Int. j. adv. multidisc. res. stud. 2023; 3(5):1104-1107

Received: 29-08-2023
Accepted: 09-10-2023

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

The Theoretical Basis of Cost Management Accounting Methods in Product Pricing at Manufacturing Enterprises

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Abstract
Determining a reasonable product selling price to bring high efficiency to business activities is one of the important issues of corporate governance. When making pricing decisions, managers rely on many different sources of information with different pricing strategies, but the role of cost information cannot be denied. In terms of economic efficiency, the selling price of the product must cover costs and create profits for the business. The article explores the theoretical basis of the system of management accounting methods, including the variable cost method, the full cost method, and the activity cost method. From there, research methods of product pricing based on cost. The article also explores factors that affect cost-based pricing methods, including business strategy, business scale, market share, competition in the business environment, product characteristics, cost information, level of influence in determining selling price, and business lines.

Keywords: Cost Management Accounting, Pricing, Manufacturing Enterprises

1. Introduction

In the market economy, the role of cost management accounting information is increasingly expanding and affirming its development position. The basic reason is due to fierce competition between businesses and economic groups. In that competition, businesses and economic groups can succeed or fail. One of the important factors leading to the success or failure of businesses is information about cost management accounting. The importance of cost information to management activities has raised the need to develop a method capable of providing appropriate, timely, and reliable cost information for planning, controlling and using resources, evaluating performance, and making business decisions. Product pricing is one of the most important and complex decisions a business must make. The pricing decision is not just a marketing decision or a financial decision; it is a decision that affects all activities in the business. To make good pricing decisions, administrators must be provided with complete information, especially cost information. Cost is the starting point of price, and cost is the lowest level to which price cannot fall in the long run. Therefore, operating a management accounting system to provide cost information in product pricing is a core issue for maintaining and developing a business. The article mentions cost management accounting methods applied to pricing businesses' products.

2. System of Cost Management Accounting Methods

Drury (2004) [1] "The terms variable cost pricing or margin pricing are commonly defined to describe prices in the short term of variable cost pricing," and "in the long term, both variable and fixed costs must both be considered in pricing if the company is to survive." Thus, the selling price of the product in the short term only needs to offset variable costs, but in the long term, the selling price must offset the long-term costs of replacing resources. Classifying costs according to their relationship with the level of activity (variable costs and fixed costs) is an important cost classification in determining the selling price of a business. Within the scope of this article, the authors discuss the following cost management accounting methods: Variable cost method, full cost method, and activity-based cost method.

Variable Cost Method

The variable cost method only identifies production costs that vary with output to be included in production costs. It usually includes direct material costs, direct labor costs, and variable manufacturing overhead costs. Fixed manufacturing overhead costs are included in period costs, so they will be recorded in full in each period to determine profit. According to Garrison *et*

al. (2010) [2], the variable costing method is sometimes referred to as the direct costing or marginal costing method. The characteristic of the variable cost method is to consider variable costs and ignore fixed costs.

Full-Cost Method

The full cost method determines both variable manufacturing costs and fixed manufacturing costs for a product. Depending on the cost method used, accountants determine variable costs or factor both variable and fixed costs into the product value. Determining variable costs for cost objects does not pose any problems because all cost methods can trace variable costs to specific products. On the contrary, fixed costs are often common to many products, so it is difficult to calculate them separately for each product. Fixed costs must then be determined for the products using cost allocation. The cost allocation basis uses significant cause-and-effect as the cost determinant. According to Garrison (1991) [3], it makes no difference whether the cost of production is variable or fixed. Fixed production costs, such as depreciation and salaries, are as important as variable costs and therefore cannot be ignored for the product.

Activity-Based Costing (ABC) Method

According to Garrison *et al*. (2010) [2], activity-based costing is a costing method built to provide managers with cost information to make strategic and other decisions will likely affect productivity. The ABC method is based on the basic principle that products consume activities and activities consume resources. ABC determines costs by activity and then allocates costs to products based on the relationship. Cause and effect If the full costing method is developed to provide data for external financial reporting, the activity costing method is developed for use in decision-making. Therefore, according to Garrison and colleagues, the full cost method differs from the ABC method in three points: Production and non-production costs are allocated to the product but only based on cause-and-effect relationships; some costs are not included in product costs. Multiple overhead costs are used, each of which is allocated to products and other cost objects that use a separate activity measurement method.

3. Cost-Based Pricing at Manufacturing Enterprises

Variable Cost-Based Pricing

Using variable costs in product pricing, cost elements in base costs are calculated using variable costs without taking into account fixed costs. Garrison (1991) [3] calculates base costs, including all variable costs, including production variables, sales variables, and business management. No element of fixed costs is included in the base cost, so the additional amount must be enough to offset the fixed costs as well as create an expected profit. In addition, base costs can also only include variable production costs, so all fixed costs and variable sales and administrative costs are included in the addition so that the price is determined to compensate. All costs and make a profit. Thus, according to the author, it is possible to choose a base cost that includes production variability or includes both production variability and sales and business management variability.

