



PRICING OF PHARMACEUTICAL PRODUCTS IN ETHIOPIA

A thesis submitted to the Graduate program of the Department of Management

College of Business and Economics of Addis Ababa University

In partial fulfillment of the requirements for the Degree of

Master of Business Administration

By

Temesgen Gebreslassie

Addis Ababa University

Addis Ababa

March 17, 2020

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Declaration

I, the undersigned, declare that this research project is my own work and effort and it has not been submitted anywhere for any award. Where other sources of information have been used, they have been duly acknowledged.

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CERTIFICATION OF APPROVAL

I certify that I have read “Pricing of pharmaceutical products in Ethiopia” by Temesgen Gebreslassie and that in my opinion this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirement for the degree of Master of Business Administration in Management at Addis Ababa university

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Signature:

Date:

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Abstract

This descriptive study was aimed to uncovering the three important aspects of pricing decisions made by pharmaceutical firms in Ethiopia which are the pricing strategies implemented, the determinant factors that affect the choice of pricing strategies and their relation to the identified pricing strategies. A systematic random sampling was used to administer a survey questionnaire containing three parts. The main strategies that were found to be most widely implemented among the pharmaceutical firms include cost-plus pricing, parity pricing, differential pricing, Low price supplier and penetration pricing. The determinant factors that are most considered in the firms pricing decisions includes cost, company objectives such as profitability, customer features such as order volume. A regression analysis was performed to see the kind of relationship that might exists between the identified most widely used pricing strategies and the factors that are considered in pricing decision. The result of this regression analysis demonstrated that the identified factors have a strong correlation with those pricing strategies that revolves around the factors and also the most common correlation as depicted by other literatures.

Acknowledgment

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Chapter 1: Introduction

1.1. Background of the study

The short and precise definition of marketing is it is a way of identifying and meeting human and social needs (Kotler, 2012). Marketing is also defined as the performance of activities that seek to accomplish an organization's objectives by anticipating customer or client needs and directing a flow of need-satisfying goods and services from producer to customer or client (William, Joseph, E. Jerome, 2017). One of the most important factors for the success of any organization is marketing as it is the organization link to its customers. The marketing strategy has evolved from containing a single element to being multi element which is dubbed as 4Ps standing for Price, Place, Product, and Promotion (Thabit & Manaf, 2018). Price part of the marketing mix, which is the main focus of this study, is concerned with managers decision to set the right price The product part is concerned with developing the right product that satisfy customers' need and any product related such as branding, packaging etc. In case of place it is concerned with decisions made to get the products to the target market and promotion is concerned with conveying the firms' products to the customers (William, Joseph, E. Jerome, 2017).

As stated by Strauss and Raymond (2006) in their study price can be defined as the sum of money, time, energy and all other values that buyers exchange for the benefit of having or using a product which could be a good or service. Another way of defining price comes from Kibera & Waruinge (1998) which defined price as the value that customers place on a certain good or service provided by an organization. Accordingly pricing could be defined as an organizations' process of determining the price of its product or service which in turn is the value the organization will receive in exchange for its products. It is one of the most important and integral component of the marketing mix (Borden, 1964) and it is one of the basic and yet most critical decisions that have to be made by businesses (Stanton & Futrel, 1987). As Hinterhuber and Bertini (2011) stated a lack of proper and effective pricing strategy within an organization will ultimately hinder an organizations performance by hurting its profitability. Accordingly

efficient pricing strategy is critical to ensure profitability by facilitating customer value creation and structuring the pricing decisions (Lancioni, Schau, & Smith, 2005).

1.1.1. Pharmaceutical sector in Ethiopia

The Ethiopian pharmaceutical sector is one of the integral components of the country's healthcare system. Actually pharmaceutical sector is considered as the most important component of any country's healthcare system as it is concerned with supply of medicine which as per Fidler and Msisha (2008) are one of the inputs of healthcare system that have the highest value and often make a difference in the health outcomes for individual citizen and the population in general.

The pharmaceutical sector of Ethiopia is governed by the Ethiopian Food and Drug authority (EFDA) which is a government regulatory body responsible for tasks such as granting marketing authorization for new products to be launched to the market, Inspection and granting of certificate of competence for pharmaceutical firms engaged in manufacturing, import and distribution of pharmaceutical products.

It serves more than 102 million people (WGO, 2016) which is the second largest population in Africa. It is one of the fastest growing pharmaceutical sectors in the world with an estimated annual growth rate of 25% per annum and its value is estimated to reach just under 1 billion in 2018. The sector is highly reliant on imported products with more than 80% of the pharmaceutical products on the market are imported from foreign manufacturers and the remaining 20% of the market share is owned by the only available 14 local manufacturers (EFDA, 2018).

1.2. Statement of the problem

Price is one of the main components of the marketing mix which many literatures deem as having the most profound effect on the performance of an organization and the economic environment in which it operates. A heap of literature claimed that price is one of the most critical components of the marketing mix. The main features that make price to be the most important components of the market mix includes it is

easily changeable increasing an organizations responsiveness to the market, it is the only component that generates revenue (Mayuri, 2019) and it's the component that has the highest impact on buyers decision (Yeoman.I., McMahon-Beattie. U., 2011).

There is no doubt that pricing decisions, which are made on the most important component of the marketing mix, are given the highest weight if important among organizations. A study done to explore the cost, risks and capabilities associated with investing to improve an organization's pricing decisions stated that "regardless of industry, geography or size, companies with effective pricing capabilities significantly outperformed industry peers across multiple financial metrics, including net margin, market valuation, return on assets and return on equity" (Shruti, Julie, Chuck, 2012). Pricing decisions can have important consequences for any organization and the attention given by an organization to pricing is just as important as the attention given to more recognizable marketing activities (Kotler, 2012).

The importance of prices and pricing decisions makes the underlying tool implemented to make pricing decisions, which is pricing strategy, an equally influential for the success of an organization in its all aspects. A descriptive study on exploring the various pricing systems used in many sectors and their relation to consumers depicted pricing strategy as a technique for setting price of a product in a way that instigates consumer to buy that product hence generating revenue that keeps the company supplying that product (Ben, David, Julian, 2017).

A scoping study performed with the aim of identifying the main factors the influence prices of pharmaceutical products has identified five major groups of factors that have a direct influence on prices of medicines. These identified groups were supply-related, consumer-related, product-related, trading strategies of either sellers or buyers and regulatory approach. The trading strategies group consists of mainly firm level characteristics such as pricing strategies and the regulatory approach group consists of factors pertaining to government regulations imposed on the pharmaceutical sector which also includes pricing regulations. As per the study, among these identified

groups of factors, those factors under trading strategies and regulatory approach are found to have higher influence on prices of pharmaceutical products. (Maria Angelica et al, 2018).

A number of studies have been done regarding the prices charged by pharmaceutical firms in Ethiopia. One of such studies stated that prices of medicine set by pharmaceutical firms are among the main factors determining access to treatment and are also the causes of high financial burden on households (Eshetu, Anwar-ul, Gedif, 2014, Noble, Peter and Gruca, 1999). Another study noted that when compared with International Reference Prices, the prices of pharmaceutical products in Ethiopia are higher especially in private pharmacies and medicines hence treatments are less affordable when compared with other African countries (Shruti, Julie & Chuck, 2012). A similar study on pricing of pharmaceutical products in Ethiopia acknowledged that unaffordable prices of essential medicines for the poor is one of the main reasons for low level of access for essential medicines in Ethiopia (Eshetu, Anwar-ul, Gedif, 2014).

