

Comparative analysis on cost price philosophy in national and international context

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Abstract

In time, Romanian accounting system had an evolution marked by important changes that illustrated certain oscillations between European Directives and IFRS. Major changes produced in the economic environment from our country imposed drastic transformations in the accountancy system too, because the accounting reform was seen as a component of the economic reform, that can contribute to financial markets development, to investments promotion and to efficient management of economic entities. This was the reason that determined authorities to decide the accounting system modernization on order to adapt it to the informational needs specific to a concurrent economic environment. Obviously, cost price determination is the accountancy appanage, but the actual modality by means of which this thing is performed is related to some factors, from which we mention the entity (activity) size, the way in which the entity's activity is organized, the way in which the accountancy is organized etc, the determination of the elements that allow its calculus was a complex problem was solution has the origin both in financial accountancy and in managerial accountancy. By this article, we shall realize a comparative analysis of general doubts referring to the principles from the basis of price cost determination, considering, on one hand, the accounting regulations applicable in Romania and, on the other hand, specific provisions to International Financial Reporting Standards. By means of ideas presented in this study, we shall point out both common elements and the differences governing the issues approached, in the context of the two accounting references.

Keywords: price cost, financial accountancy, managerial accountancy, national regulations, IFRS.

JEL classifications: M40, M41, M48

1. Introduction

Ascertainment of elements allowing price cost determination is a complex problem was solution has the origin both in financial accountancy and in management accountancy.

The price cost is specific, in the first place, to a distinct category of stocks and we consider here the elements known under the generic name of products and, in the second place, the other categories of assets acquired for its own purposes. On the other hand, we must not lose sight of the fact that the accounting regulations applicable refer to the stocks cost of a service provider including the man power and other expenses related to the direct personnel employed in

providing services, including the supervisory personnel and the appropriate overhead charges.

Obviously, the calculation of this indicator is the accountancy appanage, but the actual modality by means of which this thing is performed is related to some factors, from which we mention the entity (activity) size, the way in which the entity's activity is organized, the way in which the accountancy is organized etc.

According to regulations in force *"the management accountancy is organized by the legal person administrator using specific accounts or developing financial accountancy accounts or by the help of own technical-operative evidence"*¹.

As a consequence, in the context of those mentioned above, we can conclude not only on the lack of requirement to use management accounts, but also in terms of practical ways to consider in order to acquire and use necessary information for the price cost calculation that, in our opinion, can reveal three options:

- separation of informational circuit of management accountancy from the financial accountancy, buy using the accounts from Class 9 "Management accounts";
- adjustment of financial accountancy specific accounts (especially expenditure accounts) thus meet the rigors imposed by the exact determination of price cost;
- extra-accounting (para-accounting) approach which is characterized by the fact that *"elements and amounts tracking is made with tables, without transiting accounts"*² in order to make calculations and to ensure the relation with the financial accountancy, option practiced especially by small and medium-sized entities.

2. Reference elements of price cost determination - comparative analysis

In order to determine price cost, we must consider the applicable regulations in the field, to be implemented in the particular context of each entity in part, by completing a series of steps, which generally aim: to register the expenses in financial accountancy during the period and their takeover in the management accountancy; to register production to standard cost, during the period; to deduct the expenses related to auxiliary sections; to allocate indirect costs on the costs carriers; to determine and to register the production in progress; to calculate the effective price cost and to illustrate the differences from the pre-calculated cost; to register the unincorporated expenses in the price cost, during the period.

According to accounting regulations correspondent to European Directives *"the price cost of an assets includes the acquisition cost of raw materials and of consumable materials and the price costs directly attributable to the asset. The price cost or processing cost of stocks and the price cost of assets include the direct expenses attributable to the production, namely: direct materials, energy consumed for technological purposes, direct man power and other direct*

¹ OMFP no. 1826/2003 for the approval of Determinations regarding some measures about the organization and the administration of management accountancy, Official Gazette no. 23/2004.

² Ghid practic de aplicare a reglementărilor contabile conforme cu directivele europene, CECCAR Publishing House, Bucharest, 2010, pg. 507.

