

The Pricing Practices: Management Accounting Perspective

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ABSTRACT

Management Accounting can be defined as management-oriented accounting or accounting in relation to management process. The management process describes the functions carried out by managers. At least, there are 3 (three) activities in management process: (1) Planning, (2) Controlling and (3) Decision making. Decision making is the process of choosing among competing alternatives. In decision making, management accounting provides information needed by managers. Determining a product's price or pricing decision is one of the common examples of short run decision making. The general rule of pricing from management accounting perspective is that price should be enough to cover all costs and generating satisfactory profit to organization. The main focus of management accounting is to improve the organization's performance and profitability by providing relevant information to managers. This research examined the practices of pricing in manufacturing firms throughout the Yogyakarta Region. The research's samples were 52 manufacturing companies that consist of 33 medium-scale companies and 19 big-scale companies. This study tried to provide evidence on what was the main objectives of pricing, how a price was set, what factors were considered, and in what circumstances the price was changed. This research also tried to compare pricing practices in medium-scaled and big-scale companies also companies that only sell their product locally and sell their product globally. The research revealed that companies have more than one objective in setting their price. The main objective of pricing decision for big-scale companies was to maintain its market share, however the main objective for medium-scale was to achieve their target profit. The most important finding was that the main factor that influence the price was cost for all the samples. There was no difference between big and medium-scale companies on that point. Cost was also the most important factor that influenced the price changes for all samples. Another finding was that all samples believe the price changes will be

not effective in increasing the sale volume.

Key words: pricing decision, market-based pricing, cost-based pricing, product costs.

1. INTRODUCTION

The word “price” means different things to different people. Pricing is a crucial managerial decision making for almost all companies. Every company, whether it is a manufacturing or services or merchandising have to set their price. Hilton and Platt (2011) said that for manufacturing companies have to set prices for the products they manufacture; merchandising companies set the price for the goods; services firms set the price for their services. Corr (1974) said that pricing decision—the setting of price—is normally made in the short time. It means that a price is set for maximum one year length. Sunarni (2014) stated that in a very competitive business market, information is the most important factor to survive. One of the information needed is management accounting information. The primary purpose of management accounting in the organization is to help management doing their function by collecting, processing, and communicating information by providing information, include information for pricing. From managerial accounting point of view, managerial decision is classified into two-types of decision: Short-run decision making and long-run decision making. Generally, the price will be adjusted due to the changing of economic resources’ prices or inflation. The setting of price is one of the most important managerial decisions. The price setting not only affects the revenue but also brings other important consequences. If the price setting is considered too low, the sale is most likely increase, however the firm won’t be able to cover the cost of making the product. If the price setting is too high, then the sale is most likely to decrease, customer will look elsewhere (Horngren, 2012) Price (in connection with volume), is the only one directly generating revenue, all other items give raise to costs, although non-price considerations are increasingly taking precedence in competing (Claret and Phadke, 1995).

Pricing or pricing decision is the process to set the product’s price. Pricing decision is different from pricing policy. Corr (1974) stated that pricing policies are statements of management’s attitude toward pricing decision. Normally, pricing policies are set for long-term period. Pricing policies should emphasize in maximizing profit consistent with other corporate’s objectives. In the long-run, the price of a product must be enough to cover all corporate’s costs and generate a satisfactory profit for a company. By covering all cost and providing a satisfactory profit, a

company could maintain and increase its position in the competition. In the short-run, a product's price at least should cover incremental costs in providing the product to the customers. Claret and Phadke (1995) also mentioned that pricing policy is a proper way to tackle individual pricing situation, whereas pricing decision frequently remains a patchwork of adhoc decision.

Economic Theory perspective states that pricing should consider various market structures such as competitive, monopoly and oligopoly; demand and supply and also cost functions (Cunningham and Hornby, 1993). However, there are several limitations of economic theory perspective on pricing determination that it isn't easy to identify and to formulate the market's structure and its supply and demand. From managerial accounting perspective, the pricing decision is much simpler and more practical oriented. A good price is a price that enough to cover all costs and generate satisfactory profit to the company.

