

THE IMPLEMENTATION OF THE „STANDARD-COST” METHOD IN THE FURNITURE INDUSTRY: A WAY OF IMPROVING THE MANAGERIAL ACCOUNTING

Garboveanu Emilia

*ROMANIAN-AMERICAN UNIVERSITY, Internal and International Tourism Economy, 0723195849,
emilia.gabroveanu@gmail.com*

Stan Elena Roxana

*ROMANIAN-AMERICAN UNIVERSITY, Internal and International Tourism Economy, 0746045089,
seroxana@gmail.com*

Andrei Ruxandra

*ROMANIAN-AMERICAN UNIVERSITY, Internal and International Tourism Economy, 0744878131,
ruxandrei@yahoo.com*

Abstract. The information regarding the production costs has a central role, determined by their implications on the actual status and on the future evolution of the company. The value of the information regarding the production cost justify its use on the decision taking process for the current activity, as well as for the company's strategy.

The use and the superior exploit of the resources in order to increase the competitive capacity of the organisation impose the wide-scale use of the advanced cost management methods, which sustain the performance, the significance and accuracy. The efficiency of the selected method depends on the speed it provides the information to the board, in order to allow the fast-taking decision process.

The standard-cost method guides the future activity of the company through acquiring long term standards, which will guarantee a efficient technological process and the implementation of a modern management.

Key words: method standard cost, cost of production, direct and indirect costs, decision

In order to operatively supply the information on manufacturing costs on the one hand, and to develop the estimated side of the managerial accounting on the other hand, there is a need to promote various methods of cost calculation based on estimated expenses. In this regard we can take into account the standard – cost method.

The history of standard cost calculation is marked by numerous evolution stages; a direct impact on plan cost calculation had „*Estimated Cost System*”) and „*Standard Cost Accounting*”.

The standard-cost method (also known in literature as the standard cost method) underwent throughout time a permanent improvement, which allowed its use in many countries.

If the used methods were based on the concept according to which cost is being calculated after the completion of the manufacturing process, the standard-cost method aims at anticipatedly establishing direct production expenses (raw materials and direct materials) and indirect production expenses (common expensens of the section and general expenses of the unit), which we hereby call standard costs or standards.

These estimated costs are deemed normal, typical and in the same time real and they stand as standards of measure and comparison of the level of effective production costs. Any difference between the effective costs and the standard ones is deemed as an exemption from the normal (estimated, anticipated, schedules) situation, which influences the financial results of the organization.

The forecalculated cost system mainly refers to the annual antecalculation of production costs on product unity, separately for the cost of materials and separately for the processing cost, that is the production in quantitative units is monthly multiplied by the forecalculated costs on unit product, and the result should be compared to the effective costs. To simplify, the effective costs are globally calculated for the whole production and not analytically for each cost bearer. The only analytical calculation is that of forecalculated costs.

The anticipated determination of resources needed to realize the product allows the management to fastly evaluate the production, the identification of exemptions and of the corrective measures of the differences between effective and standard costs.

The typical structure of a standard-cost contains the following main calculation articles:

- Raw and direct materials;
- Direct wages (labour cost);
- Common expenses of the section (or common direction of the section) and
- General expenses of the unit (or general direction of the unit).

The first two calculation articles make up the direct standard costs, while the last article in the presented structure stands as indirect standard costs, also known as cost budgets.

Standard cost calculation stimulated the concern of European authors as to develop and to improve the calculation procedures. Such a concern resulted, in Germany, in the transforming of *rigid calculation of normal costs* in *rigid calculation of plan costs*.

As part of this transformation, two problems effectively contributed to the passage from normal costs to plan cost. The first is the elaboration of standard measures, respectively plan measures, for common costs. The adopted solution referred to the determination of common costs planned on proportional reference measures, determined analogically with those used, for a long time ago, as standard for the dimensioning of wages planned direct costs. It has been remarked that, in most cases, common costs are in a direct proportionally relation with manufacturing time. Therefore, through the calculation of quotas of common costs on time unit (hours-production, hours-equipment) ponderated, in their turn, by the planned manufacturing time, the determination of common planned costs on each cost place could be achieved.

The second problem, the approach of cost calculation through the analytical methods of the science of enterprise organization and management, respectively, the admission of the fact that production cost is a function of numeruos influence factors, led to the conclusion that standard-costs calculation implies:

The specification of dependence relations of costs against the influence factors:

- the determination of standard-measures or of reference measures which to indicate the degree of influence of each factor;
- the transcription of the dependence relations of costs as liniar equations, by taking into account the degree of influence of each factor.

