

## **ACCOUNTING ASPECTS OF PRICING AND TRANSFER PRICING**

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**ABSTRACT:** *The pricing methods in practice need really complex view of the business situation and depend on the strategy and market position of a company. The structure of a price seems simple: cost plus margin. Both categories are special area in the management accounting. Information about the product costs, the allocation methodologies in cost accounting, the analyzing of revenue and different level of the margin needs information from accounting system. This paper analyzes the pricing methods from management accounting aspects to show out the role of the accounting system in the short term and long term pricing and transfer pricing decisions.*

**KEY WORD:** *pricing; transfer pricing; cost plus method; market price; break-even point.*

**JEL CLASSIFICATION:** *M41.*

### **1. ABOUT PRICING IN GENERAL FROM THE ASPECTS OF AN ACCOUNTANT**

At each level of corporate management, fast and effective work requires the supply of reliable and up-to-date information to the decision-makers, the involvement of experts, competent in professional and corporate strategy issues in decision-making and their responses to environmental effects within the shortest reaction time. By achieving this, in a decentralised company the divisions formed based on activities are individually responsible for influencing the results with their decisions. Thus the independence of divisions and the nature of their responsibilities may be different, depending on how the inputs required for their operation and their outputs are affected by their decision-making freedom, i.e., how they influence the results.

It is absolutely necessary to reconsider the organisational structure of the company if we talk about transfer prices, because a transfer price can only be used if

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the appropriate system of responsibilities is put in place. These days this issue is becoming increasingly important. Respect for international guidelines and the coordination of the national tax systems accordingly become increasingly important, and the documentation of co-operation is an even greater challenge with regard to domestic corporate groups. Naturally, financial management considers the transfer price issue important with regard to tax regulations and sanctions, yet transfer prices are much more widely related to accounting.

The prices of issued products and performed services are entered into the accounting information system through the sales revenues of the enterprise. The sales revenue is a fundamental component of one of the most important accounting documents therefore the issue of pricing is especially important in financial accounting. On the other hand, management accounting, which performs the internal information supply functions of accounting for the most extensive analysis and planning of the activity, relies on the prices and the external and internal environmental factors affecting them. However, as the realisation is fundamentally related to the output of the enterprise (sales), a lot of functions relate to pricing which are important in production and sales. This topic is not clearly an accounting topic, it must be managed within the complex system of corporate governance. However, below I shall still try to identify the criteria applicable to pricing from the point of an accountant.

## 2. PRICING METHODS

The category and process of pricing is a rather complex issue. With their output, enterprises obviously intend to cover their resource consumption and all other expenses related to their operation, yet they cannot achieve long-term profitable operation without the consideration of the market factors, relying only on the internal information system. Consequently, there are two basic theoretical pricing methods, the cost-based and the market-based pricing.

The *cost-based* method is a seemingly easy method based on costs and the expected profit. On the other hand, both categories require a wide information base and a diversified analysis. The cost content is fundamentally based on the historic value of the product. The direct resource requirement of the historic value can generally be measured well, yet naturally the price must also cover the expenses which cannot be directly allocated to the product or activity for the purpose of long-term operation. Consequently, the allocation of the expenses classified as general expenses requires the reconsideration of the processes. With regard to general expenses, the traditional cost calculation can be mentioned among the allocation options, during which the general expenses are allocated to the cost bearer based on a selected cost characteristic, but we can also opt for the ABC (Activity Based Costing) cost allocation, during which the cost drivers, influencing most the serving processes, are used as the basis of allocation. However, as pricing does not take place subsequently, based on the actual data of the production process, the cost structure and cost information can be used consistently only on an empirical basis, by taking into account the future estimated impacts and using a thorough planning system. Naturally, on the one hand, this inspires experts to

think prudently and, on the other hand, it also calls for the application of some standard in order to simplify the calculation process.

Whenever prices are established, the market conditions must also be taken into account. It is important to assess the price acceptance and pricing policy of the market actors, i.e., the conduct, price sensitivity and pricing practice of the customers and competitors. In this context, the microeconomic model considers the estimated demand and supply functions the most important factors. However, there are numerous limits for that in practice. It is also true that no price can be established with sufficient profitability without the thorough knowledge of the market. The experts need to understand the market product structure, in which they sell their products in order to be able to assess the substitute products and the price reactions of the manufacturers and to also understand the decision-making habits of their customers. In other words, they must understand the other factors that also influence the purchases apart from price and can have an impact on the entire activity in terms of the product structure (material consumption, accessories, function, quality, etc.) and sales processes (advertising, other marketing-type relationship with the consumer, etc.).

In market-based pricing, the cost structure, with the help of which the expected profit can be achieved, is established on the basis of the price formed according to the market information. This concept refers back to the target cost calculation topic, where the historic value of the product is established on the basis of market information, by taking into account the customers' requirements in terms of quality, related services, durability and substitution. In this context, the required profit is an exciting issue. The profit can be defined by combining several factors. The required profit is a key issue mainly for those stakeholders who measure the activities of the enterprise in the profit or their profit share. The degree of profitability is limited by their interest in the profit, yet the volume of the budgeted costs represent a minimum limit too, because the manufacturing of a product requires certain resources, which may be changed only by deteriorating quality or functionality if the intention is to increase the profit.