As depicted in the above discussed literatures it can be understood that pricing decisions made by pharmaceutical firms is one of the main determinants of the performance of pharmaceutical firms. The effect of pricing decisions is extended to purchasing ability of the consumer hence affecting affordability of medicines which in turn determines access to treatment. The pricing strategy implemented by pharmaceutical firms in their pricing decisions have a direct impact on their own performance as well as affordability of medicines which directly impacts quality of healthcare.

The issue of prices of pharmaceutical products in Ethiopia is studied by many researchers but only from an economic perspective which is market prices set by pharmaceutical firms and their effect on affordability of medicines. These studies done on price of pharmaceutical products are mainly focused on the market prices of pharmaceutical products and missed to explore the process of deciding the market

prices of pharmaceutical products. These researches done on the pharmaceutical sector ignored the main cause of their findings which is pricing strategies used by pharmaceutical firms.

A number of studies on the various components of marketing mix, mainly pricing, are also performed in different sectors of Ethiopia. Such studies that aims at identifying the pricing strategies used by business entities, their effect on various metrics of performance such as sales volume, the main pricing objectives etc are done on the telecommunication sector, brewery industry, coffee industry etc. Unfortunately there is no such study that focuses on one of the most crucial sector of any country which is the pharmaceutical sector.

In summation previous studies on price situation in the pharmaceutical sector of Ethiopia and studies on the pricing component of marketing mix missed to explore the components of pricing decisions in one of the most critical sectors which is the pharmaceutical sector. This research gap on pricing is also echoed in many literatures stating that even though pricing decisions are one of the most critical decisions made by an organization they are yet most of the time neglected as compared with the other components of the marketing mix (Kotler, 2003).

1.3. Significance of the study

The study of pricing of pharmaceutical products in Ethiopia has a multifaceted benefit. When it comes to pharmaceutical firms, it will provide an insight into the various pricing strategy alternatives that pharmaceutical firms can choose from along with their respective pros and cons. This will enable pharmaceutical firms to have a clear idea about the kind of pricing strategy that fits them well and should incorporate in their marketing plan. In doing so they will be better equipped to achieve their organizational objectives such as staying competitive, profitability, survival etc. This in turn will result a rapid growth of the sector and most importantly the provision of better products to the consumer.

The study will also benefit future researchers interested in studying the Ethiopian pharmaceutical sector by giving them insight into one of the most important factors they should include in their study which is pricing strategies used by the firms. Academicians and scholars can also use this study as a reference and source of secondary data.

1.4. Objective of the study

This study aims at exploring one of the major components that made up marketing activities in all sectors including pharmaceutical sector, which is pricing. The purpose of this study is to explore the current pricing strategies implemented in the pharmaceutical sector of Ethiopia. It aims to explore the types of pricing strategies that pharmaceutical firms in Ethiopia use or implement to decide the prices of their products they supply. It aims to identify the pricing strategies they commonly implement to make pricing decisions based on the trends they follow when setting prices for their products.

In addition the study also aims to uncover the various factors that affect choice of pricing strategies by pharmaceutical firms. This means the main factors that the firms take into consideration when fixing the prices of their products. In conjunction with this it also aims to explore any possible relationship between that the identified factors have with respect to each pricing strategy.

1.5. Research questions

1. What are the main pricing strategies that are most commonly used by pharmaceutical firms when making pricing decisions?
2. What are the main factors that influence the choice of pricing strategy implemented by pharmaceutical firms?
3. How do the identified determinant factors and the most widely used pricing strategies relate with each other?

1.6. Scope of the Study

This study revolves around of the most critical decisions made by managers which is pricing decisions as stated by many literatures. The study mainly focuses on two aspects of the process of pricing decision practiced by managers in the Ethiopian pharmaceutical sector. These two aspects are the pricing strategies adopted and the factors that affect the choice of these pricing strategies. In case of pricing strategy even though there are a large number of pricing strategies discussed in various literatures this study will only focus on 13 of them which are deemed most widely used. The study furthered narrowed down its focus on 5 of these strategies which are identified by the study as the most widely used ones.

When it comes to the factors that affect the choice of pricing strategies, the study focused on 17 factors that correspond to the internal and external environment of the firms. These factors are gathered in exactly the same way as that of the pricing strategies.

The study focused on pharmaceutical firms located in Addis Ababa and belonging to the two levels of the supply chain which are importers and wholesalers, excluding the manufacturers and retailers.

1.7. Limitations of the study

The biggest limitation of the study is the sample size. The sample size is deemed small when compared with the target population. The sample size was small because it was extremely difficult to get the willingness of the companies to fill the questionnaire and provide the requested info. As the samples were business entities it was challenging to convince the respondents scarify some amount of their time to fill the questionnaire. This has forced the margin of error and confidence interval to be large which in turn reduces the quality of the study to some extent.

The other main limitation was inability to substantiate the response of the respondents by reviewing documented pricing decisions or actual already made pricing decisions. This is because it requires the firms to disclose confidential info such as their buying price, supply price, their margin etc.

Chapter 2: Literature review

Price is defined as the amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service (Ahmed RR, Parmar V, Ahmad N, Warraich UA, Khoso I , 2014).

Price is one of the four elements of the marketing mix that generates revenue. Price is the one element of the marketing mix that produces revenue; the other elements produce costs. Prices are perhaps the easiest element of the marketing program to adjust; product features, channels, and even communications take more time. Price also communicates to the market the company's intended value positioning of its product or brand. A well-designed and marketed product can command a price premium and reap big profits. But new economic realities have caused many consumers to pinch pennies, and many companies have had to carefully review their pricing strategies as a result (Eshetu, Anwar-ul, Gedif, 2014) (Noble, Peter and Gruca, 1999).

Pricing strategy is a plan that a firm may have for setting prices when it introduces a new product, when it introduces a regular product into a new distribution channel or geographical area and when it enters bid on new contract work (Hurley, R.F. & Hult, 1998).Pricing strategy is the mean to determine relative price levels by considering influential factors and thereby realizing certain business objectives in a specific situation (Noble, Peter and Gruca, 1999, Tellis, 1986).The pricing strategy implies the method or technique selected and implemented by a supplier, in this study context a pharmaceutical firm, to make decision on the market price of its products.

Pricing is unarguably the most important component of the marketing mix since it is the main revenue-generating element. Price low and significant revenues will be left on the table. Price high and payers' restrictions, physicians' complaints and patient abandonment at the pharmacy will drastically cut acceptance and market penetration. High pricing can also lead to PR issues, damaging the image of a company while at the same time diverting management's attention. However, pricing a product right will

lead to a large acceptance from payers, physicians and patients and a significant market share. There are many pricing strategies that can be applied, depending on the drug type, the company's objectives, the competition and the market. Because of the specific distribution and selling structure of pharmaceutical products, four can be used to set drug prices: cost-based pricing, value-based pricing, competition-based pricing and price skimming (Delagneau, 2018)

The different pricing strategies used by organizations can be grouped into four pricing situations which are namely new product pricing, competitive pricing, product line pricing, and cost-based pricing. A pricing situation is a set of key product, economic, market, and information conditions that make a certain pricing strategy more favorable than another pricing strategy. The study noted that the pricing strategy chosen should perfectly fit the above mentioned conditions that make up the pricing environment (Noble, Peter and Gruca, 1999). The different pricing strategies that are most commonly implemented in organizations are defined in many literatures. Some of the pricing strategies used in different sectors are defined in many literatures as follow.