Also, the acceptance of the thruth according to which cost is depending on many factors has transformed cost calculation in the decisive pivot to realize the central objective of enterprise efficacy planning; under these terms, the only variant able to supply a solution proved to be plan cost calculation.

The standard cost method refers to the anticipated determination against the entry in production of products both of direct expenses and indirect ones as well, included in the production costs as forecalculation. Exemptions from standard costs should be registered as distinct costs. Through their addition or their deduction, as the case may be, the effective costs of the production obtained will be calculated upon the standard costs.

The restructuring process undergone by the enterprises in the furniture industry entails a diagnostic analysis and an objective evaluation of the a performances of the methods of cost scheduling, record and follow-up of the quality of information supplied to the decision-making factor, but also of the manner in which the decision-making factor uses the information supplied by the accounting department in general, and in the managerial accountiting specifically.

The need of the enterprises to operate with scientifically established and controllable production costs stands as a fact admitted in practice, while the calculation methods based on fore-established standards in order to calculate the costs meet the needs of the technological processes and organization structures in the enterprises from the furniture industry.

The concern to find calculation methods which to ensure the operative determination of a production cost and the establishment of ratios with enhanced information power as required by the fundamentation of decisions for the efficient management of the activity of enterprises in the furniture industry and in order to

oppose the more powerful competition environment have influenced the multinational companies in this field so to evaluate throughout time towards the standard-cost method.

The standard-cost method has the advantage to allow the enterprises from the furniture industry to determinate some previsible costs, deemed as normal, which are used for the fast evaluation of the production obtained in relation to which one can operatively determinate the variations of the expenses during the production process and, therefore, the leadership by exception, the management control through the analysis of exemptions from the pre-established costs, inclusively through the determination of sub-activity costs, the separation of expenses according to their dependence in volume of production, in variable expenses, fixed expenses and mixed expenses, which allow the determination of each enterprise's rigidity degree.

The problems had in view within the method proposed to the enterprises from the furniture industry should be:

- standard cost calculation, record and analysis of exemptions and effective cost calculation. The standard cost calculation involves the determination of maximal limits for the expenses required by the achievement of the scheduled production. Standards for direct expenses, indirect production expenses, general administrative expenses and delivery expenses should be set upon. Based on the calculated standards, budgets for indirect production expenses, administrative expenses, auxiliary activity expenses and delivery expenses should be set upon;
- the calculation of the standard cost on product will include the summing up of standard direct unitary expenses with the standard indirect expenses of the respective product. The calculation of standard costs on product should be made before the start of the management year, whereas important changes in the standard expenses should occur, the calculation made at the beginning of the year should be updated ongoingly.

The use of the standard cost submits, at an enterprise level, the following advantages:

- it ensures an operative and efficient control on costs, by offering the decision-makers, at brief intervals of time, information on exemptions from standard costs;
- it supplies the decision-makers with operative, pertinent and efficient information on the evolutions in cheapconditions of the production process;
- it stands as an efficient means to exercise preventive control on production costs;
- it enriches the material needed for cost analysis, the determination of causes that have generated the possible overfulfilment;
- it offers the possibility to take measures in order to achieve previsions and to determine and signal exemptions ongoingly;
- it considerably cuts the time for cost calculation, the activity taking place almost all the time in relation to exemptions;
- the projection and standardization of the production costs entails some changes in the work of the financial-accounting and administrative department, that is efforts concentrate during the stage before the management period.

This information help managers to evaluate if a workshop or a production process is efficient; it also shows if prices can be adjusted to face competition. During the periods of trade regress, the information shows the price on which work can be done to ensure an activity enough to cover fixed expenses.

When standard costs are settled, it is necessary to determine the performace level targeted by the said enterprise. Therefore, there are three levels to take into account, namely:

- that suggested by previous achievements. This level can be deemed satisfactory, as is easily reachable, but the management could indulge in it;
- the level to imply the highest possible efficacy. This level is not a realistic one and will invariably lead to negative exemptions, due to the too high standards required. Exemptions can stimulate the management, but they can have frequently a discouraging effect on the personnel;

- the level made possible by leadership and efficient work. This level is satisfactory, since it's a realistic one. Any negative exemptions will provide possible ways to save. The management will realize that, through a optimal effort, standards could be met.