The aim of this research is to investigate pricing decision not pricing policy in small/medium and big enterprises from management accounting perspective and comparing the practices between them, especially the role of cost product information in that decision. Warshasky and Cahill (1996) said that large business can afford television advertising to enhance customer perception of their products, many small business cannot. As a result, the large business may have a cost advantage over the small business, an ability to charge higher price. In deciding their price, the large business has more "courage" compared to the small business. Guilding, Drury and Tayles (2005) wrote that small firm operating in an industry where prices are set by dominant market leader will have little influence over the prices of products or services. In such firm, cost information is expected to be considered as a primary factor in setting the price. Houge (1971) as cited in Cunningham and Hornby (1993) concluded that competition would be a major factor in the pricing of small business, it may be easier to describe how prices are set in small firm rather than in large firms, although the small firm pricing may be less flexible than large firm pricing. A company that sells their product abroad or an exporting company has more competitive market than those sell locally or non-exporting company. Market factors should have more influence rather than cost product information in making pricing decision. The role of cost product information should be less important for exporting companies rather than non-exporting. Based on that statement, this research also tries to explore whether the objectives, the factors that influence the price change and the role of cost vary between exporting and non-exporting companies. The main pupose of this research is to discover the factors used by medium and big-scale manufacturing firms in setting their prices.

2. LITERATURE REVIEW

Hilton and Platt (2011) wrote that setting the price for organization's products or services is one of the most important decisions a manager faces. Pricing decision depend on several factors such as companies' production costs, their market position, intensity of market competition and quality of products or services provided to customers (Celebrate & Fransisco, 2014). Setting the price is also one of the manager's most difficult decision due to the factors that should be considered. Managerial or management accounting that is defined as "the process of identifying, measuring, analyzing, interpreting and communicating information in pursuit of an organization's goals"(Hilton and Platt, 2011). It means that managerial accounting should able to help manager by providing any information needed in doing the managerial functions. Any information needed in setting the price should be provided by managerial accounting. According to managerial accounting, setting the price is classified as short run decision making that only be implemented in 1 (one) year maximum. The information provided should be current, updated and accurate. The quality of the information will determine the quality of the price. There are two popular approaches in setting the price. The first one is cost based pricing. A firm has to know how much it costs to make or provide goods or services. The second approach is competitive pricing or market-based model that involves checking out your rival's offering and setting your prices accordingly. Those two approaches will be explain below.

2.1 Cost Driven Pricing: Cost-Based Pricing

The price is the revenue per unit for a company. The price must be greater than costs in order that the firm generates income. A product's price ultimately must cover its costs in order that the firm remains in the business. From managerial accounting perspective, managers should base prices on accounting product costs. There are several reasons why product costs is a vital information in pricing (Hilton and Platt, 2011): (1) There is not enough time to do a thorough demand and marginal cost analysis for every product or services; (2) Eventhough market consideration ultimately may determine the final product's price, a cost-based pricing formula gives the managers a place to start: (3)The cost of a product or service provides a floor below where the price cannot be set in the long run. It can be said that cost based price is the minimum price.

From managerial accounting perspective, one of the approaches to set price that is based on product's costs is called cost plus pricing or cost based pricing. Implementing cost-based pricing relies heavily on the accuracy of cost calculation

and cost structure. In its most simple form, the cost of production is calculated, a margin for profit is added and a product's price is set. Manager's understanding of cost structure will influence the accuracy of cost calculation. Mowen, Hanson and Heitger (2012,) said that the failure of understanding costs structure will have a serious impact to the firm. It is likely that the firm will encounter problems in setting prices either too high-and will be undercut by competitors with more appropriate lower price- or too low- and will not cover all costs, thereby resulting in a net loss. The simplicity of this method is that it requires no other information beyond the product's cost.

There is no necessity to consider market's demand, customer's demand, competition and other factors that have influence on price. However, there are several drawbacks of using this methods (Fletcher and Russel-Jones, 1997 and Nessim and Dodge, 1995 as cited in Korda and Belogavec, 2004): (1) there is no certainty about costs in companies, as different techniques can give astoundingly different answers, (2)The effect of demand is not considered; if demand falls dramatically below plan, costs will certainly change and thus return will be nothing like expected and (3) Because consumer needs and demand are not factored in, companies may be offering the product at an entirely wrong price (too high or too low). Regardless the weaknesses, it sees that cost-based pricing is still dominating, although there is a changing in the last decade (Diamantopoulus and Mathews, 1995 as cited in Korda and Belogavec, 2004). Korda and Belogavec, (2004, p.1849) describe the steps in cost based pricing in figure1 below.