Price skimming

It is a pricing strategy in which initially price of a product is set very high to maximize revenues from 'early adopters' of the new product who have a very high willingness to pay and then price drops over time as demand becomes more elastic (Noble, Peter and Gruca, 1999). This strategy is most implemented in "companies unveiling a new technology favor setting high prices to *maximize market skimming*. Sony is a frequent practitioner of market-skimming pricing, in which prices start high and slowly drop over time (Eshetu, Anwar-ul, Gedif, 2014). Skim pricing is preferable when there is a high degree of product differentiation and demand is expected to be fairly inelastic initially (Nagle, Holden, 1995) (Schoell and Gultinan, 1995) (Jain ,Marketing 1993).

Penetration pricing

Penetration pricing is used when a company launches a product in a market with

several competitors. Initially, the price for the product is set low to grow product sales and increase market share. Doing this attracts new customers more quickly and easily than other strategies. Once market share is gained, price is increased. This strategy is effective when potential customers are price sensitive and economies of scale can be exploited. Although this strategy might seem to work for small, value-added enterprises, few will have the infrastructure and size to operate at economies of scale result (Eshetu, Anwar-ul, Gedif, 2014).

Experience curve pricing

This is most appropriate in a new product-pricing situation. Penetration pricing and experience curve pricing both set a new product's price very low, but the motives are different. Penetration pricing is motivated by the desire to take advantage of a firm's competitive strength in moving quickly up the learning curve and down the unit cost curve. (Tellis 1986)(Dean J, 1950) (Nagle, Holden, 1995).

Cost-Plus pricing

One determines the total costs and adds a margin of profit. Cost-plus pricing is used when a company has a two-tiered focus; costs and return on sales. Companies implement cost-plus pricing when market share and profits are the objectives. To establish a price using a cost - plus strategy, the company needs to determine its break-even price by calculating all costs involved in the production and distribution of the product. The mark-up must be large enough to provide a sufficient profit, but should not exceed what customers' are willing to pay. (Kotler,1999)

Going rate pricing

For many small businesses, accepting the current market pricing structure is all they are able to do. Such firms have an element of being price takers. They must sell their goods and services at a price that the consumers are used to paying. For new entrants to the market, the price charged has to be below that of the market leader. (Kotler, 1999)

Price leadership

Price leadership is characterized primarily by having a very large market share.(Jain, 1993) In this environment, a firm can establish the price for the market and expect the rest of the market to set lower prices because they do not have as much market power (clout).

Parity pricing

A firm which uses such pricing strategy basically follows the price set by price leader firm in the market and keeps a relatively constant price which is the same as price set by the price leader. A study done to describe the evolution of reference-based prices stated that a reference price is the benchmark price that all competitors use to check if their prices are reasonable or not. (Lowe B. and Alpert F, 2010).

Low-price supplier

In this strategy a firm doesn't follow price set by a price leader firm. It rather undercuts the market by offering the lowest price by taking advantage of its lower cost structure and ability to utilize the learning curve effects.(Jain, 1993) (Nagle, Holden, 1995).

Perceived value Pricing

This strategy is centered on the actual value of the product to be priced. It means price is decided based on the value of the product. The price of products whose price is set using this strategy are lower than premium products because they face moderate market competition. This strategy is well suited for products with few competitors, barriers to entry are high and customers mainly value the benefits of the products. (Stanton, Futrell, 1987)

Differential pricing

A study performed on profit maximization using differential prices labeled differential pricing strategy as one modes of "one-to-one" marketing. Just like one-to-one market in this strategy a firm tailors its prices to fit each individual customers' needs or features. This study further stated that this strategy is effective if three conditions are set. These conditions are segmentation of the market, inability of the low cost segment

to resell product to a high cost segment and the strategy shouldn't offend any of the customers in each segment. (Deac, Dorbin, Dima, Violeta Voicus, 2016)

Premium Pricing

P It is a strategy which is used when a product some features that are unique from other competitors products providing the firm a competitive advantage. It involves setting high price for high quality product or for a product with unique characteristics. The price set using this strategy is short lived because more competitors will be attracted by the high price, hence the assumption of high profit margin. (Runyon, 1982).

As noted by Haron (2016) and Cant, wiid & Sephapo (2016) factors that affect the choice of pricing strategies are divided as internal factors and external factors. The internal factors refer to those factors that are controlled by the firms and can be easily altered by the firms, whereas external factors pertain to those factors that are not controlled by the firms and requires the firm conduct research to fully understand them. Internal factors include Return on Investment (ROI), cash flow, market share, profit, cost. As for external factors, they include elasticity of demand which refers to the degree to which demand changes in response to a change in price, customer expectations referring to customers perception of the product worth, competitor price, government policy etc.

An empirical study aimed at evaluating the determinants of pricing objectives was performed on the brewery industry of Ethiopia. This study focused on pricing decisions from the perspective of identifying the main objectives that brewery companies wants to achieve through their pricing decisions and the relation of these objectives with some determinant factors such as cost and demand. The study concluded that financial objective is the number one priority among brewery companies followed by competitive objectives. The study also further stated that cost, product quality, demand and competition are the top four determinant factors that have the most significant influence on the achievement and determination of pricing objectives. This study also concluded that cost has a much higher impact on financial

objectives while the other factors such as product quality and demand have higher impact on competitive objectives (Tsegaye, 2018).

A similar study was done on alcohol manufacturers in Kenya with the aim of identifying the main factors that affect pricing strategies and the extent to which different pricing strategies are adopted. The study was a census study done on three large alcohol manufacturers. This study identified cost structure to be the main factor with the most significant influence on the firms' pricing strategies while other factors such as product demand, quality, pricing objectives and industry competition are found to have no significant relation with the pricing strategies. Accordingly the study noted that market intelligence is ignored in pricing decisions and the firms are more focused on their cost structure. This perfectly substantiates another finding of the study which is cost plus pricing is found to be the most widely adopted pricing strategy among these alcohol manufacturers (Odhiambo, 2010).

Chapter 3: Methodology

3.1. Research design

The research design chosen for this study was a cross sectional survey design. This design was used to find out the various aspects of the pricing decision process practiced by pharmaceutical firms in Ethiopia. A cross sectional survey was deemed suitable for this study because it provides a clear picture of the study population with respect to a topic of interest. It gives a snapshot of a population of interest concerning a specific topic which can be used to make inferences. It is one of the descriptive research designs which aim to depict or describe an information which already exists. Since the aim of this study is to describe the various aspects of pricing decisions made by pharmaceutical firms this study is found to be the most appropriate one.

3.2. Target Population

The study was conducted in Addis Ababa as it is a representative of the country's pharmaceutical sector. This is because as per the Ethiopian food and drug authority (EFDA), the pharmaceutical sector regulatory body, more than 72% of pharmaceutical firms are located in Addis Ababa and these pharmaceutical firms perfectly characterize the overall pharmaceutical sector of the country. So a description of the various features of the pricing decisions made by pharmaceutical firms in Addis Ababa could be generalized to describe pricing decisions of all pharmaceutical firms in entire Ethiopia.

