

Accounting for Overheads in Russia: Historical Aspects

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Abstract: The study is devoted to a retrospective analysis of the formation stages of the accounting system for overheads in Russia. It provides definitions and classifications of overheads used in different years. The problems of allocating overheads between the products are studied, the most widely used allocation bases and cost objects are shown. Particular attention is paid to the study of early development stages of accounting for overheads.

Key words: Costs, overheads, cost accounting, conception, absorption rates, cost center, bases for absorption rates, history

INTRODUCTION

Currently, there is a steady increase in overheads both in absolute amount and relative to the total amount of costs. This is due to the scientific and technological advances which increase the share of past costs in the expenses for production and marketing, to the complexity of managerial tasks and growing number of the administrative staff, its competency level, an extensive use of computers in management, modern means of communication, increasing demands for office representativeness, its equipment, etc.

Nowadays, it has become apparent that overheads are gradually becoming the most manageable in terms of locating potential for savings, revenue growth and profitability of the company that determined production and marketing strategy. However, it is of interest to study historical aspects of overheads calculating concept.

Problems of calculating overheads in the modern world system of management accounting are studied by Maiga (2007), Peden and Baker (2001) and Tang *et al.* (2013).

MATERIALS AND METHOD

The aim of the research is to study the dynamics of the accounting system for overheads in Russia. The information base for the study were legislative acts, regulations, guidance papers which were in effect in different historical periods, materials of enterprises, scientific provisions contained in the writings of scholars in cost accounting.

The study used the scientific apparatus of economic theory, accounting theory, management accounting and management analysis, internal control and accountability.

Problems of calculating overheads in Russia were researched by Tang *et al.* (2013), Blatov (1935) and Butakov (1926).

RESULTS AND DISCUSSION

Costs which are now called overheads, existed at the dawn of trade relations. In economic literature since mid of 19th century the concept of “general costs” which is similar in content to the overheads was confirmed officially. Particular attention was paid to their specific role in production costs and prices. This was facilitated by the growth of production, a new way of economic development and accordingly, a new direction in accounting industrial accounting.

The general costs included general costs of territorial region, the general costs of the main office of plants and the general costs of a particular plant. The last item included the expenses for keeping laboratories, stables, hospitals, apartments and houses, libraries, telegraph equipment, administration, fee for the use of credits, depreciation of equipment and buildings, etc. It was during this period that along with the advent of variable and fixed costs, a system of “accounts by departments” was worked out. Therefore, the information about the general costs was collected in terms of departments and it should be noted that cost center accounting for controlling purposes within organization appeared during this period.

The beginning of 20th century is marked by the gradual transformation of a simple production cost accounting into consistent and comprehensive cost accounting. Cost accounting was to provide an opportunity to study all parts of a more complex manufacturing process and thereby improve the

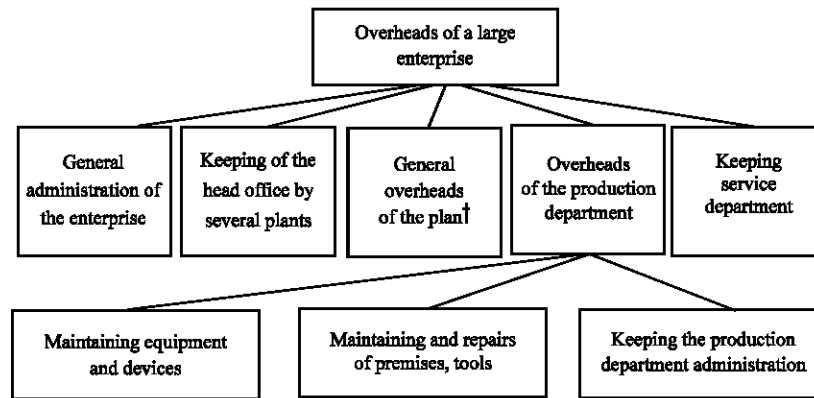


Fig. 1: Classification of overheads, 1911

functional structure of enterprise management. In this context, the problem of studying the total cost took on a new meaning. Profits dynamics depended on changes in the market that directly affected the cost composition of the product manufactured. It was then that the general costs came to play an important role in accounting and analytical reports: on the one hand, they were required to assess inventories and their display in the balance sheet, on the other hand, to allocate costs for the purpose of pricing and management decisions. The term “general costs” is gradually replaced by a new one “overhead costs”. In practice, in most cases it was customary to charge overheads to the same account and only after a year to carry out basic operations with this account. Many scientists believed that all overhead costs must be directly charged to “profits and losses”.

Gomberg’s view is interesting in this regard. In his “The meaning of costs” written in 1897, he criticized this widespread belief, noting that, in essence, overheads are not losses. He offered to charge them to a special account “Enterprise operation” which later could be involved in determining company’s performance. He considered overheads as costs incurred by the firm’s operation and aimed at improving the business of the enterprise.