*price costs, costs of designing products, and the share of indirect production expenses rationally allocated as related to their manufacture."*³

Following the regulation text we found out that one call on the price costs classification depending on the possibility to identify them on the level of costs carrier, in direct and indirect costs. According to the theory, direct costs are those that can be identified on the level of calculation object, as being directly generated by it, while the indirect costs are considered to be those related to several calculation objects and, as a consequence, we can not make an exact localization of them on the level of individual costs carrier, their distribution being necessary.

On the other hand, considering the practical activities necessities and also by appeal to the previsions of IAS 2 "Stocks", we think that we must consider another classification way of price costs, in relation to their conduct depending on the production volume change

Although IAS 2 considers only the classification of indirect costs in fixed and variable (fixed and variable overhead charges), we consider that, when talking about the price costs classification, the two criteria previously mentioned must be correlated considering the fact that certain direct or indirect costs can be categorized, at the same time, as being fixed or variable.

National regulations require a rational allocation of indirect costs of production that remain relatively constant (fixed production overhead charges) regardless of production volume, such as depreciation, sections and equipments maintenance charges and those regarding the sections management and administration. In this case, we start from the requirements of rational reproach principle according to which this type of costs must be allocated on the costs carrier depending on the utilization degree of productive capacity⁴, which is defined within the regulations as being "*the production expected to be acquired, on an average, over a number of periods, under normal conditions, considering the loss of capacity resulting from the planned maintenance of the equipment*", while the part remained unallocated from these costs must be recognized as an expense in the period when appeared.

However, the practical activity reveals also another category of costs that change depending on production volume but without having an evolution proportional to the activity volume. These are named mixed or semi-variable costs, because they have both a fixed component and a variable one, therefore the need to separate the two components by using some specific methods, among which the specialty literature brings into question the method of minimum and maximum points, the method of the least quadrants (minimum squares), graphical method etc.

In order to register production at the standard cost, during the period, as determined by both IAS 2 and national regulations, we consider normal levels of materials and consumables, man power, efficiency and capacity use, levels periodically reviewed and, if necessary, adjusted depending on current conditions.

³ OMFP no. 3055/2009 for the approval of Accounting Regulations in accordance with European Directives, Official Gazette no. 766/10.11.2009.

⁴ Is determined as a report between the real capacity (used capacity) and the normal capacity.

In general, concerning standard costs, one must consider three types of standards aiming, in fact, the most important components of the cost, namely: raw materials, direct man power and indirect costs.

Standard costs (pre-calculated) determination allows to the entity management to identify possible deviations that may occur between the default cost, which can be interpreted as a goal or as an objective to be achieved, and their actual level.

Another very sensitive issue that practical activity raises, concerning the price cost determination, is represented by the settlement of expenses related to auxiliary sections. These sections have as the main business the execution of some products or the provision of some services necessary for the entity basic sections, among which we remember the supply of steam, water or electricity, the SDV manufacture, transport services etc.

Although auxiliary sections production is intended for the basic and administrative activity of the entity, it is the possibility that a part of it be consumed even by the generating stations, another part to be consumed by the other auxiliary sections as a consequence of some mutual benefits and, sometimes, a part to be delivered to other entities. Under these conditions, appears the question of knowledge the level of expenses to which the settlement of ancillary sections production is made, being their incorporation in the costs of the others expenses generators.

The question analyzed is differentially solved depending on the nature of ancillary section production and its destination, thus:

- own consumption, to homogenous production sections, is deducted from the total production quantified with the measuring instruments, and the difference is settled on the charge of the other consuming sections at actual cost level, while at sections with heterogeneous production increase the overhead charges, from where they will be distributed on the orders performed, related to other beneficiary sections;
- if the ancillary sections enter in reciprocal services, the cost calculation can be done only after the registration of the other expenses occasioned by the consumptions delivered by the ancillary provider sections. In this situation, one can consider specific procedures for determining and settle the cost of ancillary sections with interdependent activity, among which we note: the procedure of reciprocal services evaluation at pre-established cost, the procedure of reiteration, the procedure of algebraic calculation, the procedure of standard cession rate etc.;
- after the collection of all production expenses related to the ancillary sections, is determined the value of the production aimed to basic and distribution sections and to administrative sector.