Figure 1
Cost-Based Pricing Procedures

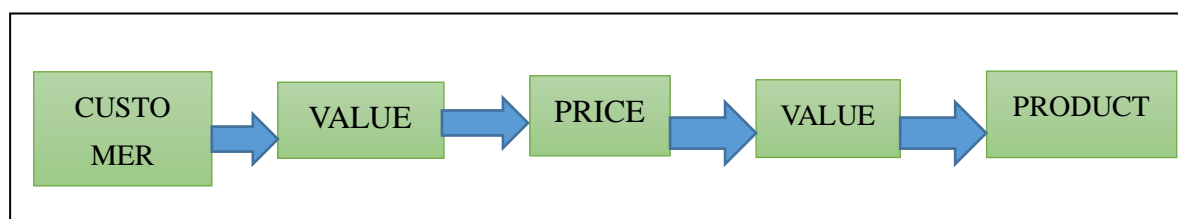


Cost-based pricing method is also not fair for customer because if a company produce their product inefficiently, the customer has to pay the un-efficiency impact on costs. This approach also does not consider demand, supply, competition and new entrance.

2.2 Market Driven Pricing: Value-Based Pricing

Market driven or market-based pricing focuses on demand and competition. This method assumes that a product's price should reflect perceived value and image. The price is set from customer's perspective. This method take a look at the customer's perceived value of the product and then based on the customer's view, a company will estimate how much a consumer would be willing to pay. Amir (2016) stated that price has to be based on customer's value rather than costs or even competition. According to this approach, price is only perceived to be fair when it matches the expected outcomes resulting from the transactions. Market based pricing relies on the supply and demand but companies must make sure that they do not gain loss by charging too low or drive consumers to competitors by charging too high. However, accurate product costing method is still important because costs determine the lowest price that can be charged (Kain and Rosenweig, 1992). In Market Based Pricing, a product's price is set according to mutual decision between sellers and buyers. Korda and Belogavec, (2004) describe the steps in market based pricing in figure 2 below. Basically, economics assume that the consumer is a rational decision maker and has perfect nformation. Therefore, if a price for a particular product goes up and the customer is aware of all relevant information, demand will be reduced for that product. If the price decline, demand would increase. That is, the quantity demanded typically rises causing a downward sloping demand curve.

Figure 2
Market-Based Pricing Procedures



3. THE RESEARCH METHODOLOGY

3.1 Population and samples

Population refer to the entire group of people, events, or things of interest that the researcher wishes to invstigate. (Sekaran, 2011). The research population was manufacturing companies in Yogyakarta, Indonesia. The research samples were selected by using purposive sampling. According to Sekaran (2011) purposive sampling is a method of selecting samples that is confined to specific types of people who can provide the desired information. There are two types of purposive sampling -

judgment sampling and quota sampling. A simple random sample is a subset of a statistical population in which each member of the subset has an equal probability of being chosen. It is also can be stated that a random sample is a sample that is chosen randomly. This study use the judgment sampling and the characteristic is the number of firm's employees should be more than 20 employees.

The samples consist of 63,46% (33 companies) were medium-scale and 36,54% (19 companies) were big-scale companies. According to Indonesian Central Bureau of Statistic, a company can be classified as micro business if it has less than 3 employees, a small-scale if it has 3-19 employees, a medium-scale if it has 20 – 99 employees and as a big-scale company if it has more than 100 employees. This study used this classification because it is very easy to get the information on the number of employees rather than information on sales revenue or profit per year. All participating companies could identify the number of their employees easily and accurately and they were not reluctant to share this information to external parties. The next classification of the samples is based on the area of sales; 38,46% of the samples (22 companies) sold their product to other countries (exporting companies), whereas 61,54% (30 companies) sold their product locally (non-exporting companies). The sample description is provided in table 1.

3.2 Data Collection

This study used primary data that was collected using questionnaire. The research questionnaires were developed based on research done by Dunn, Kogut and Short (2012). The questionnaire was divided into two parts. The first part was asking about the characteristics of the firms. The second part consisted of ten questions on how price was set in the firms. There were 6 factors that were used to describe pricing decision: objective, competitors, costs, price change, sales volume and regulation. The respondents were provided with a list of 10 items of pricing factors and were asked to indicate, using a three point scale (1 = Not agree, 2=neutral and 3=agree), how important they considered each one of them in pricing decision.

A hundred (100) outlines of research's questionnaires were delivered randomly by my students in management accounting classes to the owner of several manufacturing companies throughout Jogjakarta. The outline gave early information of the type of information to be collected in the interview. Cunningham and Hornby (1993) stated that the aim of this was to cut the downtime wasted in the interview and also to ensure that the right person would be available for interview. A total of fifty two (52) manufacturing companies located in Yogyakarta agreed to be interviewed in this research. The in-depth interview was conducted to collect the information needed

in this research. The data analysis was done by using statistics descriptive by comparing the percentage of medium and bigscale firm and exporting and non-exporting firm for each research question.