Public debates in the special economic literature were quite popular in that period. They help us get acquainted with the peculiarities of accounting for overheads at that stage of its development, show constant searches for new approaches to issues that were topical in the past. For instance, the controversy between V. Plevinskiy (chief accountant of an Ural factory) and A. Popov (the researcher of “Counting Art”, 1909) was remarkable. Peculiar for that time were overheads for the district in the industrial regions of tsarist Russia such as the Urals. B. Plevinsky tried to construct an optimal structure of costs relationship between the district, main office of the

enterprise and individual factories. From his point of view, depreciation must be strictly deductive in nature and based on the principle of proportional distribution. Property depreciation which depends on the economic and technical conditions should be made through account “Overheads for the District”, followed by the deployment of depreciation between all products and items created. According to A. Popov, overheads can not be regarded as a mediator for depreciation distribution. In practice, this allows you to impose those productions “which are beneficial and do not use expensive machinery and equipment, excessive depreciations of other production departments which do not depend on it, less necessary or even unprofitable (Tang *et al.*, 2013) B. Plevinskiy’s proposal to fix a budget for only direct costs (excluding overheads) was criticized. In particular, A. Popov noted inexpedience of such an approach because, in his opinion, it is always important to have information on the overheads for each product as “such an estimate provides valuable guidance to define the influence degree of each unit size and their totality on manufacturer’s price” (Tang *et al.*, 2013). In the early twentieth century, maintenance costs of support production were already identified as part of overheads (Fig. 1).

There were widely used two kinds of bases for absorption rates: direct costs (prime costs, workers’ wages) and output (units). The following scheme could be used. Costs of service departments (power stations, mechanical shops joineries, etc.) were allocated among the departments consuming the services. Department overheads were allocated between products in proportion to the direct costs. Then product cost (direct costs+ production department costs) becomes the base for allocating general overheads of the plant. For allocating costs of keeping head office by several factories, a different product cost will be in allocation base (direct

costs+department costs+general overheads of the factory) etc. In some companies, the overheads of keeping the head office by several factories and by the General Administration of all enterprises were not allocated but were referred to profit shrinkage. Alternatively, they could be attributed to the decrease in profit and then be distributed among products sold using such a base as revenue (price).

Allocation base “output” is also multiple option: product unit (option 1), product and semi-finished products unit (option 2), product, semi-finished products unit and raw materials (option 3). Thus, the company could at any time sell not only products but also semi-finished products and materials.

In 1920-330's definitions of overheads were interpreted differently depending on the time period, region, legislation. Two variants were widespread. The first variant considered overheads as indirect costs attributable to the entire output. The second one-costs that are independent on the production itself and do not have a decisive influence on it, i.e., this is part of the factory cost, whose lack will not affect the result of the production (output). The second variant almost equated overheads with fixed overheads.

Equivalence of overheads and indirect costs was seen as something natural. There were no special differences between them in the economic literature of the time. In some regions of Russia overheads were perceived as the costs of the enterprise whose reduction or increase depends on the economic thrift of the head of the enterprise.

It was stressed that theoretically all costs can be attributed to overheads, for example, in producing oxygen and nitrogen from air where there is no basic material or labor that could be charged to the production itself. Political processes in Russia have always influenced the economic interests of society and the state. Therefore, change of ownership transformed approaches to the accounting system. The changes affected the composition of overheads. Manufacturing in the mid-1920's modified and became complicated. Industrial enterprises adopted a list of overheads which was to be applied obligatorily. Each type (sort) of cost was listed under its specific number.

Butakov (1926) analyzed a fixed part of overheads believing it to be “the main nerve of production” and the most important factor driving the company to increase productivity. Pricing formula allows us to analyze the influence of fixed and variable costs on it (Butakov, 1926):

$$p = \left(v + \frac{F}{pu} \right) + \left[\left(v + \frac{F}{pu} \right) \times \frac{a}{10_0} \right] \quad (1)$$

Where:

p = Price
F = Fixed overheads
v = Variable cost per unit
pu = Production in units
a = Profit (%)

Equation 1 was transformed (Butakov, 1926):

$$\frac{p}{v} = \left(1 + \frac{a}{10_0} \right) \times \frac{1}{pu} \times \frac{F}{v} + 1 + \frac{a}{10_0} \quad (2)$$

The relationship between p/v and F/v is linear if $a/100 = \text{const}$. Formula transformation allowed to conclude that, as a result, to increase the p/v it is necessary to increase the ratio of F/v or in other words, it is necessary to acquire more sophisticated equipment, create better automation systems, etc.

In 1927, according to the existing legislation, overheads included a group of commercial expenses (these are cost for sales of goods including provision of goods for sale, their transportation, business trips, etc.). Identifying this group was a significant step forward in comparison with the practice of previous years, as the problem of groundless mixing of commercial and administrative costs which previously led to serious errors, was solved.

In order to analyze overheads, they were compared with the previous periods of the enterprise as a percentage of revenue. The data received was the basis for a comprehensive study of abnormal fluctuations of overheads. In 1928-1929 under the law governing the Russian accounting, a new term-overhead for labor which were incurred directly by the presence of workers at work (on-the-job safety, vacations, accrual on workers' wages, etc.) appeared. However, in 1930's the concept of “overheads for labor” disappeared practically from the vocabulary of accounting. In 1930-50's a cumbersome, rigidly regulated system of accounting was created in Russia. It was characterized by lack of flexibility and rejection of new views on issues of accounting and analysis.

