

ARTICLE

IMPACT OF RESTRUCTURING OUTSOURCING ON LEVEL OF BREAK-EVEN ENTERPRISE

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ABSTRACT

The most important indicator of the effectiveness of the industrial enterprise in modern rapidly changing conditions of production and sales is the level of break-even. It should be noted that the profitable activity of the enterprise and the ability to respond flexibly to market changes directly depend on this indicator. The lower the break-even point value, the more likely the company is to survive in the event of a sharp drop in the volume of sales caused by negative socio-economic processes. The main feature of determining the break-even point is the division of production costs of the enterprise into variable and constant depending on the volume of production. Variable costs are those costs of the enterprise, the value of which varies with the change in production volumes or the degree of utilization of production capacities. Variable costs include the cost of raw materials, purchased components of the product, wages of the main production workers, and others. Break-even analysis is an effective tool for planning and evaluating the company's activities. Since it is by analyzing the behavior of variables and fixed costs depending on changes in production volumes, it is possible to make management decisions flexibly and quickly. One of the positive economic effects of the use of restructuring outsourcing is the translation of fixed costs into variables. This fact leads to a decrease in the level of break-even enterprise. However, we will conduct a more detailed analysis of the impact of outsourcing on the break-even point, and also consider some areas of work to improve the efficiency of this tool in the enterprise.

INTRODUCTION

The most important indicator of the effectiveness of the industrial enterprise in modern rapidly changing conditions of production and sales is the level of break-even. It should be noted that the profitable activity of the enterprise and the ability to respond flexibly to market changes directly depend on this indicator. The lower the break-even point value, the more likely the company is to survive in the event of a sharp drop in the volume of sales caused by negative socio-economic processes. The main content characteristic of determining the break-even point is the division of production costs of the enterprise into variables and constants depending on the volume of production [1]. Variable costs are those costs of the enterprise, the value of which varies with the change in production volumes or the degree of utilization of production capacities. Variable costs include the cost of raw materials, purchased components of the product, wages of the main production workers, and others. It should be noted that an important provision of the theory of classification of production costs is the conditionality of this classification, since in nature there is no type of cost that can be unambiguously attributed to variables or constants.

Break-even analysis is an effective tool for planning and evaluating the company's activities. Since it is by analyzing the behavior of variables and fixed costs depending on changes in production volumes, it is possible to make management decisions flexibly and quickly.

One of the positive economic effects of the use of restructuring outsourcing is the translation of fixed costs into variables. This fact leads to a decrease in the level of break-even enterprise. A good example of the positive impact of restructuring outsourcing on the position of the break-even point is the American automotive industry.

According to the analysis of the market of trucks submitted by the company Paccar Inc., the U.S. and Canadian markets are more sensitive to socio-economic processes than the European market [Fig. 1] [2].

When negative socio-economic processes are manifested, the truck market in the USA and Canada "sags" deeper than in Europe. Therefore, a feature of the production of trucks in the United States is a low level of break-even point of enterprises, which is achieved through the widespread use of industrial outsourcing.

Truck manufacturers in the US mainly focus on the production of the cab, frame and Assembly of the finished car, and the production of other components is outsourced. It should be noted that the frames in the US are standardized in width, so, for example, bridges and axles of American manufacturers of automotive components, such as "Dana Holding Corporation", "Meritor Inc." and others, suitable for all American trucks [3].

As a rule, the consumer can choose the composition of the car from the components supplied by outsourcers. For example, the company "Peterbilt Motors Company" offers the buyer the engine for the selected car from at least two different suppliers: Paccar Inc. and Cummins Inc. [4].

However, we will conduct a more detailed analysis of the impact of restructuring outsourcing on the break-even point, and also consider some areas of work to improve the efficiency of this tool in the enterprise.