Since the regulations in force stipulate the fact that in the price cost can be included a reasonable proportion from the expenses indirectly attributable to the asset, as far as they are related to the production period, it results that appears the necessity of rational distribution of these expenses on the individual carriers of costs. Accounting regulations correspondent to European directives do not refer to concise modalities by means of which the distribution of indirect expenses can be done, but they are only requesting the

reasonable incorporation of related part from these expenses in the price cost. In turn, the regulations regarding the organization and the administration of management accountancy bring additional details, mentioning the fact that, when processing costs can not be distinctly identified for each product in part, it is allocated based on some rational procedures applied with congruence (simple division procedure, quantitative procedure, equivalence indicators procedure, quantitative equivalence procedure of secondary product with main product etc).

As a rule, this process for indirect production costs repartition supposes the conventional choice of an element which meets the basic function (criteria) for repartition and which ensures a causal report with the expense to be assigned. As repartition bases, can be used the number of direct man power hours, the number of automatic processing hours, the number of manufactured products etc.

The method for the repartition of indirect expenses depends on the calculation method used by the entity, that must be chosen and adapted according to the organization way of the production, to the activity's specific, to the particularities of technological process and the the own necessities among which we mention the orders method, the steps method, the direct-costing method etc.

Mostly, at the end of management periods there are products that have not gone through all processing steps (stages), stipulated in technological process. The quantitative and the value determination of the production in progress represent a preliminary stage of unitary cost determination and present a special importance for the accurate calculation of the price cost level.

In order to establish the production in progress, national regulations require the stock taking of unfinished production at the end of the period, by technical methods for finding the finalization degree or the performance stage of technological operations and its evaluation at price costs. With this in view, takes place the reception off all markers, parts, intermediates finished until the stock taking moment and by their separate storage, as proceeding at the arrangement on homogenous lots of different markers from which the unfinished production is formed and the respective lots labeling within the orders or steps. Onwards, one proceed to the weighing, measuring and counting of the markers lots, parts or incomplete products and their registration in the inventory lists. The processing step of raw materials from machines are determined in regard of the operative evidence data, of the installments capacity or its is approximated.

The evaluation of unfinished production can be realized by means of several procedures, among which we note: the evaluation in regard of the degree of technical perfecting, the evaluation on parts and operations, the evaluation according to the average cost of an hour-worker etc.

Regardless the evaluation modality between the cost of finished production and that related to the unfinished production there is the following calculation relation:

Finished product = cost	Production expenses of the period	+ Value of unfinished production at the beginning of the period	- Value of unfinished production at the end of the period
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Regulations dedicated to ensure the general framework of organization of the management accountancy⁵ refer to a series of principles to consider when raises the problem regarding the price cost determination among which we remember the separation principle of the expenses regarding the assets award, the principle regarding the delimitation of expenses in time, the principle regarding the delimitation of expenses in space etc. In this context, we consider that we must analyze also the borrowing cost problem because, when we must calculate the price cost, is important to know, on one hand, the extent to which the borrowing cost is incorporable and, on the other hand, the determination way of the amount to consider.

From the text of the regulations correspondent to European Directives, we note the fact that, as a rule, *"the borrowing costs that are directly attributable to the acquisition, to the construction or to the production of an asset with a long cycle of fabrication can be included in the cost of that asset if they are related to the production period"*⁶.

By the borrowing cost, the rules mentioned aim the interest related to the borrowed capital in order to finance the acquisition, the construction or the production of assets with long cycle of fabrication, and the commissions generated by the borrowing agreements mentioned.

In general, we can say that the accounting treatment of the borrowing cost is registered on the same coordinates both within the national regulations and in what regards the international standard dedicated to this problem. Although, we must illustrate the fact that IAS 23 "Borrowing costs" stipulates the obligation to capitalize these expenses, while the national rules considers that this treatment like an option of the entity.

On the other hand, we consider that we must illustrate also the fact that international rules are, in this case too, more generous than national regulations, meaning that they offer more details related to the borrowing costs recognition and evaluation.