### **3. LONG AND SHORT TERM THINKING IN PRICING**

It is obvious that these two methods cannot be the pure basis of a pricing policy at an enterprise, but the preference order can be established by applying some key factors. On the one hand, the market share of the enterprise limits its pricing conduct. A company with a considerable market share has a price setting position in cost calculation and in the establishment of the historic value of the product compared to another enterprise which must fit into its cost and income budget on the basis of the market prices. According to the price setting role, the enterprise may define the historic value of the product by integrating the actual resource requirement and define its price on the basis of the principle of covering the total costs, estimated on the basis of empirical experience and calculated with strategic steps.

Short-term thinking practically applies to ad hoc contracts and irregular customer relations. In the sales activities of each enterprise there are ad hoc orders originating from irregular business activities of new customers or existing customers.

Naturally, an enterprise with a price setting role has a much wider scope of competence also in this respect than enterprises that follow the prices because the maximum utilisation of the capacity limits is sufficient motivation for accepting an order. In this respect the pricing itself could be a special issue and instead of the general pricing model a price generated on the basis of the additional expenses for an order facilitating capacity utilisation could be an attractive offer. In general, the additional expenses can typically be considered the variable costs of the product. In this context, the cost content used in pricing could be significantly lower than in the pricing of a usual and ordinary trade relationship. The scope within which the enterprise can stretch itself in order to generate the profit margin included in the price must be defined not only on the basis of the information contained in the accounting records, because the understanding of the specific market conditions and factors causing the change relate to the competence of another enterprise management unit. Anyhow, accounting can provide the following information for decision-making:

- the variable costs associated with the product (product service)
- the degree of capacity utilisation
- the output margin
- the output level at the break-even point
- the impact of capacity utilisation on the margin by product
- potential capacity enhancement due to special orders, its availability in time and its impact on the prime costs.

For an enterprise that follows the prices in terms of its market position, this problem concentrates more on the need of understanding the capacity limits. With regard to fixed market prices, the enterprise could be open to any business relationship that can provide sufficient profit for it. Naturally, the attempt is to increase capacity utilisation, and therefore the enterprise is fundamentally interested in accepting special orders up to the maximum of its potential capacity. The accounting impact of this will definitely be positive, providing that the enterprise still does not have any influence on pricing, because any price decrease would 'attract the anger' of the major market forces, which would be detrimental for its long-term presence.

#### **4. PROFIT MARGIN**

Some sort of general pricing model needs to be developed in order to enable an enterprise to manage easily its decisions related to its output and market relations. In this context, the accounting information system can be used as the main information base. What information may be needed and how can the pricing framework be established in internal communication? First of all:

- The variable costs of products and activities must be understood. This method is covered in the Prime Cost Calculation Regulations (which is part of the Accounting Policy);
- The resource requirements of the operation of the enterprise, i.e., the general expenses of the company, without which market presence is unavoidable, also need to be understood;

- The profitability requirement for achieving the strategic goals of the enterprise must also be calculated.

In the market realisation process, the product issuer intends to cover all the above factors with the price formed in the trading relationship, but the profit amount is the specific margin which covers the permanent costs of the activity and the income realised on the product. This can be identified on the basis of empirical data and the estimated changes of the fixed costs. However, on the basis of the accounting information system, the margin may be analysed further in order to make the fixed asset value required for the activity and the profit impacts of the serving processes clear. The assets required for operation must be interpreted more widely than the value of fixed assets and intangible assets. These asset groups naturally fix the company's funds for a longer term and naturally with regard to their return the analysis can be based on the profitability of the long-term financial investments. It needs to be noted that the amortisation of the invested asset value is usually an item appearing among the fixed costs to be covered, therefore the capacity utilisation level of those definitely influences the recovery period.

However, tangible fixed assets and intangible assets represent only one area in the fixed asset value category, because the assets of the enterprise contain also components that are necessarily created in the operation, yet the improvement of their efficiency has a fundamental impact on the costs and income of the enterprise and the estimated profit, and therefore it should be interpreted as a factor affecting the pricing process. One issue is the inventories relating to the activities of the company and generating a warehousing demand. The analysis of inventories is an important aspect of the review of the financing activities with regard to purchased and produced inventories. Not only because the liquid assets invested into the inventories were taken from other financing processes and with regard to short-term use the risk is more complex, but also because warehousing is a rather cost intensive activity. The adequate level of inventories, the resources required for their warehousing and the mitigation of the risk factors need to be planned thoroughly when prices are established.

The volume of accounts receivable is also important in terms of the expenses of the trading process. The liquidity situation is a typical risk factor related to accounts receivable. On the other hand, the maintenance, or potential improvement of the turnover of accounts receivable, and the minimisation of loan losses require an effective customer monitoring and management system.