However, in order to achieve the purpose had in view for the superior valorification of the information used in the standard - cost method, a peculiar attention should be given to the objectives set out in the budget. The standardization of the production costs should be based on scientifically fundamented quantitative and valorical standards with technical-economical motivation. This is necessary, since exemptions of effective expenses from the standard ones, concomitently determined with the development of the production process, have a larger significance than in case of the exemptions calculated at the end of the management period, which in many cases lead to tardive decisions or as compared to the effective data considered isolately, which only shows what was achieved, but not the way of its achievement. The said exemptions necessarily involve the operative determination causes, since these are elements required by decision-adoption and future actions to revise exemptions in the achievement of the objectives set out for the improvement of activity.

The indicated weight of raw materials consumption and direct materials expenses in the total of production expenses necessarily requires the permanent follow-up of their efficient use in order to cut the cost of the products achieved and the increase on this ground of the enterprise rentability.

In this regard, the improvement of the management accounting appears necessary in terms of operative identification of the exemptions of the effective expenses from the standard ones with raw materials and direct materials consumption, the analysis of the respective exemptions on cost centres where causes were also located and their discount in order to calculate the effective cost of the al production achieved.

These exemptions falls upon two types: exemptions from standard consumption, also known as quantity exemption or consumption and exemptions from price difference.

As regards the operative identification of quantity exemptions, these can be determined within the enterprise on cost centres, and within their limits one can divide on types of raw materials and direct materials, by using the following ways, namely:

1. During the delivery of the preventive control visa, after the drawing up of the respective documents by the organs of the scheduling during the start of production. The control visa is delivered by the preventive control department, only on those consumption documents to observe the necessary referred to in the production internal program. The respective necessary must be in keeping with standard expenses, also taking into view the necessity of the material required by the cost centre, should there be no similar materials supplied for the said production, and also if materials similar to the requested ones cannot be found in the section or cost centre where the respective product is being manufactured
2. Be it through the non-supply of already launched consumption documents. These can be used only in case that consumption tickets may be used as primary documents for the delivery of materials from the warehouse.

According to this modality, consumption tickets are launched for all the materials necessary for the execution of the production prescribed in the internal monthly manufacturing programme. When taking over the materials from the warehouse, the head of section and the responsible of the cost center submit the delivery visa, according to necessities, for each delivery in turn, until the achievement of the planned production. Therefore, a series of consumption tickets stay unpaid, since the materials prescribed there are no more necessary to manufacture the planned production. These materials stand as economies, there favorable exemptions, and the respective tickets will be applied on a distinctive sign to signal economies. In case of consumption exceed, there will be issued additional consumption tickets, to stand as unfavorable exemptions.

3. Be it through the inventory of the pending raw materials and direct materials at the work places in the section. This modality refers to the inventory (daily or on brief intervals) of the materials at the work places within each cost centre, to be then substracted from the total of the materials issued by the respective centre, while the difference should stand as the effective consumption of materials from the same centre. This one should be compared to the standard consumption of materials for the said centre and the difference on plus should stand as surplus, then unfavorable exemptions, and on minus, economies, then favorable exemptions.

This procedure can be successfully applied on these sections and cost centres where the production process is not deprived of the inventory operation. The control is also recommended if until the end of the month the pending materials in that section were recorded on the documents of restitution.

The causes to enable such exemptions from the standard consumptions of raw materials are multiple: for example, the use of non-standardized materials or of those with different output during the manufacturing process, the use of other equipment or machinery than the standard ones, the deficiency of the equipment or tools, the failure to update standards in the same time with the change of the constructive solution of the products etc.

In the case of the second category of exemptions, therefore at raw materials, price exemptions can be calculated either according to the materials received, when the material accounting is organized at the delivery standard, or according to consumed materials when material accounting is organized at the proper said supply price.

Exemptions from the price difference at raw materials include: change of purchase prices, change of the transport fees, change of suppliers from those taken into view when elaborating the budgets etc.

The calculation and analysis of exemptions can be effectuated both concomitantly with the development of the production process, according to its evolution, and at the end of the management period, when the manner of observance of the production cost budget can be controlled post-factum.

In the first case, the analysis aims at discovering the causes that have led to the respective exemptions, so as to enable the direction to take, in keeping with these, a series of correction decisions to those previously taken.

As far as the second case is concerned, this aims at grounding and taking over certain perspective decisions based on the provisions made on production cost.

The calculation of exemptions from standard costs for raw materials is being made on cost centres and on types of materials, totally (globally) and on causes, by comparing the effective costs to the standard ones.

The application of the standard cost method in the enterprises from the furniture industry requires the improvement of primary documents and of their circuit, of the operating record, as well as of the automated processing data systems.

The improvement of the primary document system in order to monitor exemptions will be achieved starting with the drawing up of sheets of standard costs for each product. Standard cost sheet should contain both quantitative standards and standard prices for raw materials and the cost of labour, as well as standard direction expenses.

