

**DOMESTIC AND FOREIGN EXPERIENCE OF APPLICATION OF COSTS
ACCOUNTING METHODS AND PRIME COST CALCULATION**

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The article investigates domestic and foreign costs accounting and prime cost calculation methods.

It is proven that different researchers attribute the same methods to costs accounting methods or to calculation methods, considering interpretation of their essence. Conducted researches give a possibility to make a conclusion that domestic costs accounting and prime cost calculation methods have considerable analytical possibilities in providing management necessities and enterprise cost control, than calculation systems of foreign countries.

Key words: *accounting methods, costs methods, calculation, production prime cost, normative method, division-wise method, order-wise method, "standard-cost".*

Improvement of costs accounting methods and organization as well as production prime cost calculation methods have been the centre of specialists' attention for a long time, but still the question about correlation of concepts "costs accounting" and "calculation" remains debatable. Thus there is a question about unity and differentiation of costs accounting and calculation methods, which in a domestic theory has been the topic of discussions during many years. One of the first who raised the problem of correlation of these concepts were academic Chumachenko M [1] and Professor Basmanov I.A. [2].

In connection with appearance of translations of foreign editions on management accounts, terms like "system of calculation" and "calculation system" got in use in addition to terms like "costs accounting method" and "calculation methods"; publications appear on introduction of foreign systems of calculation in practical activity of domestic enterprises. It is obvious, that desire to improve and develop accounting and calculation in Ukraine is positive, however, one shouldn't underestimate the abilities of domestic achievements in the field of calculation because they have been providing all levels of management with necessary information during lots of decades.

Thus, the following problems require additional researches and solution for further scientifically reasonable organization of calculation at an enterprise: 1) classification of methods, which consists not only in the choice of its bases but also in the answering a question – costs accounting and calculation methods are to consider as a single unit or they are to be divided independently in classification; 2) improvement of domestic cost accounting and calculation methods with foreign experience taken into account.

In economic literature there are two approaches to correlation of costs accounting and calculation methods.

The supporters of the first approach think that costs accounting and calculation should be considered separately, that is why they distinguish costs accounting and calculation methods which function differently. In particular, professor Paliy V.F. marks that the costs accounting method must characterize the process of their appearance and forming course in a particular productive process with necessary completeness and details [3, p. 196], and the calculation methods is a "set of methods of analytical costs accounting on production by calculation objects

and methods of calculation units prime cost calculation" [3, p. 223]. From one side, professor Paliy V.F. underlines successively differences between costs accounting and calculation, and, accordingly, between their methods, from the other side – he does not give a clear determination of the costs accounting method.

Seleznyov S.I and Tarbeev O.O. name economic methods of determination of particular production types prime cost (objects of calculation) as calculation methods, and technical methods of costs reflection on particular production types (objects of accounting) - as costs accounting methods [4, p. 164]. And researchers distinguish normative and unnormative costs accounting methods on production and production prime cost calculation methods with the same name [4, p. 165]. We consider the opinion of the mentioned researchers as improper: at first, because of the unclearness of the essence of economic and technical methods and order of their application; secondly, in connection with the absence of differences in classification between calculation methods and production costs accounting methods.

Researchers which adhere to the second approach, consider costs accounting as calculation in that or other form. So production prime cost is determined by the system and organization of costs accounting and is indissoluble. In particular, professor Margulis A.S. considers that costs accounting and calculation method is "a united process of research of certain types enterprises costs on production and realization of production from positions of measuring, control, production and works prime cost determination" [5, p. 26].

Professor Bezrukyh P.S. has got a more precise definition, which suggests understanding costs accounting and prime cost calculation method as "a set of documenting organization and production costs reflection methods, which provides actual production cost calculation and necessary information to control the process of prime cost formation [6, p. 291]. This definition pays more attention to costs accounting, which is considered as a base of calculation. Calculation is based on the use of analytical production costs accounting data, and thus, one of the tasks of production costs accounting is data origination, necessary for prime cost calculation.

Some researchers do not adhere to the clearness in terminology in relation to methods in their works. Thus, Kerimov V.E. in one of the parts of his textbook "Costs accounting and prime cost calculation methods" provides costs accounting methods classification [7, pp. 114-130]. Kondratov M.P., on the contrary, gives a definition of calculation method, however he classifies costs accounting and calculation methods [8]. Such position can not be accepted - the essence of concepts and their use must exclude misunderstanding and ambiguity, not complicate and not bring in a mess within the limits of science.

Some scientists, in particular, Professor Aksenenko A.F. [9], are sure in necessity of replacement of a concept "costs on production accounting method" by "organization planning and costs on production accounting method". We can't agree to substitute the concept "accounting method" by "accounting organization method", as production costs reflection method and organization planning and production costs accounting method are different concepts in the essence.