Consequently, when an enterprise establishes its margin, it can strive for the recovery of the capital invested into the areas referred to above and to achieve the profit projected from the business in the form of the margin contained in the price. With thorough analyses, the ROI (return on investment) based pricing method can be applied effectively, forming the invested capital category according to the outlined capital components and calculating the appropriate risk factors into the expected recovery with regard to all categories. It is an important advantage that all capital fixing referred to above are typical factors in the corporate performance evaluation. Naturally, even so truly relevant return figures can be calculated only with longer-term data and a longer-term activity base, assuming a certain level of long-term capacity

utilisation. It is difficult to manage the impacts and changes of the economic environment, and pricing itself cannot be sufficiently flexible.

## 5. INTRA-COMPANY PRICING RELATED TO TRADING RELATIONS

Pricing is an especially exciting aspect of the intra-company trading relations. Naturally, intra-company trade relations take place only if the corporate activities are performed in separate organisational units and these units are interested in making profit and their performance measurement depends fundamentally on their profit impact, influenced by their decision-making responsibilities. It is definitely important to indicate that naturally the internal sales prices are assessed assuming that the purpose is to establish a price that has some profit content, otherwise we could only talk about cost allocation. Under such conditions, the organisational units can apply the pricing methods referred to above with regard to the services rendered and goods sold to each other, i.e., they can use market-based pricing and cost-based pricing. However, the application of these basic types is interpreted differently than their general concept.

With regard to *cost-based pricing*, the accurate prime cost calculation is as important for internal sales as for external sales, and, in fact, certain cost elements can be avoided through the co-ordination of certain partial processes of the entire activity. Typically those costs can be included in this category which incur in the sales process of the product, with regard to certain special customer requirements. The examples could include the costs of packaging, transportation or supply of information to customers, which are not required due to internal use, or can be simplified. However, even in cost-based pricing it is important to integrate into the price the fixed costs required for the long-term operation of the enterprise and to consider also the degree of capacity utilisation. If the function of a particular organisational unit is to ensure the operation of the entire enterprise then, naturally, the maximum capacity must be built in line with the capacity of the other units. Otherwise, on the basis of internal prices, too high fixed costs must be assumed, which may result in a distorted historic value. Even in such cases it is necessary to consider seriously the margin of the price, because the thus calculated margin will be practically the distribution of the total company-level margin among the divisions. Naturally, the divisions may have an impact on the amount of profit based on their decision on internal efficiency, but the consideration of the costs required for the activities is always important in the selection of the average margin. As an example, let us assume an enterprise with two divisions, one of which manufactures and the other one performs distribution tasks. If the activities of the manufacturing division also contain product development, then the costs of product development represent a considerable amount of general expenses which must be taken into account during the distribution of the margin earned at company level. Otherwise, the internal conflicts will have a detrimental influence on the total company interests.

According to the research results, the internal prices are established most frequently with the total cost based pricing method. However, if an internal supplier has a trading relationship with several internal customers, the total cost content is not necessarily a good basis, because the services assisting the activities of the division are not always used equally. Naturally, a solution could be activity-based cost allocation

and the planning of needs, thoroughly considered with regard to customer requirements.

*The market-based pricing* can be applied in intra-company trading practices if the divisions of the company have full independence and maximum freedom in establishing their performance. In such cases they rely on reasonable criteria in purchasing their resources in order to achieve the maximum profit, i.e., they will opt for the lowest possible price. This means the review of the offers of the market actors. With regard to market prices, the pricing structure should be reviewed not only from the aspect of the internal purchaser, but also from the aspect of the sales unit. As the market realisation process is a factor generating basic performance for a division operating as a profit centre, it is a natural process to select the best sales opportunities in line with the better utilisation of the capacities.

What price range can the seller and the buyer envisage in relation to intra-company sales? The ceiling of the price range is determined by the customer, because he will not pay more than the lowest price available at external suppliers. The upper range can be more flexible, depending on the capacity utilisation level at which the seller can operate his activity. Consequently, with maximum capacity utilisation for longer-term contracts, the range can be narrowed until it reaches the price established on the basis of the highest sales price on the market, taking into account the costs avoidable in internal sales and preferences given for the purpose of capacity utilisation.

What was said above clearly indicates that in terms of settlement prices the accounting information system has a very important role, regardless whether we analyse the cost of the product, or the profit required for long-term, effective operation. On the other hand, co-operation among the divisions of the company is typically a long-term strategic interest, which requires consideration of the interests of the divisions and the establishment of incentive systems with regard to transfer prices. The data provided by the accounting information system are important not only for the contents of those expenses, but also in the selection of the methodology applied to performance measurement. However, in internal price negotiations the thorough knowledge of external market prices is also necessary, which must always be taken into account in internal co-operation.

## 6. SUMMARY

*In summary*, the accounting information system has a fundamental role in pricing, as it fully grasps all processes of the business activities in terms of accounting. The price cannot be established without management accounting or cost accounting analyses. Although the financial statements disclose very little information in this respect, it is important for each enterprise to insist on a structure that supports pricing when it establishes its internal calculation system. It is also true if the divisions of the company realise the profit of their activities on the internal market and, in fact, profitability and expenditure become even more important in this case due to the performance measurement interests formed in line with the responsibilities of the division.

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