Accounting Aspects of Pricing and Transfer Pricing Decisions

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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. On the other hand pricing and transfer pricing systems need continuous control of their operation. Because of the transfer prices are useful assets in the management hand to allocate and maximizes the profit inside the company, there is need to evaluate the performance of divisions and to follow the expectations of tax rules. 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 and of inside and outside control.

Key word: pricing, transfer pricing, cost plus method, market price, break-even point

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 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

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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.

6 Transfer Price as a Management Asset – Advantages and Questions

When we are thinking about transfer price we can understand it is a very useful technique in the company management’s hand. We can summarise two main function of the transfer price:

1. **Profit allocation** inside the company. It means keeping the company strategy in the focus of the inside pricing decisions, the management can find the way to allocate the profit between divisions with slightly the performance evaluation system.

2. **Profit maximisation**. According to the knowledge of taxation systems the company management can transfer the profit between divisions to minimize the tax base or in multinational level to regroup the profit to the lower tax rate economical environment and minimize the global tax payment.

Both functions have advantages and disadvantages, and both of them needs information from accounting system to control or analyze the realization of profit allocation. Especially multinational companies (MNC) have challenges to build up acceptable evaluation system and to make documentation about the comparison of their transfer prices and the arms’ length prices. Lets take attention to the main factors of inside and outside control of the MNC’s.

**Profit allocation**

Transfer price is used in the inside merchandise transactions, the participants are independent companies with the right to make business decisions. Of course the decisions concentrate to the divisional objectives, but in the same time these have to be appropriate with the long term company strategy too. The situation needs a consistent performance evaluation system to keep the motivation on the division management level to follow the interest of company too.

The performance evaluation is part of the management accounting research area. Historically the techniques of analyzes based on different level of earning measurements. The most typical calculations are sales margin, operating profit, ROI. Of course these measures can be calculated easy from a good integrated system and can be used easy to evaluate the daily situations. The question is, how the motivation can be kept inside the daughter company if the transfer price gives
limit for example of the sales margin, or other part of profit structure? Is it really reasonable to use ROI if the investment decisions made and hardly controlled by top management? Can operating profit be motivator when fixed costs has directly invoiced management fee? In this case the company management has to find other factors to control the performance on lower level of the management, which can show clearer picture about the efficiency of their decisions. Of course there are some possibilities to measure the activity, for example to analyze the realized margins on the whole chain, to clear the fixed cost structure by inside invoiced services. On the other hand the evaluation system needs based always some kind of comparison. This is the reason the important role of choosing good bases of the control. Inside an international business organization the possibilities are more meaningful. The most important comparison way is coming from the budgeting system, which is determinate, the main expectations from the company, mainly decided by taking consideration of the specialities and approved by both side. The second evaluation possibility to make analyzes inside the MNC between the daughter companies’ measurements. It has to be important not only for get clear numbers, but the divisions can understand their place in the structure. The company management has to be careful with it in order to motivation. The daughter companies of MNC work in different environment and it also has effect to their performance, so during the setting up a performance evaluation system it has to be into consideration. Many of the factors of the circumstances are really independent of the company decisions but effect seriously to the performance. As the result of management accounting researches we can define the following environmental parameters:

- **Economical** differences are the most important environmental factors, because of the effects can be quantifiable. Under this category MNC-s have to calculate mainly with inflation and interest rates, fluctuation of exchange rates, restrictions or barriers in international trading, etc.

- **Political and legal** differences have to be considered because these factors mean high degree of risk or uncertainty of the MNC. Changing of the political forces and governments can effect to the efficiency of the legal system and acceptance of foreign businesses inside the country.

- **Educational** differences can be perceptible in quality and structure of education side of a country. It can be really attractive or retention too for foreign investors. The management style, reliability of their knowledge, expectations of management trainings and acceptance of company culture are depends on the educated level.

- **Social** environmental factors include cultural, moral and religious features of the country. These factors can be realized also in economical and education factors, because the acceptance and follow – up the laws and regulations depends on historical cultural and social changes.

**Profit maximization**
It is natural pursuit of MNC-s to maximize the profit by taking advantages of different taxation systems. By the internal sales between the daughter companies MNC can restructuring the realised profit according to the minimization of global tax payment. In the same time to increase market position on the global market, to handle the risk of exchange rate differences are also important objectives. From this aspect accounting systems have again important role to find out the differences between the taxations of the countries, analyze the risk of exchange rates, tariffs, duties and find the ways of transfers.

From this point of view transfer price category has been in the focus of international professional communication for many years. It is clear the countries with higher tax rate system have disadvantages if MNC transfers inside according to profit maximization. That was the reason a regulation was needed to handle this profit transfer between the countries.

The first regulation was approved in 1968 in U.S., Internal Revenue Code Section 482 set up the arm’s length price and three methods to calculate this price: 1. the comparable uncontrolled price method, 2. the resale price method 3. the cost plus price method. This regulation had been kept alive for 20 years, in 1988 White Paper was the first modification of IRS 482. In the White Paper there was suggestion to analyze the comparability an easy way, according to BALRM (basic arm’s length method) which is a solution when there are no comparable transactions or prices.

The next milestone in the history of regulation was the final IRS 482 in 1994, which determined (based on earlier year temporary regulation) that during the arm’s length analyzes the result of comparable transaction have to be under comparable circumstances. This final regulation gives five factors to analyze the circumstances: functions, contractual terms, risks, economic conditions and property or services being transferred, and provides six methods to determine the arm’s length prices: 1. the comparable uncontrolled price method 2. the resale price method 3. the cost plus method 4. the comparable profit method 5. the profit split method and 6. unspecified methods. The requirement is to find the arm’s length range by applying a single price method selected under the best method rule two or more uncontrolled transactions of similar comparability and reliability. Comparable profit methods was criticised, but it was explained by the following: the third party profit level indicators in the comparable profit methods may not account for relevant differences between the taxpayers being compared. The unspecified methods described as make-or-buy analysis. Summarizing the result of this final IRS 482, it gave more flexibility by choosing the best methods and in analysing comparable selection.

In 1995 the Organization for Economic Cooperation and Development (OECD) adopted rules of international transfer pricing. Based on these rules many countries have already built in their taxation and take attention to develop the control of internally used prices and required documentation. These regulations are consistent with IRS. Because of the importance of comparability the economic
environment has direct influence to the arm’s length price. During the financial crises there were so big changes in the factors that may be important when determining comparability. Finally OECD made revision of the Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations. The first three about the comparability and profit methods has detailed and one new chapter of report on the transfer pricing aspects of business restructuring was added. The short overview of the history of the transfer pricing regulation confirms and predicts the role of the transfer pricing administration. It is somehow a serious pressure on the management but in the same time need collection of the information about the external circumstances (market, competitors, different business strategies, etc.) and comparison with the internal factors.

7 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. If the divisions are daughter companies of an MNC and the inside transactions mean cross-border transfer property or services the essential role of accounting information system and task of financial administration is unquestionable. These tasks of management and financial accounting are somehow special areas, because the regulations around pricing and transfer pricing give frames of calculations, and thorough knowledge of business environmental is needed to provide reliable information to inside evaluation and acceptable documentation to the external sources of interest.

My opinion is the information about the inside trade of affiliated companies is important to the market players. At least the fact of using transfer pricing should have been part of the Notes of Financial Statement. According to the Hungarian accounting law we can see in the Balance Sheet the credit and debt with affiliated companies, but there is no more detailed explanation about transfer pricing principles, like methods and tax base modification. My objective is to analyze the tax reports of companies and make suggestion to develop the provided information about internal sales.

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