The pharmaceutical supply chain consists of pharmaceutical importers which are located at the top of the supply chain and are mainly engaged in import and distribution of medicines. They are followed by wholesalers which are mainly engaged in only distribution of pharmaceutical products they bought from importers to retail market. The retail pharmacies and drugstores are located below wholesalers and are direct point of contact with the consumer. Accordingly the study focused on firms on the top two positions of the supply chain which are importers and wholesalers (sub-distributors). The logic behind this is these two firms play the central role in the pharmaceutical sector as importers are pioneers in introducing new products to the market and wholesalers through mass distribution. So these two groups

of firms are the ones who set initial or first prices of products available on the market. They are also the ones who use different pricing strategies for different circumstances. So a study of these two groups of pharmaceutical firms could be extended to perfectly describe the trends practiced by pharmaceutical firms at lower level of the supply chain.

3.3. Sample Size

The sampling frame was a list of pharmaceutical importers and wholesalers taken from the Ethiopian food and drug authority (EFDA) which is a government regulatory body responsible for granting drug market authorization, licensing of pharmaceutical firms and other regulations of the pharmaceutical sector. As per the sampling frame data taken from EFDA there are a total of 700 pharmaceutical importers and 1100 pharmaceutical wholesalers. Accordingly the target population of this study is comprised of 1800 pharmaceutical firms.

The total population size determined from the sampling frame was used to compute the sample size considering a 10% margin of error and 90% confidence interval. Accordingly using a statistical tool called Raosoft the sample size was determined to be 66. This means the questionnaire was administered for 66 pharmaceutical firms.

In order to ensure 100% response rate a combination of convenience and random sampling. In this method first the samples were taken randomly from the sampling frame and were asked for their willingness to fill the questionnaire. The questionnaire was administered to those samples that are willing to cooperate in filling the questionnaire. On the other hand those samples that are selected randomly but are not willing to fill the questionnaire are replaced by another samples which in turn are randomly taken from the sampling frame. This process is repeated until the determined number of samples was achieved. In the selected participant companies the respondents or the personnel who filled the questionnaire was chosen purposively making sure that they are responsible for making pricing decisions.

3.4. Data collection instrument

The primary data which is the main input to this study was collected using a questionnaire. The questionnaire had three parts. The first part contains questions to find general information

about the company such as type of business, ownership etc. The second part contained a list of descriptions of the various pricing strategies gathered from literatures and the last part contained a list of potential factors that sample firms consider when choosing the pricing strategy.

The list of possible pricing strategies along with the factors that are considered in the choice of pricing strategies was developed or collected through an in depth review of similar researches and marketing books. The pricing strategies and determinant factors were compiled from scientific books on marketing mainly by Kotler (2003 & 2009) and similar researches on pricing strategies practiced in various sectors mainly by Gruca & Nobel (1990), a study performed by Tellis (1986) and a study by Diamantopoulos, Adamantios & Brian Mathews (1995).

In the questionnaire, in order to ensure that the participants understand each pricing strategy an easily understandable description of the pricing strategies are listed rather than the specific name of the pricing strategies. This way the respondents can associate the logic they use in their day to day pricing decisions with the main schemes underlying each pricing strategy described in the questionnaire.

As for the factors influencing the choice of pricing strategies only the factors are listed without any further descriptions as the list is descriptive itself. The three components of the questionnaire are presented in Annex I.

3.5. Data Analysis technique

The study used different statistical methods for data analysis ranging from simple descriptive statistical methods such as mean and median to regression analysis. The mean score is used to analyze the average scale given to the pricing strategies and determinant factors with respect to the extent of their use and consideration among the selected sample firms. In addition to the mean the mode tool is also used in order to determine the most frequent scale given to each pricing strategies and determinant factors with respect to the extent of their use and consideration respectively. In summation these two descriptive statistical tools were used to reveal the most widely used pricing strategies and also those factors that are most widely

considered during pricing decisions. In addition to mean and mode other descriptive statistics tool such as percentage frequency are used to summarize the profile of the sample companies and respondents in the sample companies.

In addition to the mean and mode statistical analysis methods a regression analysis technique was used to analyze the relation between the identified most widely used pricing strategies and the determinant factors. In the regression analysis the most widely used pricing strategies were treated as dependent variables and the determinant factors as independent variables. The beta coefficients were calculated for each determinant factors against the identified pricing strategies showing the direction and extent of their correlation. In addition to the correlation analysis a test of significance was performed in order to determine whether the observed correlations between the variable could be considered as significant or not

Chapter 4: Result

4.1. Introduction

The study explored one of the most critical components of the marketing mix which is pricing; to be more specific it delved into the various aspects of pricing decisions made by pharmaceutical firms in Ethiopia. The three main focuses of the study were the common pricing strategies implemented by pharmaceutical firms, the main determinants that influence their choice of pricing strategy and lastly the relation between the most used pricing strategies with the determinant factors.

The questionnaire was administered to the companies chosen systematically. The questionnaire was administered to the personnel in each company who is found to be responsible for deciding prices of the firm's products. In order to ensure full understanding of the questions further clarification is provided whenever requested. Then the filled questionnaire were encoded to be analyzed using simple statistical tools and regression model to find answers for the stated research questions.

This part presents the complete data that was collected in the survey and an analysis of the main information conveyed by the collected data. It has five parts each describing the various aspects of the data collected. The first part mainly presents the characteristics of the participant companies in terms of their ownership and type of business. In the second part data regarding the position or responsibilities of the personnel who filled the questionnaires were presented. The third part is where data on one of the main interests of this study which is the pricing strategies is presented as summary using descriptive statistics. This is followed by data gathered on determinant factors which affects the choice of pricing strategies presented in the fourth part of this section. Lastly is the result of a regression analysis done to find out the relationship between the determinant factors and the most widely used pricing strategy which are identified in the third part.

4.2. Profile of participant companies

The selected companies were mostly importers and wholesalers as they are found top of the supply chain and are the main determinants of various aspects of the market. The pricing

strategies implemented by these companies can be a representative of the pricing strategy trend in the market. The following table shows the total number of companies in terms of their type of business and ownership.

Type of business	Frequency	Percentage	Type of ownership			
			Private		Public	
Importers	21	32	21	100	0	0
Wholesalers	45	68	45	100	0	0

Table 1:- Participant companies business and ownership type

As presented in the above table 32% of the sample companies picked were pharmaceutical firms engaged in the import and distribution of pharmaceuticals. The remaining 68% of them were firms which are engaged in buying pharmaceuticals from these importers and distributing to the retail market. In terms of ownership all of the sample companies were privately owned companies.

4.3. Profile of respondents in the participant companies.

The questionnaire were purposely requested to be filled by those personnel who make the pricing decisions. The below table presents the responsibilities of the respondents who filled the questionnaire.

Position in the company	Importers		Wholesalers	
	Frequency	Percentage	Frequency	Percentage
General manager	4	19.0%	26	57.8%
Deputy manager	12	57.1%	6	13.3%
Sales manager	5	23.8%	13	28.9

Table 2:- Respondents position in the participant companies.

As depicted in Table 4.2 majority of the respondents accounting 57.1% of the total respondents in importers were deputy managers or vice presidents followed by sales managers which made up 23.8% of the total respondents and lastly general managers accounting 19% of the respondents in importer companies.

In case of wholesalers, majority of the time the pricing decisions are made by general managers (57.8%) which could be attributed to the smaller size of such firms compared to importers. Their smaller size made them to be managed directly by the owners who are also general managers. This is followed by sales managers who made up 28.9% of the total respondents in wholesalers and lastly deputy managers making up 13.3% of the total respondents in wholesalers.