Base costs are all variable costs.

*Price= The variable costs + Add-on rate * variable costs*

Base costs are variable costs of production.

*Price = Variable costs of production + Added rate * variable production costs*

Source: Compiled by the author group

In a competitive market, prices based on variable costs can provide better performance than prices based on full costs, as they tend to be lower. Furthermore, the variable costing method does not require fixed costs to be allocated to products. It is argued that most companies today operate in multiple markets with multiple products manufactured by different processes, making accurate cost allocation nearly impossible. Therefore, companies can avoid this problem by using only variable costs.

Full Cost-Based Pricing

Garrison (1991) [3] emphasizes that, according to the full calculation, the base cost is determined as the cost to produce one unit of product. Selling and administrative expenses are not included in the base costs but are calculated in the add-on portion. At that time, the additional amount of money must be large enough to cover these costs and create a satisfactory profit balance for the company. According to Drury (2004) [1], background costs can be all costs, including production costs, sales costs, and business management costs. The markup is then calculated only to provide an acceptable profit margin.

Base costs are production costs.

*Price = Production cost + Added rate * Production costs*

The base cost is the total cost.

*Price = Expense + Additional Rate * Cost*

Source: Compiled by the author group

Cooper and Kaplan (1988) [4] argue that there are two main reasons for using full cost as the cost basis in making pricing decisions. First, full costs are available, so businesses can easily use this cost information to determine product selling prices. Second, fully cost-based pricing can provide a safe price that is sufficient to cover costs and generate profits. Pricing according to the full cost method shows that the information structure of the price components is consistent with the information in the financial accounting system. However, this method lacks flexibility in price adjustment. The components of base costs and additional costs include a mixture of both variable costs and fixed costs, so when the level of production and business changes, it is difficult to determine and forecast base costs and additional costs. extra money. On the other hand, in competitive conditions, if you want to lower the price to the minimum level, the minimum price cannot be determined. Price at full cost, often using an arbitrary cost allocation basis. Determining fixed costs for products is not based on a cause-and-effect relationship.

Activity-Based Costing Pricing

Cooper and Kaplan (1988) [4] emphasize that most pricing and other decisions affect a company's long-term capabilities and that these decisions should be made based on long-term *coverage prices, not short-term ones. In fact, much recent* research in management accounting has focused on designing cost accounting methods where product costs are determined more accurately. Many researchers have advised businesses to use activity-based costing (ABC) to provide product cost information for

decision-making. Shim and Sudit (1995) [5] explain the rationale for continuing to use full-cost pricing. According to them, implementing the ABC method has the potential to rationalize the allocation of fixed costs and make them appear variable or semi-variable. Additionally, the ABC method enhances the way fixed costs are determined for a particular product and leads to a better allocation of costs. They concluded that the ABC method provides more accurate product cost estimates, which are the basis for determining prices on a full cost basis. Implementing the ABC method tends to provide information for the common use of pricing on a full-cost basis in practice. Drury (2004) [1] states that the activity-based method measures all organizational resources required to produce the product and calculates the average long-run product cost. This method calculates long-run product costs more accurately than the full method. Therefore, it is recommended to use costs from the ABC method for long-term pricing decisions and the variable method to determine incremental costs for short-term pricing decisions. Thus, ABC streamlines fixed cost allocation, providing more accurate product cost information for pricing decisions. Using ABC, the inherent limitations of the full cost-based pricing method will be overcome.

4. Factors Affecting the Cost-Based Pricing Method

Business Strategy of the Enterprise

According to Garrison *et al*. (2010) [2], there are three major business strategies: Customer friendliness: understanding and meeting customer needs; operational excellence strategy: providing products at the fastest cost. Lowest and product leadership strategy: Providing the highest quality products. Businesses that choose a low-cost strategy often require large-scale production, pursuing the goal of reducing costs through experience or by controlling fixed costs. According to Govindarajan and Anthony (1983) [6], companies pursuing a quality leadership strategy cannot ignore costs. Companies adopting this strategy need to have accurate product cost information to be able to determine the higher profits generated from cost-added products combined with a quality strategy. Hughes and Gjerde (2003) [7] argue that product differentiation makes prices more flexible, but it is an expensive strategy to pursue. Where products are different from competitors' products, competition-based pricing will not be able to inform businesses about price ranges.

