highly sought by customers.

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