4.4. Pricing strategies

The questionnaire contained a list of the typical descriptions of characteristic indications of 13 pricing strategies that are most widely implemented in business entities. The 13 pricing strategies and their typical descriptions are presented in Table

S.No	Strategy name	Strategy Description
1	Customer value pricing	Set different prices for the same type of product based on their features such as country of origin & brand
2	Parity pricing	Make sure that the price set is in line with price of the same product offered by competitors
3	Low price supplier	Always make sure that we offer the lowest price
4	Price skimming	Initially set high prices to maximize profit and then systematically lower it through time
5	Differential pricing	Set different prices for the same product based on customer features such as order quantity & payment history
6	Percieved value pricing	Set prices on the basis of customer perception of the product value gathered through survey
7	Complimentary pricing	Set low price to the main product and charge a higher price for the complimentary products
8	Experience curve pricing	Set price low to increase sales volume and then reduce cost through accumulated experience
9	Cost-Plus pricing	Calculate cost and add certain percentage of this cost as our mark up to the final price of the product
10	Going rate pricing	Change prices in response to change prices of competitor products irrespective of cost
11	Leader pricing	Lower or Change our prices and expect the other competitors to follow us
12	Penetration pricing	Initially set low prices to attract customers & to make the product well known in short time
13	Target return pricing	Set price in a way to ensure or achieve a specified return(profit) assumed at the beginning

Table 3: The selected pricing strategies with their respective descriptions

As explained in the data collection instrument part of this study, the pricing strategies and their respective essence are gathered through a review of similar literatures and marketing scientific

books. These strategies are found to be the most commonly known among similar literatures and marketing scholarly articles. Their respective descriptions are also prepared as above by crosschecking their definitions in multiple literatures.

In addition a description of a 5 point extent scale developed based on Likert scale was provided from which respondents can pick and express the extent to which they implement each of the 13 described pricing strategies. As described in the data collection part a total of 13 pricing strategies were gathered from different literatures. These 13 strategies were deemed to be the vastly used ones across different industries.

The respondents were asked to fill the extent to which they practice each of the pricing strategies, which are presented in the questionnaire as descriptions, by choosing an appropriate scale between 1 to 5 with 1 meaning the firm practiced the listed pricing strategy to “no extent” and 5 meaning the firm practiced it to a “very large extent”

A total of 66 companies, which is the full samples size, responded as systematic sampling is used to ensure 100% response rate. The collected data is shown in table 4. As presented in table 4 the number of companies that selected each scale for each pricing strategies were counted.

Accordingly the pricing strategies and the respective percentage of respondents which gave a scale of 5 which corresponds to “very large extent” includes cost-plus pricing given by 87.88% of the respondents, parity pricing given by 56.06%, differential pricing given by 50%, Penetration pricing which is given by 30.30%, Low-price supplier which is given 5 scale by 37.88% of the respondents, price skimming 7.58%. The complete data which contains what proportion of the respondents and the scaling of their use of the individual pricing strategies is presented in Table 4.

This data was used to calculate the total score of each pricing strategy which is a good indication of the extent to which they are used. This is computed by multiplying each scale by the number of respondents that picked up that scale and summing this multiple for the 5 scales of each pricing strategy.

Score in each scale = Scale (1 to 5) X number of respondents that picked this scale.

The score in each scale is summed up for the 5 scales to give the total score for each pricing strategy. This total score is divided by the total number of respondents to compute the mean rating of the individual pricing strategies which is an indication of the extent of use of the respective pricing strategies by pharmaceutical firms when making pricing decisions.

		Scales									
		5		4		3		2		1	
S.No	Pricing strategies	N	%	n	%	N	%	n	%	N	%
1	Customer value pricing	3	4.545	1	1.52	15	22.7	30	45.45	17	25.8
2	Parity pricing	37	56.06	22	33.3	2	3.03	4	6.061	1	1.52
3	Low price supplier	25	37.88	13	19.7	5	7.58	11	16.67	12	18.2
4	Price skimming	5	7.576	3	4.55	14	21.2	35	53.03	9	13.6
5	Differential pricing	33	50	20	30.3	7	10.6	6	9.091	0	0
6	Perceived value pricing	0	0	0	0	0	0	15	22.73	51	77.3
7	Complimentary pricing	0	0	3	4.55	15	22.7	31	46.97	17	25.8
8	Experience curve pricing	4	6.061	13	19.7	8	12.1	6	9.091	35	53
9	Cost-Plus pricing	58	87.88	8	12.1	0	0	0	0	0	0
10	Going rate pricing	0	0	0	0	13	19.7	22	33.33	31	47
11	Leader pricing	0	0	15	22.7	3	4.55	30	45.45	18	27.3
12	Penetration pricing	20	30.3	13	19.7	20	30.3	10	15.15	3	4.55
13	Target return pricing	4	6.061	0	0	0	0	0	0	62	93.9

Table 4: Number and percentage of firms with the scales selected for each strategy

As per the above calculations Cost-plus pricing strategy is found to be the number one choice among pharmaceutical firms with 87.888% of the respondents giving it a rate of 5 and 12.1% of the respondents giving it a scale of 4. In addition the mean rating for this strategy is found to be 4.88 and the mode to be 5. The second preferred strategy is parity pricing which is given a 5 scale rating by 56.06% of the respondents and a 4 scale rating by 33.3% of the respondents. This gives it the second highest mean rating of 4.36 making it the second most widely used pricing strategy among the studied pharmaceutical firms. This is followed by differential pricing with 50% of the respondents giving it a 5 scale rating and 30.3% giving it a 4 scale rating. It is the third most used pricing strategy with a mean scale or rating of 4.21. In fourth place is penetration pricing getting a 5 scale rating from 30.3% of the respondent firms and a 4 scale rating from 19.7%. This gives it a mean rating or scale of 3.56 making it the fourth most widely used pricing

strategy among the pharmaceutical firms. Low price supplier is placed in fifth place with a 5 scale rating from 37.88% of the respondents accompanied by a 4 scale rating from 19.7% of the respondents. This give it a mean rating of 3.42 labelling it as the 5th most widely used pricing strategy

The remaining pricing strategies follows with the order of price skimming in sixth place with a mean rating of 2.39 followed by the seventh place Leader pricing mean scale of 2.23. The eighth most used pricing strategy is experience curve pricing with a mean score of 2.17 followed by Customer value pricing with a mean score of 2.14 in ninth place. Complimentary product pricing is placed in tenth position with a mean score of 2.06 followed by Going rate pricing with a mean score of 1.73, perceived value pricing with a mean score of 1.23 and lastly target return pricing with a mean score of 1.24.

When the mean ratings presented in table 5 are viewed with respect to the same likert scale used in the survey, it can be seen that Cost plus pricing, differential pricing and parity pricing are used to a very large extent as their mean rating falls above the scale of 4.

S.no	Pricing strategies	Mean	Mode
1	Customer value pricing	2.14	3
2	Parity pricing	4.36	5
3	Low price supplier	3.42	5
4	Price skimming	2.39	2
5	Differential pricing	4.21	5
6	Perceived value pricing	1.23	1
7	Complimentary pricing	2.06	2
8	Experience curve pricing	2.17	1
9	Cost-Plus pricing	4.88	5
10	Going rate pricing	1.73	1
11	Leader pricing	2.23	2
12	Penetration pricing	3.56	1
13	Target return pricing	1.24	1

Table 5:- Cumulative mean and mode for each pricing strategy

Accordingly the Low price supplier and penetration pricing strategies are used to a large extent as their mean ratings fall just above the moderate extent scale marker which is 3.