For example, regarding the possibility to include in costs the expenses generated by the borrowing, the regulations correspondent to the European Directives from Romania stipulate only the fact that this treatment *"must end when is realized the most part of the activities necessary for the preparation of the asset with long cycle of fabrication, in order to use or to sell them"*. IAS 23 offers several information in this sense, because it mentions:

- borrowing costs capitalization must start when payments for that asset are realized, borrowing costs are employed and the activities

⁵ OMFP no. 1826/2003 for the approval of Determinations regarding some measures about the organization and the administration of management accountancy, Official Gazette no. 23/ 2004.

⁶ OMFP no. 3055/2009 for the approval of Accounting Regulations in accordance with European Directives, Official Gazette no. 766/10.11.2009.

necessary to prepare the assets, prior to its use or sale, are in progress;

- borrowing costs capitalization in the cost of an asset must be interrupted during the prolonged periods when one doesn't efficiently works at the performance of that asset;
- the incorporation mustn't be suspended when is necessary a temporary delay within a preparation phase of the asset in order to use or sell it.

Rigorous determination of the price cost must represent a goal for each economic entity, because it must reflect, more accurately, the effort in order to obtain the respective asset. This is the reason for which the accounting regulations applicable expressly request the exclusion from the stocks cost and the recognition as expenses for the period when they appeared of the loss of materials, man power or other price costs registered over the limits normally admitted, including the losses due to lavishness.

Generally, losses are considered consumed resources that aren't found in the final product. Depending on their nature, they can be classified in two categories, each of them generating different accounting treatments, thus:

- inherent losses appearing as a consequence of the technological process development (by cutting, evaporation, metal cutting etc.);
- losses over the limits normally admitted, produced because of: the inadequate use of equipments, raw materials quality, human errors etc.

It results that true identification of the nature of a loss represents a very important aspect in the determination process of the price cost, because, depending on nature, we can talk about different accounting treatments and, so, different implications on the final cost, as a consequence of the fact that normal losses affect the stocks cost, and the abnormal losses are considered expenses of the period.

Remaining in the context of the idea previously expressed, we consider that the expenses delimitation in those related to the production, that can be imputed to the cost, and those related to the management period when produced, is very important in order to meet the goal regarding the rigorous determination of the price costs. This necessity appears from the text of accounting regulations presenting a series of examples of costs that mustn't be included in the stocks costs, but are recognized as expenses of the period when appeared, among which we note: storage expenses, except cases where these costs are necessary in the production process, previous to the passage in a new phase of fabrication⁷; general management overhead charges (expenses) that don't participate to bring the stocks in the final form and place; draft costs; fixed overhead charges unallocated to the cost etc.

⁷ The storage expenses are included in the price cost when are necessary to bring stock in the place and in the condition they are.

3. Conclusions

According to the Romanian accounting law, legal persons have the obligation to organize and to administrate own accountancy. Romanian accounting system is a dual one, meaning that informational circuit specific to the accountancy is divided in two components: financial accountancy and management (managerial) accountancy. Management accountancy has the obligation to support, by adequate information, the managers' actions related to the entity's management.

Although price cost calculation is traditionally considered an objective specific to management accountancy, however, we don't have to make a strict delimitation between the roles of the two components of the national accounting system regarding the determination of this important indicator.

Through the ideas expressed in this article, we aimed to perform a comparative analysis of the basic principles governing the price cost, putting in balance, on one hand, the rules imposed by national accounting rules in the field, and on the other hand, the accounting treatments specific to International Financial Reporting Standards (IFRS).

Analyze performed illustrated the fact that Romanian accounting system was, in the last time, exposed to multiple interventions aiming the harmonization of national legislation with the European legislation and, indirectly, with the international legislation.

As a consequence of the reconsideration process of the European Directives in the accountancy field, in terms of the implementation of some accounting treatments taken from IFRS according to the provisions of the Regulation (EC) no. 1606/2002 of European Parliament and Council from 19th of July 2002 on the application of international accounting standards, and the national regulations in the field, suffered several changes through which it was followed the alignment of national legislation in field with European Directives.

In the context of these legislative mutation, we can conclude the fact that in respect to the price cost determination philosophy, we can identify both particular elements to national normative act and certain international treatments but, collectively, general principles specific to determination process of the price costs levels are common to both accounting references.

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