An untraditional term is used by professor Novichenko P.P. [10, p. 31] and professor Shchenkov S.O. [11, pp. 68-70] - it is "prime cost accounting method", and they define it as a set of methods of reflection, grouping and generalization of data on production costs and production, that provide gaining information to control production costs and calculate actual production cost. This term is offered to simplify terminology and pay attention to the unity of costs accounting methods and calculation methods. We think that a term "prime cost accounting method" is contradictory, as, at first, costs and then prime cost are accounted.

Considering calculation as a separate science, professor Pushkar M.S. distinguishes the science of calculation methods, understanding them as a system of scientifically reasonable methods of calculation of production prime cost, works and services with the purpose to determine the efficiency of organization and production technology, work of separate links of a production process (brigades, areas, workshops, services) [12, p. 248].

Thus, the retrospective review of literature, systematization and analysis of researchers works results, allowed defining next points.

1. Costs accounting methods should be discussed from the point of view of achieving a certain goal, solving a certain task. Solving of most tasks of costs accounting is provided by grouping of data, got on the stage of documenting. Determination of calculation object prime cost is, to a certain extent, also possible to consider as some grouping of costs, but, as a rule, except for grouping it is necessary to carry out a number of calculation procedures, id est. a solution of a certain task foresees the presence of special methods of initial information on costs processing – calculation methods.

2. Costs accounting is a difficult, many-sided process which provides achievement of different aims that is why it is practically impossible to formulate an exhaustive definition of costs accounting method. We think it is necessary to understand costs accounting method as a set of methods of reflection, grouping and systematization of data on costs which provides achievement of set tasks. An essential task of costs accounting is prime cost calculation. From this point of view calculation methods should be considered as special methods of grouping and systematization of costs which are used to calculate calculation objects prime cost.

Professor Novychenko P.P. and academic Chumachenko M.G. have an interesting opinion. They distinguish such calculation methods of calculation object prime cost: direct calculation; costs allocation; costs exception; costs summation, that in their essence are equal to calculation methods with technical calculation of calculation unit prime cost. It caused numerous denials, the content of which on the whole is that they are not calculation methods, but only technical methods, a list of arithmetic actions which are used during the calculation of calculation unit prime cost [5, p. 34; 11, p. 95]. The correctness of the authors' views should be noted, relating to positions of complex productions, thus such productions face difficulties in documenting of production costs on the principle of their direct attributing to separate types of production, which are gained simultaneously. That's why Vrublevskiy M.D. distinguishes methods of separate production prime cost calculation in complex productions and methods of outcome prime cost calculation [13]. First methods are classified into: "1) methods of production costs exception on side types of production (remaining cost method); 2) methods of calculation-analytical calculation of prime cost or allocation of production costs between separate objects of calculation; 3) methods of quantitative-cost calculation of prime cost; 4) methods of joint (combined) prime cost calculation"[13, p. 279]. Vrublevskiy M.D. defined the following signs of classification of prime cost calculation methods: control operationability on cost formation and objects of their accounting [13, p. 294].

To solve the problem of classification of costs accounting methods and calculation methods it should be noted that different researchers refer one and the same methods to costs accounting methods or to calculation methods, according to interpretation of their essence.

Except for the mentioned methods, one can find another ones in economic literature (choice-wise, detail-wise, operation-wise, phase); however, it is necessary to adhere to the scientific approach in the selection of a separate method.

Professor Stukov S.O. gave a versatile and complex description of costs accounting and prime cost calculation method, having defined 12 features for his classification, in particular: periodicity of prime cost calculation; character of prime cost formation in production; construction of analytical accounting; use of prime cost management principle by deflections; character of production; presence of technological processes; production assortment; calculation object; a method of costs including into the prime cost; a method of indirect costs allocation; a base of indirect costs allocation; completeness of costs including into prime cost [14, pp. 39-40]. The presence of such a multiple-aspect classification should be admitted to be unsuccessful because of the complication of its practical application.

A simple (process-wise) method, which is used for costs accounting of homogeneous production is often mentioned in economic literature, when a technological process is not divided into redistributions (phases). This method does not need to be distinguished in a separate classification group, but to consider as a kind of the previous method, as a simple method actually repeats the previous one's methodology in relation to one redistribution. A depersonalized calculation method was also widespread in the middle of the XX century. We consider this method not a special method of costs grouping and systematization, but generation of defects in organization of calculation which testifies to the absence of any calculation methods at an enterprise.

A considerable group of researchers distinguish order-wise, division-wise and normative methods as basic methods of costs accounting and calculation. We can't agree with such classification, as there must be a common feature in the basis of the classification. If the choice of the first two methods is related to the period of calculation, then a normative method cannot be used dissociated from any of these two methods.

Professors Gilde E.K. and Poklad I.I. made an attempt to unite a normative method with division-wise and order-wise methods, complementing the classification of cost accounting methods with order-wise-normative and division-wise-normative methods. The offered methods are an artificial unity of two classification features that can not be allowed in scientifically reasonable classification.

