

THE METHOD OF INTERPLANT COMPARISON IN THE MEAT INDUSTRY D 48

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In an endeavour to improve economic rationality and effectiveness as well as the planning and management of the meat industry, the Polish Meat Research Institute undertook a study aiming at investigating the possibility and advisability of applying an interplant comparison and at designing a variant of it suitable for this industry line. As it is known, this form of analysis requires an adjustment of general principles to particular lines.

The Institute cooperated in introducing this method into practical use in the industry. The method had been readily accepted and appreciated as a perfect tool for objectivisation of evaluation of plants for improving the performance of less efficient plants to reach the level of leading ones, for propagating achievements, activating reserves, perfecting the planning and the management.

Along with the method of interplant comparison, some guiding lines were set regarding principles for tabulating comparative tables, calculating indices, carrying research on primary causes /it has to be done by meat plants which are supervised by units of voivodeship management/ and principles of organising the work on analysis.

The method of interplant comparison had been developed in capitalist countries as a method of research useful for improving the effectiveness of management and its rationality, for discovering reserves and losses. It is used as such in many countries by

different departments of economy and many industries.

Socialist countries including Poland adopted it long ago. It was connected in particular with changes which are gradually taking place in economic management and with the switching to more intensive methods. In socialist countries the method of interplant comparison was also looked upon because it was considered a useful tool for improving the planning and management of industry. Besides it was used for objectivisation of evaluation of industrial plants and enterprises subordinated to industrial unions.

Spatial comparisons serve as basis for the method of interplant comparison. It may include comparisons between various plants and also between enterprises, unions etc. Essentially it consists of methodically carried research based on comparison of data gathered from several plants illustrating the phenomena under investigation in causal-consecutive connection. The analysis leads to the knowledge and evaluation of causes affecting the investigated effect and to draw conclusion on that basis by grasping differences between plants in indices selected for research.

As a rule, the method of interplant comparison is performed by superior units or by units which stay apart from economic units subjected to investigation.

There are various possibilities of applying the method of interplant comparison. It is begin used in studying financial indices such as profit, accumulation, profitability, costs, and also for various technical-economic indices. The selection of objects for investigation depends on immediate, continuous of future needs arising in a given industry or in a group of enterprises. The way of conducting the examination depends on peculiarities in production, its organization and economics of that industry.

Besides methods applied generally, the method of interplant comparison is also using additional methods. They include :

- 1/specifying the targets and tasks in every case when interplant comparison is being conducted,

- 2/adjusting the scope and profile of investigation and the selection of plants and indices to fit the target and the task of each actual analysis. The work on specifying and adjusting is called the programming of the analysis. The programming is aimed at securing proper conditions for interplant comparability. It has a special importance for the method of interplant comparison because such research is reaching beyond single economic units.

Transferring the general methods of interplant comparison to the field of the meat industry, it had been stated on the basis of research, that the realisation of the general goal for which the interplant comparison research is being done, /which means the improvement of management effectiveness /is best served by the analysis of accumulation since accumulation is a comprehensive yardstick of results of an enterprise. It includes and brings out all angles of its activities. Those researches also indicated important, sometimes very important, differences existing in the levels of acquired accumulation between plants in the meat industry. They do occur following a considerable diversification of factors and conditions of production within different meat plants and an uneven degree in their management performance. Besides revealing causes of differences, the analysis of accumulation at the same time shows sources of reserves and of losses that are common and are general feature in a particular industry line, and also the individual ones involving only investigated plants. This analysis con-

tributes to the objectivization of evaluation of results of meat processing plants performed by superior units and simultaneously provide data for decision making at the stage of planning and realisation.

Meanwhile it had been stated that interplant research on accumulation in the meat industry can not cover the whole plants because an important degree of diversification in profile of production make difficult or even impossible to secure comparability between plants. For that reason a principle of conducting interplant segment comparison had been accepted. Single products or assorted groups of products are considered as segments. The acceptance of this principle allows delimitation in organization and applying the rule of economic accountability inside the plant. Thus the interplant comparison of accumulation in the meat industry is in fact a segmentary analysis of unitary accumulation in production of goods selected for investigation.