Table1
Sample Discription

	N=52	%
Sales area		
1 export	22	38.46 %
2 Non- eksport	30	61.54 %
Numbers of Employees		
1 20-99 (medium)	33	63.46 %
2 >= 100 (big)	19	36.54 %
Price Evaluation		
1 Less than 1 month	8	15.4 %
2 Between 2-3 months	12	23.1 %
3 Between 4-5 months	2	38 %
4 Between 6-7 months	30	57.7%
5 More than 7 months	0	0

4. THE RESEARCH FINDINGS AND DISCUSSION

Analysis of the data reflects the answer of respondents concerning the pricing practices in their firms. There are six questions in this reserach: (1) what is the objective of the pricing; (2) what is the role of competitors;(3) what is the role of costs;(4) when is the time to do price changes;(5) what does the firm do to increase the sales volume and (6) what is the role of government's regulation. The analysis was based on the number respondets who answer "agree" on every question.

4.1 Objectives of pricing

As can be seen in table 2, the most majority of the respondents answer that there are two main pricing objectives: the first is achieving the target profit (80,9%), that more short-run perspective and the second one is maintaining their market share (86,5%) that is more representing long-run perspective. This result was lineant to the research done by Lawrence Gordon and Robert Cooper (Gordon; Cooper; Haim and Miller, 1981) that stated in general, the literature said that the single goal of the firm in setting their price is maintaining the profit maximization. The result

uncovers that the objective of pricing is multiple, not only single objective. Apparently corporation pursues multiple objectives in setting their pricing. Table 2 reveals that the pricing objectives do not differ between medium and big sized firms. Although the most important objective for medium firm was to sustain the market share, that was more longrun oriented, on the other hand, the objective for bigsize firms was more shortrun oriented. The same result was similar in the sales area, exporting firm focused more on the short-run but for non-exporting firm focused more on the long-run .

Table 2
The Objectives of Pricing

Description	All	Firm's scale		Sales Area	
		medium	big	export	non
Maximize the firm profit	59.6%	48.5%	78.9%	59.1%	60.0%
Achieve the target profit	80.8%	69.7%	100%	81.8%	80.0%
Sustain the market share	86.5%	87.9%	84.2%	77.3%	93.3%
Cover all variable costs	26.9%	30.3%	28.6%	18.2%	33.3%

4.2 Determinants of Price

There are several elements that are considered as the most important factor in setting the price. This research only identifies 5 elements: cost of good sold, factory overhead, competitors, customers power purchase and specific customer. As presented in table 3, most respondents selected costs as the most important element in setting their price. This condition was similar to all types of organization whether it was medium or big-sized firm and also for exporting or non-exporting firms. Interestingly, costs appeared to have the most influence in setting prices with almost 92,3 percent of the respondents said that costs of goods sold were important elements in price setting and 76.9 percent said that overhead costs were also important in price setting. Cost of good sold represent the total production costs in manufacturing firms. It consists of direct material, direct labour and factory overhead. From the cost behavior perspective, direct material and direct labor are variable costs, on the other hand factory overhead cost can be variable and fixed costs. The difficulties in controlling and estimating the cost were also different. It could be said that the accuracy of product cost calculation would determine the quality of product's price.

Table 3 also revealed that only 51.9 percent of the respondents answered that competitors was an important element in price setting. The result also represented

that the respondent felt external factors (competitors and customers) were less important compared to costs. It was more difficult for a company to control and to predict external factors rather than internal ones. The interesting result found for exporting and non-exporting companies. For exporting companies, the willingness customer to pay was perceived more important than competitor price but for non-exporting companies the situation was vice versa.