Nowadays the question of attributing a normative method to cost accounting method, calculation method or accounting and calculation method remains debatable. A number of researchers (Bykadorov M.A., Professor Paliy V.F., Seleznyov S.I., Tarbeev O.O.) divide exactly the cost accounting methods into normative and unnormative. Using a normative method, costs on production are calculated as costs by norms, norms changes and deviations from norms. A normative method can be altered with an unnormative one, which is called, as a rule, actual costs accounting method. However the names "normative" and "unnormative" methods do not reflect their essence, because each of them is aimed at the exposure and reflection of actual costs in the final result, but in number of different ways: first - through deviation from norms, and second - by direct actual costs accounting. The essence of normative method consists not in establishment of a fact of deviations, but in the operationability of their exposure and application in control system. A major function of a normative method is an operative costs control in the process of enterprise economic activity.

The methods of costs accounting are normative method and actual costs accounting method which answer a question: how costs accounting (according to costs or before them with the next reflection of changes and deviations from norms) is carried out. A feature for a classification of such methods is a costs control operationability: applying actual costs accounting method on completion, and a normative one before the beginning and during economic activity.

The "standard-cost" system is used in foreign practice to control cost, which is the analogue of domestic costs accounting normative method.

Actual costs accounting method only establishes the costs and can reduce defects in economic activity only after comparing of actual costs to planned ones, that needs additional time, and the results of such comparison for the removal of the reduced defects can be used only in a next review period.

Formation of accounting information on production costs and prime cost calculation plays a considerable role in the process of administrative decision-making, so it is necessary to organize such a registration system, which would provide receiving of timely and sufficient for management information. Normative costs accounting method and "standard-cost" system have more advantages over actual costs accounting method to provide such information.

In the process of the carried research it is possible to make a conclusion that normative cost accounting method and "standard-cost" system are not identical. Basic differences of normative method from the foreign system of calculation are:

- 1) accounting reflects not only deviation from norms, but also changes of norms (in standard-cost changes of standards are not registered), which provide extended information to the manager staff in relation to reasons of costs deviations from normative ones;
- 2) deviations from norms are attributed not to financial results, but to production prime cost;
- 3) reasons of deviations are revealed from the manager controlled costs, but not deviations from costs, which are out of manager control.

However a leading idea of both methods is establishment of norms (standards), exposure and deviation accounting to determine defects in economic activity of an enterprise.

Thus, normative costs accounting method and "standard-cost" system have common features in providing costs control, however the advantage of domestic method is giving more analytical information on costs in a few sections (norms of costs, change of norms, deviation from norms).

Professor Zhebrak M.H., comparing a normative method with standard-cost as early as 1949 marked that soviet normative accounting is actual costs accounting, but in an analytical section, that allows to see their components. This method allows calculating actual prime cost, using information on reduced deviations and about influence of current costs on the level of costs in sections, which are necessary for prime cost calculation of the separate production names [15, p. 22].

Normative costs accounting method satisfies management requirements in gaining of timely and necessary management information and is a powerful mean of costs control. Scientifically reasonable progressive norms have a special value for prime cost planning of calculation objects, allow exposing unused reserves more deep and full. However it is necessary to develop the worked out norms and make them clear to all workers, which are responsible for norms observance and implementation, to make the norms more efficient.

To provide normative costs accounting method efficiency at an enterprise on the whole, the norms system development must embrace not only the process of production but also assets acquisition and realization.

Order-wise and division-wise methods are mostly distinguished in calculation methods classification. Domestic theory considers that a sign of calculation methods classification into order-wise and division-wise methods is a calculation object. However, as we have already marked, the object of calculation cannot be a redistribution which does not have a use value. The basis of calculation methods division into order-wise and division-wise methods is the period of calculation. Applying a division-wise method in the conditions of mass production there is a necessity of relative halt of technological process to calculate prime cost for a period, despite individual features of separate production types. Applying an order-wise method, an individual prime cost of an order is determined only on completion of production on order data, but not after a certain period completion.

Some scientists attribute order-wise and division-wise methods to costs accounting methods [1, pp. 46-47], [16, p. 12]. We should notice that prime cost calculation is impossible to consider dissociated from costs accounting that is why prime cost calculation foresees a corresponding organization of analytical costs accounting. Prime cost calculation will be impossible, if costs in primary documents are not attributed to a certain calculation object. For this reason calculation methods are sometimes replaced by the concept of the system of order-wise and division-wise calculation.

Thus, the conducted research allows making a conclusion that methods of domestic costs accounting and calculation have considerable analytical possibilities in providing management necessities and enterprise costs control, than foreign calculation systems.

On the basis of the conducted analysis of essence and features of application of domestic costs accounting methods and calculation methods the expediency costs accounting methods classification is established by control operationability on normative costs accounting method and actual costs accounting method. Calculation methods should be classified by periodicity into order-wise and division-wise methods, by plenitude of cost inclusion to prime cost – into complete and incomplete prime cost methods.

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