The task assigned to analyse~~s~~ consisted on investigating, qualifying and estimating the impact of gross result on accumulation in production. Gross result had been defined as the value of main product and by-product fixed on the basis of manufacturer's price from which the cost of raw material had been subtracted. Thus the method of gross result is a combination of the raw material and manufacturer's price of products. Establishing in such a way the tasks of interplant comparison starting from the statement that the most important influence on the differences between plants in the level of accumulation is exercised by gross result and therefore this factor may contain the most important sources of potential reserves, that other costs are having comparatively much lesser impact e.g. salaries, that regarding to indirect costs it would

ld be difficult to secure conditions for interplant comparability and the greatest effectiveness in applying interplant comparison is obtained by narrowing research to the most important problems. Regarding the impact of gross result on the differences between plants, it may be said that it is connected with differentiation of accumulation's rate on different products and with the fact that the most important item is the cost of raw material exceeding for some products 90 %.

In principle the scope of the method of interplant comparison can include all products quoted in financial reports for which the productive accumulation is begin calculated. Moreover starting from the point that it is advisable to narrow research not only regarding its tasks but also its scope, it was assumed that research should include those products which are showing the greatest differences in accumulation achieved and those whose results are affecting the level of productive accumulation of the whole plant in considerable measure. Taking into consideration both the substantiation of goal and the recommended focussing of research on gross result, the unitary analysis of productive accumulation had been conceived as a crosssection problem analysis.

Selection of plants for analysis had been related with analysis's scope. The idea is that research should/although this is not indispensable / involve only such plants which are manufacturing the product singled out for analysis."It is not indispensable" because the method of interplant comparison does not require the including of all plants subordinated to the given unit of management /it may mean an unit on voivodeship or national level /. Yet the number of plants should be big enough to allow generalisation of conclusion reached in the course of analysis to the larger

group of plants. From two selection methods applied in the method of interplant comparison:

1/ on the basis of similitudes and 2/ on the basis of differences the latter was chosen for the meat industry because it was believed that this one can give more clues for drawing conclusions. The sample must always include two plants showing the highest and the lowest unitary productive accumulation on the products singled out for analysis.

The plants selected for analysis constitute the comparative group. The plant showing the highest accumulation in the group is playing a particular part in analysis. It serves as a model to which the indices of remaining plants are compared. It is called basic plant or basis for comparison. In relation to this plant the differences between the indices of remaining plants are tabulated in absolute numbers and relative numbers. Indices calculated for 1 ton of basic product are the object of research in the analysis /the comparison of absolute numbers is seldom possible in the method of interplant comparison /.

The type of indices is related to the tasks, scope and profile of analysis, to problems of interplant comparability and with causalities occurring between the accumulation and gross result as between investigated effects and causes which are bringing them about. Some causes are affecting the investigated effect directly /secondary causes/, the others do it indirectly /primary causes/. It had been stated that because of a strong peculiarity of various products in the meat industry a diversification of causes affecting accumulation chiefly through gross results is occurring in different products. Thus e.g.: at the stage of slaughtering it will be structure of livestock to be slaughtered as reflecting indices of

hot slaughter weight, the output of by-products which are included in the yield at the stage of cutting and trimming-the structure of raw material, the importance of losses occurred during cutting, the structure of output: at the stage of processing- the structure of processed produce, productive capacity, technology used for processing, the quality of manufactured product. Most of the causes quoted above do not yet reveal the features of primary causes but are secondary causes.

As for the majority of above mentioned causes it is difficult to work out quantitative characteristics which would meet the requirements of interplant comparability, it was found necessary to do some additional recounting. The main source of those difficulties is the difference in accumulation rate occurring in different assortments and certain divergences between the rules of recording and production's norms /norms being very detailed while records are kept for assortment group/. In order to eliminate those discrepancies one is calculating the normative magnitudes, comparing them with actual indices, then proceeding to analyse separating causes and differences between plants in deviations.

Value indices which had been constructed in a special way for this purpose are dominating in analysis. They have been called analytic indices. The care was taken that as much indices as possible be characterized not only in quantitative but also in qualitative way. In relation to the kind of index its value was assessed according to the price of raw material, the price of output, the distinction of prices for basic products and those for by-products, the differences in prices for products belonging to various quality grades etc. Generally it can be said that it worked when secondary causes were involved but the more remote is the cause

from effect, the lesser possibilities exist not only for assessing their value but even for stating quantitative features.

While selecting indices for analysis, a method of narrowing research exclusively to the most important ones had been applied.