In summation as per the above presented data the 5 pricing strategies that are most widely used by pharmaceutical firms in Ethiopia are cost-plus pricing, Parity pricing, Differential pricing, Penetration pricing and Low-price supplier. The following bar chart shows the top most used pricing strategies along with the number of respondents per each scale.

In addition to the pricing strategies which are gathered from literatures and presented in the questionnaire the participant companies were asked to mention any other pricing strategy they use, other than those already listed in the questionnaire. The main purpose of this question was first to gather any other pricing strategies they might implement other than the ones listed in the questionnaire. Secondly to give them the freedom to describe their pricing strategies in their own words if they deemed that their strategy description doesn't fit any of the descriptions listed in the questionnaire.

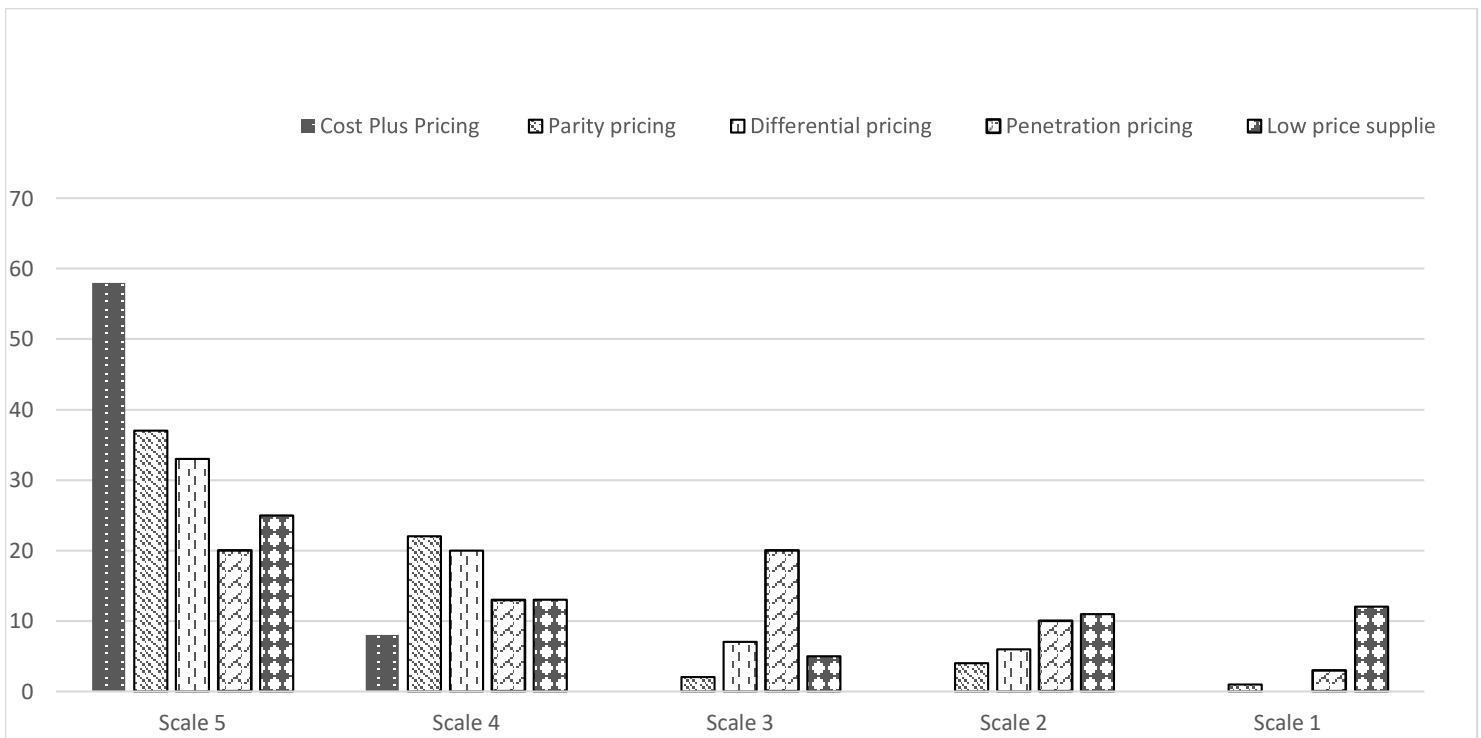


Figure 1: The top most widely implemented pricing strategies

This part was left blank by all of the respondents indicating that the participants companies have no other pricing strategy they use, other than those listed in the questionnaire.

4.5. Factors that affect choice of pricing strategies.

In the second part of the questionnaire a list of 17 factors that potentially affect the choice of pricing strategy are presented to the respondents. These potential factors were compiled with a review of scientific and research literatures to identify the most common factors that affect the choice of pricing strategies.

The factors that are identified and listed in the questionnaire are related to the various aspects of the firms' and the environment under which they operate. Accordingly the factors correspond to basically 5 aspects which are "product aspect", "market aspect", "customer aspect", "company aspect" and "competition aspect". The factors gathered from literatures along with the aspects of the company to which they belong to are presented in Table 6.

Even though the listed factors correspond to one of these 5 aspects only the specific factors are presented in the questionnaire as a unified list. The respondents labeled the individual factors with the degree to which they affect their choice of pricing strategies or how the degree of importance that they give to these factors when making pricing decisions. The same scale as the pricing strategies was used which ranges from 1 to 5, with 1 being "no extent" and a scale of 5 meaning "very large extent". The data gathered in this part of the questionnaire is presented in the Table 7.

The cumulative scale and mean scale of the individual factors is calculated using the same technique as that of the pricing strategies. The determinant factors are ranked from those factors that are most commonly considered by the participant firms to those that are less frequently considered based on their cumulative and mean scales. The determinant factors along with their respective company's aspect is shown in Table 7

S.No	Aspects of the company	Factors
1	Product aspect	Product quality
		Product brand demand
		Product differentiation
		Product features such as package size
2	Market aspect	Market demand for the product
		Ease of determining demand
		Type of market segment
		Governmental pricing regulations
3	Customer aspect	Customers' preference
		Customers' order quantity
4	Company aspect	Company objectives such as profitability
		Market share of the company
		Internal Costs
		Monthly or annual sales volume
5	Competition aspect	Number of competitors
		Price of competitor products

Table 6: Factors and aspects of the company to which they correspond

As shown in table 7 and table 8 the most influential factor which is given a high emphasis by pharmaceutical firms Company objectives such as profitability. This factor is given a 5 scale rating by 95.45% of the respondents and 4 scale rating by 4.55% of the respondents. This gives it a mean rating of 4.955 which makes the most considered factor among the pharmaceutical firms.

The second most important factor is cost which is given a 5scale rating by 92.42 % of the respondents and a 4 scale rating by 7.58% of the respondents giving it a mean rating of 4.924. In third position is customer's features such as order quantity getting a 5 scale rating from 86.36% and a 4 scale rating from 13.64% of the respondents which gives it a mean rating of 4.864.