At the line of calculation of raw materials, the comparison of data in the consumption data referring to the materials delivered from the warehouse with the situation of the manufactured production will define the observance of the limits of the standard consumption.

Exemptions from standard costs will be covered in the reports dealing with from standard costs for materials, labour cost and direction expenses. For an easier follow-up of these exemptions the use of automated data processing appears necessary.

The follow-up of production costs through accounting in the case of standard-cost method can be organized in one of the following variants: partial standard-cost, unique standard-cost and double standard-cost. The differences between these variants mainly refer to the manner of cost reflection in the calculation costs and in the manner of calculation and record of exemptions from standard costs.

Taking into account the benefits and minuses of each of the three variants of organization of standard cost accounting, it is certain that the variant to mostly meet the needs of the enterprise's management is the unique standard cost variant.

This variant allows for the definition of exemptions from effective costs from the standard ones during the development of the production process both on cost and order centres, as well as on calculation and cause articles, which ease the budgetary control of costs and the adoption of efficient conclusions on a management level at all the hierarchy positions.

Exemptions from standard costs for raw materials, as well as for labour cost, will be established based on primary documents as for material and labour consumption; these should be followed-up and operatively reported.

Exemptions for materials resulting from a price difference will be established during the supply or when consumed during production. These will be recorded in the accounts opened with each calculation article and analytically described on expenses sectors (sections).

The use of primary documents to establish the exemptions of materials and cost of labours provides the possibility to inform the management about the troubles occurred during the manufacturing process.

The operatively reported sums will be confronted with those periodically written in accounting. Even an additional effort is required to establish and operatively report exemptions, these effort will be balanced with the fact that the unique cost-standard method should not require a mandatory inventory of the unfinished production.

In order to obtain better results, the management of the enterprise must make decisions based on a complex, operative and accurate information. In this respect the production cost must be known as complete, precise and timely as possible.

The use of automated data processing systems as part of the concept of the standard method will result in: the ease of the circuit of primary documents, work speed acceleration, information circulation speed acceleration, reduction of the information cycle, of the time to obtain situations, all these necessary to the management; the operative, precise and complete grounding of the decision-making process at all the hierarchy levels; increase of the decision-making process and not in the least a better operativity and precision when achieving internal control.

Taking into account that a management due for an enterprise be conceived without a cost conceived as a complete system of operative internal management based on standardized costs, a few directions of cost calculation improvement in the furniture industry can be mentioned: The anticipated establishment, before the start of the management period, as a rule at the beginning of the year, of some standard costs, to stand as all the maximum admitted expenses for the obtainance of a certain production, separated on homogenous types of expenses (calculation articles and their inventory); expense places (cost centres); finished or half-finished products (the standard unitary cost).

In times of economical stability, unitary standard cost can be perceived as the only calculation of the unitary cost of finished (half-finished) products, therefore eliminating all the post-calculation works typical to absorbing methods.

Under this conception, the very center of the current work moves from the sphere of the most detailed follow-up of expenses on calculation articles and on places generating expenses, by ignoring the finished (half-finished) product that generated it. If during certain periods the effective calculation is had in view for finalization also on the units of finished (half-finished) product, this should be made starting with the calculation on expenses places that do not eliminate cost calculation on product. As a result the standard – cost method gives a new orientation to the record of the expenses of production and work analysis of production costs, therefore: post-calculation works as well as the analysis retrospective become secondary.

The follow-up and quantification of exemptions from standard costs, by delimitation

of the place of production, of the type of expense, as well as of the cause of exemption as part of the expense to which it refers. If using electronic technique, exemptions can be followed-up, at least on the level of direct expenses established starting with specific consumption for each finished or half-finished product. Under the conception of the standard-cost method, the calculation, follow-up, analysis and report of exemptions stand as the centre of cost calculation activity. This means that the identification and revision of all that ignores the pre-established program will be had in view, by taking into account that the rest of the phenomena and processes always falls within the desired limits to ensure the purpose had in view, or otherwise said, the idea of a management through excellence as a material form to apply the basic concepts of the modern management of an enterprise.

As stated by many specialists in this field, that we approve without the slightest reserve, the information supplied by the record of exemptions must be organized according to the selection (pyramid) system, therefore the causes of exemptions must be detailed accurately from the level of sections and installations, in order for their management to take operative measure, while the management of the enterprise should be supplied with synthetic information as regards the volume, structure, frequency, tendencies, the manner of behaviour of the exemptions during larger periods of time, places which generate expenses locuri etc.