KEY WORDS

*restructuring
outsourcing, variable
costs, fixed costs, break-
even point, enterprise
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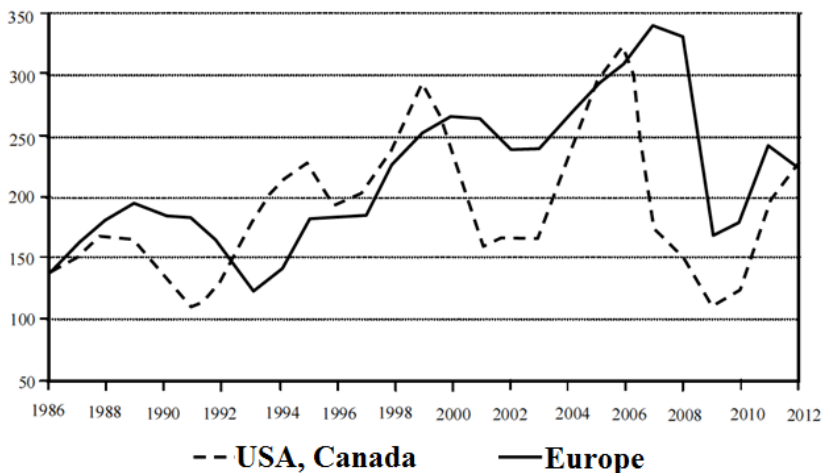


Fig. 1: The cyclical truck market in Europe and America in the years 1986-2012, thousand.

MATERIALS AND METHODS

To begin with, we note that this analysis is reduced to determining the classical break-even point and is performed in the short term under the following conditions in a certain acceptable range of production volumes:

- costs and revenue from sales are expressed in a linear relationship;
- cost behavior can be measured accurately;
- sales and production volumes are approximately equal;
- performance does not change within the scope of the release changes considered;
- prices remain stable.

The most popular direction of industrial outsourcing in Russia is the restructuring of industrial outsourcing.

The consequence of this type of outsourcing is the reduction of production space, which leads to a decrease in fixed costs of the enterprise and an increase in the share of variable costs in the cost of the product [Fig. 2].

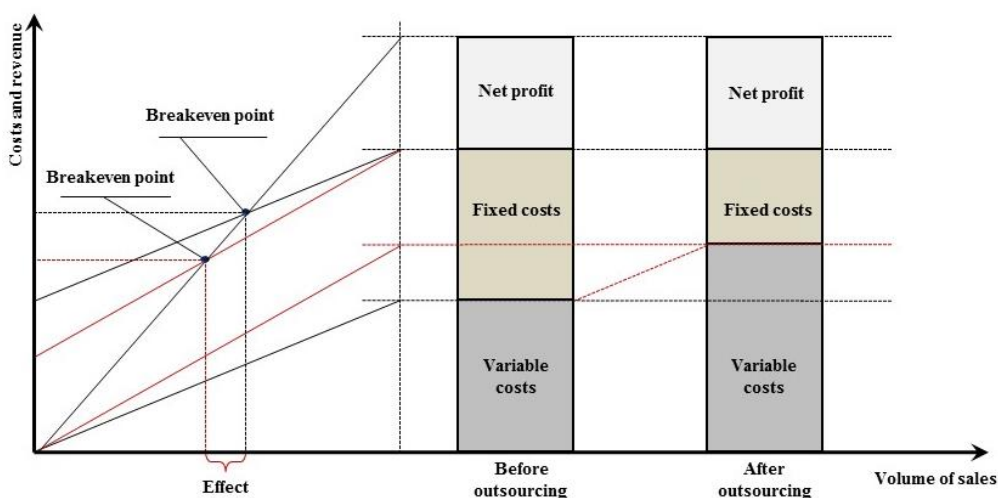


Fig. 2: Change the break-even point when using outsourcing.

The figure shows that the use of restructuring outsourcing increases variable costs, as well as reducing fixed costs.

Since after outsourcing the added value of the enterprise in the value of the product is reduced, the loss of margin profit is an obvious phenomenon.

Therefore, the positive impact of restructuring outsourcing on the position of the break-even point is obvious. However, in the above reasoning, it was assumed that the cost of production in the application of outsourcing remains relatively unchanged.

The experience of Russian and foreign companies shows that, as a rule, the use of restructuring outsourcing affects the cost of production in the direction of its increase and decrease. It depends on the purpose for which this tool was used at the enterprise [5].

Consider each of the options.