S.No	Factors										
		Scale 5		Scale 4		Scale 3		Scale 2		Scale 1	
		n	%	n	%	n	%	N	%	n	%
1	Cost	61	92.42	5	7.58	0	0.00	0	0.00	0	0.00
2	Market share of the company	3	4.55	0	0.00	30	45.45	7	10.61	26	39.39
3	Market demand of the product	41	62.12	10	15.15	15	22.73	0	0.00	0	0.00
4	Company objectives such as profitability	63	95.45	3	4.55	0	0.00	0	0.00	0	0.00
5	Number of competitor brands	44	66.67	11	16.67	11	16.67	0	0.00	0	0.00
6	Ease of determining demand	0	0.00	13	19.70	26	39.39	20	30.30	7	10.61
7	Product differentiation	0	0.00	0	0.00	10	15.15	8	12.12	48	72.73
8	Ease of detecting price changes	12	18.18	13	19.70	5	7.58	21	31.82	15	22.73
9	Government pricing policies	2	3.03	1	1.52	10	15.15	3	4.55	50	75.76
10	Product quality	25	37.88	15	22.73	26	39.39	0	0.00	0	0.00
11	Product brand demand	39	59.09	25	37.88	2	3.03	0	0.00	0	0.00
12	Type of target market segment	5	7.58	1	1.52	13	19.70	36	54.55	11	16.67
13	Customers' sensitivity to prices	45	68.18	8	12.12	13	19.70	0	0.00	0	0.00
14	Customers' features such as order quantity	57	86.36	9	13.64	0	0.00	0	0.00	0	0.00
15	Price of competitor products	46	69.70	17	25.76	3	4.55	0	0.00	0	0.00
16	Product features such as package size	0	0.00	1	1.52	0	0.00	59	89.39	6	9.09
17	Monthly or annual Sales volume	1	1.52	5	7.58	3	4.55	40	60.61	17	25.76

Table 7: The Proportion of firms that gave each scale for the factors influencing choice of pricing strategy

The fourth important factor is price of competitor products with a mean rating of 4.652 which is followed by product brand demand in fifth position with a mean rating of 4.561. The other factors are listed in the order of their importance along with their mean rating in table 8.

In general those factors which are considered highly influential in firms' choice of pricing strategy includes Company objectives such as profitability, Costs, Customers' order quantity , Price of competitor products , Product brand demand, number of competitor brands, customers' sensitivity to prices, market demand of the product and product quality. The factors which are less considered during a choice of pricing strategy include Monthly or annual Sales volume, Ease of detecting price changes, Ease of determining demand , Type of target market segment, Product features such as package size, Government pricing policies, Product differentiation.

Ranking	Factors	Mean Scale score
1	Company objectives such as profitability	4.955
2	Cost	4.924
3	Customers' features such as order quantity	4.864
4	Price of competitor products	4.652
5	Product brand demand	4.561
6	Number of competitor brands	4.500
7	Customers' sensitivity to prices	4.485
8	Market demand of the product	4.394
9	Product quality	3.985
10	Ease of detecting price changes	2.788
11	Ease of determining demand	2.682
12	Type of target market segment	2.288
13	Market share of the company	2.197
14	Monthly or annual Sales volume	1.985
15	Product features such as package size	1.939
16	Government pricing policies	1.515
17	Product differentiation	1.424

Table 8: Determinant factors sorted along their total score or mean scale score

4.6. Relation between factors and the top most used pricing strategies

A standard multiple regression was performed using the SPSS version 22 tool in order to investigate the relationship between the identified 17 determinant factors and the top 5 most used pricing strategies. This technique enables understand the relative contribution or influence that the individual factors have on the choice of each pricing strategy.

This standard multiple regression is chosen from a family of multiple regression types as it enables entering multiple independent variables simultaneously and evaluate the influence of each independent variable on the dependent variable relative to each other. In addition this method is deemed to be appropriate for ordinal data types (Pallant, 2005).

The regression is performed by treating the top 5 pricing strategies as the dependent variables and the 17 determinant factors as independent variables. The data was also tested to make sure that it meets the standard requirements or assumptions of multiple regression. One of such

assumptions was the avoidance of multicollinearity which is a high correlation among the independent variables. As many literatures on statistics recommended the bivariate correlation between the independent variables should not exceed 0.7 (Pallant, 2005). This assumption was met and the resultant computed coefficients between the determinant factors as independent variables and that of the pricing strategies as dependent using SPSS is shown in table 9.

These estimated coefficients basically indicate how much of the variance in the dependent variable is explained by each independent variable while keeping the other independent variables under control. In this study context it indicates the extent to which the determinant factors, which in this case are independent variables, determine the pricing strategy, which is the dependent variable that the firms choose or implement in their pricing decisions.

As it can be seen in table 9 the different determinant factors have different coefficient with the top 5 pricing strategies discovered in section 4.4. This indicates that each determinant factors influences pharmaceutical firms to choose a pricing strategy that revolves around that specific factor. As an example if we take cost plus pricing the highest coefficient value is 0.571, which is its correlation with cost and this correlation is considered significant having a p-value of 0.001 which is considered significant at 0.005 level. This means cost has the biggest influence when it comes to cost plus pricing. The other factors with significant coefficient value with cost plus pricing include customers' features with a coefficient value of 0.185 and ease of determining demand with coefficient of 0.295.

In the case of parity pricing, the factor with the highest coefficient value is price of competitor products which is 0.61. The other factors with significant coefficient value with this strategy includes Number of Competitors with coefficient value of 0.100 which is significant with a P-value of 0.000 and its other significant correlation with p-value of 0.0013 is Ease of determining demand with coefficient value of 0.106. As for differential pricing, it has the highest correlation with Customers' features factor with a coefficient value of 0.385 and the correlation having a p-value of 0.002 which is considered as significant. When it comes to penetration pricing, the highest coefficient value is 0.202 which belongs to price of competitor products and this correlation is also flagged as significant in the SPSS analysis with p-value of 0.000. Lastly

market share has a positive and significant correlation with Low price supplier having a coefficient value of 0.233 and a p-value of 0.000.

S.No	Factors	Cost-Plus pricing	Parity pricing	Differential pricing	Penetration pricing	Low-price supplier
1	Cost	0.571	0.051	.0005	0.054	0.028
2	Market share	0.154	0.083	0.067	0.198	0.233
3	Market demand	0.062	0.091	0.275	0.200	0.151
4	Company objectives Such as profitability	0.050	-0.076	-0.107	-0.077	-0.042
5	Number of Competitors	-0.155	0.100	0.172	0.138	0.116
6	Ease of determining demand	0.295	0.106	0.149	0.089	0.103
7	Product differentiation	0.054	-0.132	-0.069	0.092	-0.022
8	Ease of detecting price changes	-0.074	-0.114	-0.229	-0.003	0.017
9	Government pricing policies	-0.135	-0.077	-0.143	-0.035	0.024
10	Product quality	-0.008	0.271	0.065	0.154	0.208
11	Product brand demand	0.108	0.101	0.105	0.039	0.160
12	Type of target market segment	-0.004	0.093	0.152	0.078	0.023
13	Customers' sensitivity to price	-0.132	-0.023	0.093	0.156	0.129
14	Customers' features such as order quantity	0.183	0.041	0.385	0.174	0.230
15	Price of competitor products	0.038	0.610	0.110	0.202	0.167
16	Monthly or annual target sales volume	-0.146	0.133	0.092	0.132	0.088
17	Product features such as package size, country of origin	-0.101	0.043	0.093	0.017	-0.074

Table 9: Estimated coefficients of relation between determinant factors with the 5 most widely used pricing strategies.