The structure of expenses and the adaptation of calculation so as to meet the current demands of increase of the information potential of costs, through the elaboration of calculations based on the grouping of

production expenses in direct and indirect expenses, but also their grouping according to the relation with the volume of production, fixed expenses, variable expenses and mixed expenses. As regards the first grouping, the structure of expenses on articles of calculation specific to enterprise in the furniture industry should be considered.

Within this second grouping, the estimation of indirect expenses should be made only after a previous comparison of their level to the volume of production, which supposes the previous update or "flexibilization" of the indirect expenses budgets, in order to bring them in the perfect comparison state in relation with the real volume of the activity. According to the recognized accounting rules, the charge of fixed production expenses on cost is based upon the need to use the normal production capacity. In order to observe the principle of non-inclusion of costs in the sub-activity cost, these expenses must directly reflect themselves in the result of the exercise.

In this context, there must be had in view the improvement of the allocation criteria of indirect expenses through the development of pluri-criteria proceeding, which should take into account the causal relation between these and the places generating expenses and cost bearers as well.

Due to the significant volume of works entailed, the effective application of the standard-cost method in the practical activity of the enterprises from the furniture industry can be made only when calling on the facilities only provided by the IT technique.

The new conception that underlines it and the advantages it has offered to the scientific management of production has resulted in a fast dissemination and evolution of this method which has successively took the forms of flexible calculation of standard cost (Standard cost Accounting) and flexible calculation of standard costs based on full costs etc.

The managerial decision-making oriented "Standard-cost" system is perceived as a control instrument and provides the possibility to obtain a number of basic advantages:

1. Standard consumption has a special meaning when drawing up budgets, since they stand as a means of evaluation of the activity efficacy and of ensurance of control on the cost level. In the case of existence of the respective control system, which aims at identifying the operations that are not in keeping with the plan, managers are warned in due time in terms of the creation of unpleasant situations, which may require rectifying measures.
2. Norms (standards) contribute not only to the accumulation of information referring to effective consumption on a unit of finished product, but also to the elaboration of forecast as for future consumption, which may be used upon decision-making.
3. The application of standard consumption simplifies the accounting of the good and material stocks and of the costs of sales. All the entries in the current accounting are based on standard consumption, which may be obtained by multiplying the quantity of each type of materials, components or products from the warehouse at the respective unitary standard price of the product or material. Such a system significantly decreases the time of data collection and processing. All the more stable works the enterprise and all the highest is the level of production process standardization, the cost of labour for the record and calculation works consequently decreases.

As part of the "Standard-cost" system, practically all the management services of the enterprise need standards to be calculated not only to establish the production cost, but the cost of other expenses as well: trade, general and administrative etc. Therefore, the administration requires such standards in order to establish the predictable budgetary consumption and of the resources needed by the enterprise on the whole; the marketing service – to establish product prices, decision-making on the acceptance or refusal to fulfill a specific order; the production section – to control consumption by means of the analysis of exemptions in order to submit the report on the results of the activity and charge of responsibility; accounting – in order to calculate production cost and the evaluation of stocks of goods and materials.

Generalizing those mentioned ahead, we remark the existence of two modalities of approach that can be applied to calculate standard consumption. In the first place, the record of the foregoing years are being used to evaluate the need of consumption. In the second place, standards are set out through calculation, based on a technical analysis, but it is necessary to mention that, when using the first modality, there is a danger to reflect by means of standards the previous inefficacy of production. The use of the second modality based on engineering investigations provides a much consistent follow-up of the evolution of

each operation, and this allows for the clearer record of exemptions (variations), the analysis and the exercise of influence upon these.

The objective of the method is the alert of responsibilities when an anomaly occurs, which supposes the comparison of pre-established costs to the effective ones and the definition of exemptions, allowing therefore for the evaluation of internal performances of trade agents during a given period. When applying the standard-cost calculation method, accounting becomes integral part of calculation, during all its stages, with a highly active role.

References

1. Epuran M. ,V. Babaita, C. Grosu (1999) *Contabilitate si control de gestiune* Ed Economica, Bucuresti
2. Garrison R.H., Noreen E.W. (1997) *Managerial Accounting* 8th ed. Irwin
3. Homgren C. T., Foster G., Datar S.M. (1997) *Cost Accounting: A Managerial Emphasis* 9th ed. NJ: Prentice-Hall
4. Partenie Dumbravă, Atanasiu Pop (1997) *Contabilitatea de gestiune în industrie*, Editura Intelcredo, Deva
5. Pârvu F. *Costuri și fundamentarea deciziilor* Editura Economică, București, 1999