Table3
The Elements that influencing Price Setting

Description	All	Firm's scale		Sales Area	
		Medium	big	export	non
Cost of good sold	92.3%	90.9%	94.7%	90.9%	93.3%
Factory overhead costs	76.9%	81.8%	68.4%	68.2%	83.3%
Competitor's price	51.9%	51.5%	52.6%	40.9%	60.0%
Customer willing to pay	44.2%	41.4%	47.4%	50.0%	40.0%
Group of customer	38.5%	39.4%	36.8%	36.4%	40.0%

4.3 Factors considered in changing prices

Theoretically, price setting was a short-term decision that will be evaluated in less than 12 months or a year. The respondent considered to change the prices if there was changes in one or more factors. The most significant factor leading to price change were costs with 94.2 percent of respondent chose this option. This result was consistent with the previous answer that revealed costs were the most important factor in pricing. Costs of goods sold represented the production costs for product sold that consist of direct material, direct labor and factory overhead costs. All type of company whether medium or big-sized or exporting and non-exporting firms tended to answer the same factor. It seemed that customer only had the least influence on initiating a price change with only 50 percent. In the global competitive market, the customer was the most important factor that will determine the existence of a company. If the company's products were chosen by customers, the company would have been able to maintain the position in the market, however if the customer did not select the company's product, the company would have been get into trouble.

Table 4
Factors Influenced the Price Changes

iItems	All	Firm's Size		Sales Area	
		medium	Big	export	non
Cost for good sold	94.2%	93.9%	94.7%	86.4%	100%
Factory overhead costs	78.8%	90.9%	57.9%	68.2%	66.7%
Competitor's price	55.8%	57.6%	52.6%	45.5%	63.3%
Customer	50.0%	54.5%	42.1%	45.5%	53.3%

4.4. The use of price change to increase sales volume

Economics theory said that the price change for a good or service offered by a firm would have an effect on the number of units sold. It is said that if a price decreases, the consumer demand will increase and subsequently sales volume will also increase, on the other hand if a price increases, the consumer demand will decrease that will increase the sales volume. Price can be used to compete with competitor in getting consumers. This study tried to ask respondent whether they used the price as a tool to increase their sales volume or not and the answer were presented in table 5 below. More than 50 percent respondents (55.8%) did not use product's price to win the competition, because only 44.2 percent believed in using the price to compete with their competitor, however the exporting firms believed more in using this strategy in winning the competition rather than non-exporting firms. Table 5 showed the diversity tools in increasing the sales volume on medium and big-sized firms. For medium companies, they believed more in the radio advertisement in increasing the sales volume rather than advertisement in on-line media. The exporting and non-exporting firms believed the same tool to increase their sales volume, which was on-line media advertisement. The respondents believed that advertising their products on on-line media would create more influence in increasing their sale volume compared to other tools. The research showed that 63.5 % would use advertising in on-line media in increasing sales volume.

Table 5
Tools to Increase the sales volume

Items	all	Firm's size		Sales Area	
		medium	Big	exsport	non
Decreasing the sales price	44.2%	42.4%	44.4%	53.5%	36.7%
Advertising on media	46.2%	66.7%	50.0%	40.9%	50.0%
Advertising on online media	63.5%	63.6%	55.6%	56.5%	70.0%
Advertising on television	30.,8%	30.3%	33.3%	18.2%	40.0%

4.5 The Role of regulation in pricing

The main objective of regulation, especially government's regulation, is to protect society, employees, environments or other certain group. In Indonesia the government controls the gasoline and electricity price to protect the society. The Indonesian hotel and restaurant association controls the hotel room rate to reduce the unfair competition among them and to protect consumers. The research finding conveyed that the central government regulation had been more considered by exporting firms (45.5%) in pricing but the local government regulation had more influence to non-exporting firms in determining their price (56.7%). Table 6 also stated that the central government regulation was more considered in pricing for big firm but local government regulation had more influence on medium firms.

Table 6
The Impact of Regulation

Regulator	All	Firm's size		Sales Area	
		medium	big	Exsport	Non
Central Government	40.4 %	35.7%	40.8%	45.5 %	45.5%
Local Government	51.9 %	54.6%	23.1%	36.3%	56.7%

5. CONCLUSION

The research found that manufacturing companies in Yogyakarta had more than one objective (multiple) in setting their price. However, the main objective of pricing decision for big-scaled companies was to maintain its market share and for medium-scaled was to achieve their target profit. It could be said that medium-scaled firms emphasized more in short-term objective, while big-scaled firms focused more on long-term ones. The most important finding was that the main factor that influenced the price was cost of good sold for all the samples. In manufacturing companies, cost of goods sold represented production costs for units sold that consist of direct material, direct labor and overhead factory costs. There was no difference between big-scaled and medium-scaled companies on that finding. Cost was also the most important factor that influenced the changes of the price. The other finding was that all samples believed the price change will not be effective to increase the sale volume. Regardless the findings, this study also had some limitations. The limitation was related to the sample. Because the sample was in one region, the sample could have similar characteristics that would influence the research findings.

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