Chapter 5. Discussion, Conclusion and Recommendation

5.1. Discussion

This study focused on one of the most critical decisions that are made by organizations which is pricing decision. It is stated that one of the most fundamental and critical decisions made by business is deciding what price to charge for their products or services (Morris, 1987). This study focused on this critical decision, more specifically the underlying pricing strategies implemented by pharmaceutical firms to make pricing decisions. The major aims of this study were to uncover the pricing strategies that are most commonly used, the major factors that influence the choice of these pricing strategies and lastly to investigate the relation or influence of these major factors on the choice of the identified major pricing strategies.

As described in the data analysis part, the five most widely practiced pricing strategies among pharmaceutical firms; in order of their extent of use; are Cost-plus pricing, Parity pricing, Differential pricing, Penetration pricing and Low-price supplier strategy.

In cost-plus pricing strategy the basic underlying scheme is to sum up all costs that a firm incurred to deliver a product to a customer and add a certain mark up or profit. The main reasons for the wide use of this strategy are it is easy to determine the price using this method, secondly, it provides assured profits to the company. Further, it's easy to justify the price hike when required. (Deshpande, 2018) This clearly explains the main reason underlying the wide usage of this strategy by pharmaceutical firms in Ethiopia. The fact that cost has high correlation with this strategy is obvious. On the other hand its low correlation value with market and competitor related factors such as price of competitor products shows one of the disadvantages of this strategy which are complete ignorance of the competition and market demand This in turn could potentially lead to a wrong price setting resulting an overpriced product which tarnishes the firms' competitiveness or result in underpriced product which deprives the firm of a potential profit.

The second most commonly used pricing strategy is parity pricing in which the firms set their prices merely on the price of the competitor products. This revolves around the competitor prices as firms try to match up price of the competitor with largest market share or offering the lowest

price on the market. It is a kind of strategy that is more concerned with competition and this explains the reason behind the high correlation value with competition based factors such as price of competitor products and number of competitors in this study. There is no doubt that this strategy boosts the competitive status of the studied firms, but the downside is the firms are basically price followers. This could have dire consequence as the firms are less considerate of their cost and profit when trying to match competitor prices making the firms competitive but poorly perform financially.

In penetration pricing a firm set the price of its product low in order to make its product well known in a short time. It is also used as a principal instrument for penetrating mass markets (Dean, 1950). In this strategy the firm offer the same low price to the whole market and it is deemed appropriate in situations such as when the market segment who is willing to pay high price is very small, when there is high demand elasticity to price, if the firm can reduce its cost with high sales volume (Perreault, Cannon , McCarthy, 2014). This has its own advantages especially when it comes to introducing a new brand or preventing new entries to the market so as to avoid competitions. It is yet more critical advantage is when it comes to selling product that are extremely price sensitive and always hunt for the lowest prices. In such market segments the firms could achieve a significant market share in a very short time. This strategy is usually recommended if there is a way that a firm can reduce its cost from the economies scale. This way the firms can reap the above mentioned benefits of this strategy while maintaining profitability.

The other vastly implemented strategy is differential pricing which is sometimes referred as price discrimination. It is a kind of strategy in which firms offer different prices for different customers based various features such as customers' order quantity, it's paying ability etc. It could be first degree discrimination in which the price is set based on the amount that the customer is willing to pay which is usually impractical. The most practical version is the based on second degree discrimination in which offered price is based on customers order quantity. It is a customer focused strategy and this is the reason that customers features factor is found to have the highest influence on this strategy as found in this study.

5.2. Conclusion

This cross-sectional survey study has provided an insight into the various aspects of the pricing strategies implemented by pharmaceutical firms in Ethiopia. The purpose was to uncover the main pricing strategies used by pharmaceutical firms along with the factors that influence their choice. The study found that the main factors that pharmaceutical firms consider when choosing pricing strategies comply with the generally accepted trend in various literatures and marketing books. On the other hand it should be noted that they give little attention to some factors that could be important input to some strategies. It is also worth mentioning that some of their strategy choices and the factors they consider are somewhat paradoxical compared with the generally accepted trends. It is also observed that the firms use multiple pricing strategies based on various situations rather than fixating on a single strategy. This is a wise method of pricing as the appropriate type of pricing strategy is used in different circumstances.

5.3. Recommendation

Pharmaceutical firms should give a high emphasis to their pricing decisions and strive towards selecting the right pricing strategy based on a clear understanding of the pros and cons of the different pricing strategies available at their disposable. It is also highly recommended that the firms prepare a pricing framework based on the different pricing strategies to be implemented in different pricing situations.

A study that evaluates the effect of the different pricing strategies on organizational performance such as profitability could be invaluable in identifying the best pricing strategies for firms in different sectors. In addition the study focused only on the two aspects of pricing decision which are determinant factors and the pricing strategies. A further study which incorporates these two aspects along with their effect on achieving the organizational objectives would be invaluable for pharmaceutical firms.

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Appendix 1

Questionnaire

Date:- _____

1. Name of your company _____
2. What is the type of your business? (please mark one of the below lists)
 - Import & distribution Wholesaler
3. What is the ownership of your company?
 - Private Public
4. Your position in the company? _____
5. To what degree do you practice the following listed pricing strategies when making pricing decisions for your products? (*Please describe using a scale between 1 to 5 with each scale having the following meanings.*)

Scale	Meaning
1	To no extent
2	To a small extent
3	To moderate extent
4	To a large extent
5	To a very large extent

S.NO	The main logic implemented when making price decisions	Scale
1	Set different prices for the same type of product based on their features such as country of origin & brand	
2	Make sure that the price set is in line with price of the same product offered by competitors	
3	Always make sure that we offer the lowest price	
4	Initially set high prices to maximize profit and then systematically lower it through time	
5	Set different prices for the same product based on customer features such as order quantity & payment history	
6	Set prices on the basis of customer perception of the product value gathered through survey	
7	Set low price to the main product and charge a higher price for the complimentary products	
8	Set price low to increase sales volume and then reduce cost through accumulated experience	

9	Calculate cost and add certain percentage of this cost as our mark up to the final price of the product	
10	Change our prices and expect the other competitors to follow us	
11	Set prices with the major aim of maximizing market share	
12	Initially set low prices to attract customers & to make the product well known in short time	
13	Set price in a way to ensure or achieve a specified return(profit) assumed at the beginning	

If there is any other logic that you implement but not listed in the above table please specify:-

- _____
- _____
- _____

6. To what extent do the following factors pertaining to your organization and business environment affect or influence the choice of your pricing strategy? (*Please indicate using one of the below described scales*)

Scale	Meaning
1	To no extent
2	To a small extent
3	To moderate extent
4	To a large extent
5	To a very large extent

S.NO	Factors	Scale
1	Costs	
2	Market share of the company	
3	Market demand for the product	
4	Company objectives such as profitability	
5	Number of competitor brands	
6	Ease of determining demand	
7	Product differentiation	
8	Ease of detecting price changes	
9	Governmental pricing regulations	
10	Product quality	
11	Product brand demand	
12	Type of target market segment	
13	Customers' sensitivity to prices	
14	Customers' order quantity	
15	Price of competitor products	
16	Product features such as package size	
17	Monthly or annual sales volume	