RESULTS AND DISCUSSION

1) The cost of production in the application of outsourcing increases.

In this situation, it is assumed that the use of restructuring outsourcing increases the cost of production [Fig. 3]. An example is the modernization of the model range of trucks at PJSC KAMAZ, which meant the purchase of more expensive automotive components from leading global and Russian manufacturers, which leads to a rise in the cost of products [6].

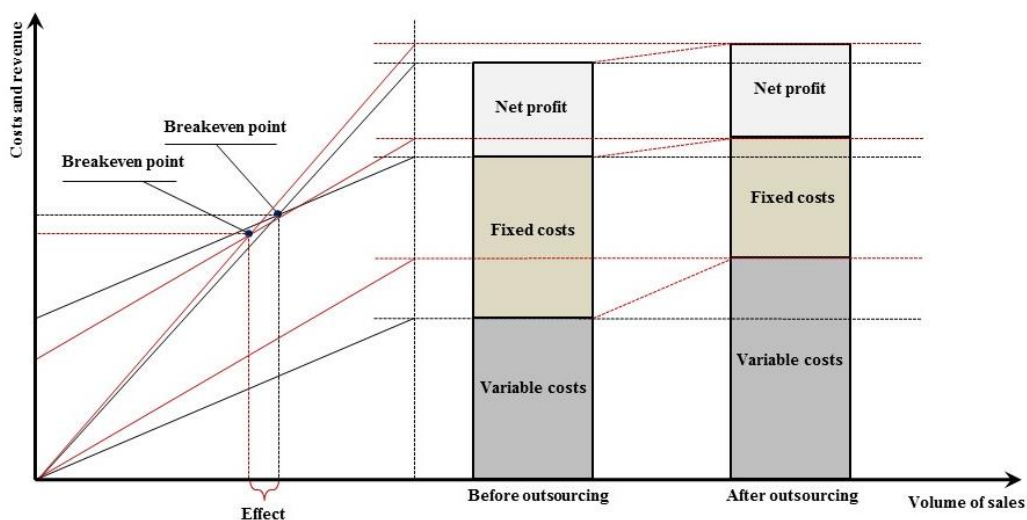


Fig. 3: Change the break-even point when the cost increases.

The increase in variable costs is higher than the decrease in fixed costs per unit of output.

It should be noted that the rise in the cost of finished products cannot always compensate for the increase in cost. Therefore, it is obvious that in order to achieve a positive economic effect from the use of outsourcing in the enterprise, it is necessary to compensate for the increase in the cost of production by increasing its price. Otherwise, it will be necessary to take measures to reduce costs or generate additional profits by reloading the equipment.

We will present some areas of work to improve the efficiency of the restructuring outsourcing in the enterprise:

1. Localization of parts production outsourcing company.

Localization of parts of outsourcer's products allows, firstly, to reduce the prices of purchased components. Second, it will partially compensate for the loss of margin profit associated with the transfer of production components to the side [7].

2. Reduction of prices for purchased components of the product.

In addition to the localization of parts of the outsourcer's products, there are several ways to reduce prices for purchased components:

- harmonization of the purchase of the product components. This allows to increase the volume of orders for outsourcer's products, which has a positive effect on the supplier's commercial offer;
- availability of alternative suppliers. One of the main limitations of outsourcing development in Russia is the monopoly position of the supplier [8]. Therefore, the presence of alternative suppliers allows to increase competition between outsourcers, which will protect against unfair increase in prices for purchased components [9];
- conclusion of long-term contracts. It is a guarantee of a serious and long-term relationship for

the supplier, which begins to reduce the risk premium in the price of its products and offer the customer a variety of discount systems.

3. Reduction of overhead costs of the enterprise.
- 2) the cost Of production in the application of outsourcing is reduced.

The next scenario of the impact of restructuring outsourcing on the break-even point is to reduce the cost of production when using this tool in the enterprise. In this situation, outsourcing is used as a tool to reduce costs. As an example, the statement of the company "Mercedes-Benz" that the automaker plans to significantly reduce the costs of the enterprise by replacing automotive components with cheaper analogues [10].

In this scenario, a decrease in the cost of production can be accompanied by either an increase in variable costs or a decrease in them. We will consider both situations.