In the early 1930's it was customary to separate, on the one hand, the overheads, on the other-indirect ones. Moreover, it was then that the overheads were considered as the value representing the difference between aggregate (total) and costs associated with the production technology. Consequently, overheads for

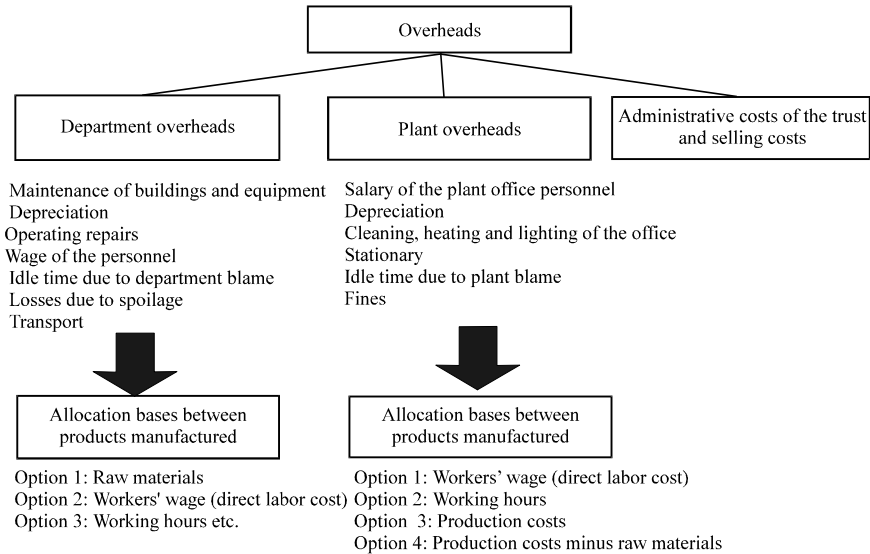


Fig. 2: Classification of overhead in Russia (1935)

many decades were perceived as costs not related to the production technology. This definition of overheads became dominant. The application of this criterion (a link with technology) led to theoretical problems in the accounting. In particular, the question remained undetermined as to the relationship of operating costs or the costs of maintenance and operation of the equipment with the technologic process of production. The composition of the overheads and distribution base in 1935 are shown in Fig. 2.

Among the general shop costs the largest share in the period belonged to such articles as “maintenance costs of fixed assets” (10-15%), “maintenance costs” (9-14%), “depreciation” (15-25%), “labor costs” (8-16%) and “transportation costs” (7.4%). In the same period (1934) accounting theory classified overheads depending on drivers: the time of production (electricity, water, compressed air, maintenance of equipment), the number of products (support materials, tools depreciation, etc.), the weight of the materials processed, semi-finished products (transportation costs), area (heating, lighting) and the duration of the period (administrative costs). It is assumed that the output is proportional to time consumption for processing.

The concept of overheads did not undergo significant changes from 1950-1970 in practice. However, regulatory documents, the state provisions on cost accounting in industrial enterprises do not use the term “overheads”. Instead, the term “maintenance costs of production and management” is used. In official documents “overheads” are mentioned only in the context of cost accounting in construction organizations. After

1970, the press published the studies of Anglo-Saxon and German systems of costs and management accounting conducted by Russian scientists. And since 1990’s, there was a trend towards convergence of Russian and international accounting systems. This has led to the fact that many of the concepts and methods which are widespread in Western accounting system were gradually used in Russia. ABC methods, TD-ABC, multi-stage scheme of allocating overheads, lean manufacturing diffused gradually in Russian companies. The term “overheads” has become very popular again.

CONCLUSION

In the early twentieth century, attempts were made to show the effect of overheads on the efficiency of enterprise management. The leaders of a number of companies have tried to find a more productive and profitable ways to exploit sites assigned to them. Overestimated or incorrectly calculated overheads led to incorrect identification of company’s performance which could cause a financial collapse in the future. However, most companies changed methods and allocation base of overheads with the change of the company management. Accountants often chose a convenient allocation base rather than a fair one. There was no common system. Starting with the 1930’s a rigidly regulated accounting system for overheads was created. All enterprises apply all the rules prescribed in the special provisions. However, scholars’ proposals to improve accounting for overheads often fall deaf on practitioner’s ears. With the transition to market economy (1990s), the situation is changing.

Gradually, provisions (regulations) governing the choice of bases and schemes of allocating overheads are repealed. Today, overheads, just like in western accounting system are considered as manufacturing overheads, associated with the maintenance of the production process; administrative costs which represent the cost of managing the organization as a whole and selling costs which are defined as the costs associated with the promotion of goods from the seller to the buyer. Companies can develop their own model of accounting and distribution of these costs which they previously were not allowed to do in the administrative-command system.

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