Enterprise Scale

Gordon *et al*. (1981) [8] argue that companies with large revenues and assets tend to set prices above competitive levels, while small-sized companies tend to set prices at competitive levels. Large businesses often dominate the market and have the ability to set prices for the market. These businesses have the ability to use cost information to set prices. Furthermore, according to Guiding *et al*. (2005) [9], large enterprises will have the resources to build modern cost systems for effective cost-based pricing. In contrast, small businesses are often price-takers; they often set their selling prices at market value.

Market Share

Companies with large market shares often have differences in product characteristics and product quality compared to other companies. These are the market leaders who set product prices in the market, so product prices are often determined through cost data. Typically, companies with larger market shares often need more resources to invest in complex accounting methods to accurately determine indirect costs for products. When costs are calculated accurately, it creates conditions for calculating a reasonable product selling price. A company with a small market share, whose products are not differentiated from other companies, applies industry prices to its products and then uses cost information to decide. How much product should be produced and consumed? However, many companies with low market shares tend to operate in niche areas where products are predominantly custom-made. Firms with lower market shares place more emphasis on cost-based pricing. At that time, the lower the market share, the more attention is paid to the cost-based pricing method. Gorden *et al*. (1981) [8] argue that companies that wish to penetrate the market to maximize market share tend to set prices based on market factors rather than on a cost basis.

Competition in the Business Environment

Guiding (2005) [9] argues that as the business environment becomes increasingly competitive, cost information plays an increasingly important role. Costs need to be calculated accurately to determine the lowest price that the business can accept. High prices compared to competitors will cause businesses to lose their ability to compete in the market when products have no differences. If a business's product has new features to serve customer needs and increase customer value, the business must consider the additional costs of adding new features to the product. The price and quality of competing products become important to the survival of the product line.

Product Characteristics

Gordon *et al*. (1981) [8] argue that companies that produce products according to customer requirements rely more on cost-based pricing instead of pricing based on market factors. Drury (2004) [1] argues that companies selling customized products will force their customers to accept a price that the company sets based on cost plus because the market does not exist at prices for such specific products. Guilding *et al*. (2005) [9] argue that customized products will result in high prices, so it can be expected to increase the importance of cost-based pricing. Therefore, the higher the level of product required by the customer, the more it affects the cost-based pricing method.

Cost Information

Blois *et al*. (2000) argue that cost knowledge is an important input to pricing. The cost of the product forms the basis on which a price can be established. Cost is the starting point of price; businesses need to calculate accurate costs as a basis for setting reasonable product prices. High prices will cause businesses to lose competitiveness, while low prices will cause businesses to not make the desired profits. Atkinson *et al*. (2007) take the view that managers use cost information to help in setting prices. Cost information is important information that helps managers set prices and make product structure decisions. According to Phillip Kotler (2000), costs are considered important for establishing the price level. The company aims to charge prices that cover all costs: production, distribution, and a reasonable profit margin. Therefore, managers should monitor costs carefully because if these costs are higher than competitors' costs, the

company will make less profit and will be at a competitive disadvantage.

Degree of Influence in Determining the Selling Price

In a competitive market, there are a few large companies that dominate prices and many small companies that become price chasers and must accept prices determined by the market. Therefore, for price-taking companies, cost information is not used to set selling prices; instead, prices are set according to market prices. Gordon *et al*. (1981) [8] show that price-chasing firms are more concerned with market conditions than costs than price-setting firms. Guilding *et al*. (2005) [9] also argue that companies that produce undifferentiated products are price takers, and cost information will not be valuable in setting selling prices.

Business

The business industry is also a factor that affects product pricing. Compared to the service and retail industries, industrial manufacturing companies often incur more overhead costs due to investments in factories, infrastructure, machinery, etc. Allocating general costs to products for pricing purposes in manufacturing enterprises is also more demanding and complicated. Compared to manufacturing companies, it is relatively easier for retail companies to track their costs for products sold at retail. Because retail companies have complete documents related to all products sold at retail, The ratio of direct costs among retail companies is relatively high compared to manufacturing companies. Companies in the service sector have a high proportion of employees working toward providing services. Unlike in the manufacturing and retail sectors, many products sold in the service sector have no exact substitutes. Therefore, it is possible to clearly distinguish the products and services provided between companies. Therefore, product pricing in the service industry tends to be price-oriented rather than price-accepting. Therefore, comparisons between retail, service, and manufacturing industries will have different effects on cost-based pricing methods.

5. Conclusion

The article has presented basic theoretical issues about cost management accounting methods in product pricing. This article evaluates the appropriateness of each cost-based product pricing method in specific management situations in order to draw directions for improving the application of cost management accounting in product selling pricing in Vietnam. Manufacturing enterprises. In addition, the authors also present factors that affect cost-based pricing methods in businesses. Through the presented theoretical basis, future studies can be used as a measure to evaluate the current status of applying cost management accounting methods to product pricing at manufacturing enterprises.

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