Cost reduction and increase of variable costs [Fig. 4].

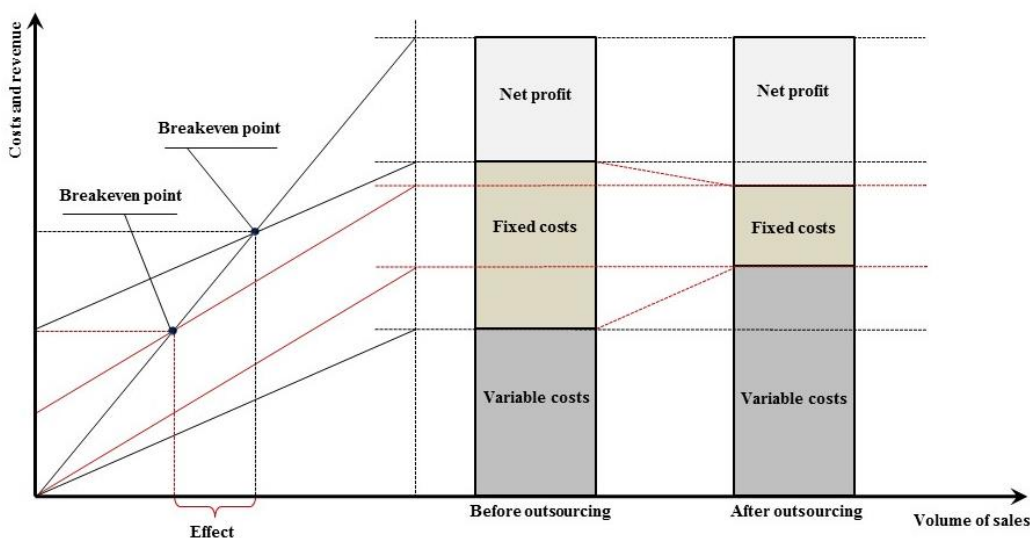


Fig. 4: Change of break-even point at cost reduction and increase of variable costs.

The increase in variable costs is less than the decrease in fixed costs per unit of output. [Fig. 4] shows that there is a decrease in the break-even point.

Reduction of variable costs and production costs.

The use of restructuring outsourcing can also be accompanied by a reduction in variable costs. This situation may be due to the fact that outdated production facilities can produce new products only by "bypass" technologies, which leads to excessive labor intensity and increase in marriage. Therefore, in this situation, the use of outsourcing allows to achieve acceptable fixed and variable costs. Such a situation was faced by "KAMAZ" company when transferring its trucks to the Euro-4 environmental class, when the modified car layout required the production of new types of brackets. However, the plant did not have the equipment for their production, so at the initial stage of "KAMAZ" company produced these components by "bypass" technologies. But in the future, the company had the task to reduce the cost of brackets and the level of marriage either by purchasing new equipment or by bringing production to the side. As a result, it was decided to use outsourcing [5].

Reduction of production costs after outsourcing can lead either to a decrease in the price of products, which will increase sales volumes, as the product becomes more competitive in the price struggle, or to the preservation of product prices, which will increase both the marginal profit of the product and the net profit. In both cases, there is a positive impact of outsourcing on the profitability of the enterprise.

CONCLUSIONS

The analysis allows us to conclude that the use of restructuring outsourcing has a positive impact on the position of the break-even point. However, there are always risks associated with uncontrolled increase in prices for purchased components of the product and inefficient reduction of fixed costs of the enterprise. Therefore, in addition to the well-carried out restructuring of the enterprise with the help of outsourcing should periodically monitor the deviation of the actual prices of purchased components from the target, and in identifying negative deviations should be applied measures to eliminate them. The use of industrial outsourcing should always be accompanied by the implementation of works aimed at the gradual

reduction of prices for the products of the outsourcer, which will eventually improve the efficiency of the use of this tool in the enterprise.

The results of this work may be of interest to theoretical economists for further research in this area in terms of continuing to study the impact of sourcing's models on the stability of the enterprise.

CONFLICT OF INTEREST

There is no conflict of interest.

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None.

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