Tactical and Strategic Modelling of the Corporate Financial Performance Indexes

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Abstract: The approaches for tactical and strategic modelling of the corporate financial performance have been studied in this article. The promising trends in the corporate management and development have been analysed and appraised. As a result of the index calculation methods represented in the article it will be possible to detect the problem companies which slow down the labour efficiency. The use of the composite variable indexes is universal in nature, what allows its application in different fields.

Key words: Strategy • Corporate financial performance • Financial performance

INTRODUCTION

Recently developing modern corporations could heighten the competition in the market by determining various strategic advantages of its business, for example, due to correctly drawn up pricing policy. To this purpose it is necessary to evaluate their main competitors' spending pattern and also to compare the product prices based on the identified pattern and made by the corporation. Economists often use the common scheme "costs - output- profit" to appraise the production output in the market share. The corporation status in the analysed period of time, the growth or decline in the key indexes could be traced, drawing on the market share rate as for the main products of the production activity over the time. In turn, it will be possible to gauge the strength of each of the major competitors when analysing the relative market prices. It is necessary to include the data on the market share of products manufactured by the corporation in the reports to make the corporate management accounting more strategically important. In turn, the information on the market competitors could be obtained in different ways:

- From the official sources (according to the media, public records or the specialized press data);
- From the unaccredited sources (based on the competitors' notion, the customers' and suppliers' testimonials, from the corporation's employees which are ready to provide this kind of information).

The basis for the strategic approach to the corporate development is the analysis of the tactical and strategic development focused on the corporate business objectives. The strategic and tactical management of the changes and corporate development path deviations over the initially approved general direction of its development should be resulted from the performed analysis. It is necessary to lay such grounds for the corporate development, in which the performance index systems will be clearly set, the objectives of the corporate development over different terms (short-, middle- and long-term) and the ways to achieve it will be defined and the necessary margin to change the index values at the intermediate stages of progressing in the strategic trend will be laid.

In the course of the economic activity the analysts should monitor the changes which occur in the corporate internal environment and the corporate external environment, which will be some kind of the corporate performance index. The corporate management should use the available in the modern market approaches to the analysis of the necessary index balance in order to develop a competitive strategy. Such analysis should carry the signs of consistency for ease of the further use.

The need for applying the system analysis results in the corporate business is due to the possibility to identify afterwards a logical relationship between the stated business objectives and the results which should be achieved in the course of doing business. The strategic target guidelines along with the strategic objectives of the
corporate competitiveness contribute to the increase of the stability level of the corporate financial and economic performance. The stable corporate business is based on four its main business aspects. The promising trends in the corporate management and development are such corporate business aspects, as

- Financial performance,
- Market researches,
- Production activity,
- Business changes subject to the market needs.

Along with the drawn up balanced system of the corporate development, it is necessary to divide the indexes into two main classes. The first class will include the indexes which allow evaluation of the obtained operating results, the second one will include the indexes which contribute to the reflection of the processes for achieving such results. It is necessary that both index classes are interrelated, as we need to use certain indexes of the second class (for example, to achieve the use of the production means with minimal residues) for obtaining the first class indexes (for example, a certain production output). In fact, the managers pay attention and analyse the corporate performance indexes.

The Table 1 presents the system of the balanced corporate strategy indexes, which, to our opinion, reflects the main noteworthy trends in the corporate business.

The “Personnel Development and Vocational Training” block – is a certain group of factors which increase the personnel performance within the company in order to maintain or to improve the corporate financial results. The prerequisite is also accounting the level of the production engineering, the employees' efficiency and professional skills, the compliance of the employees' personal interests with the basic corporate strategy. The possibility to use innovative methods of the personnel training and development has a significant impact on the new products or services implementation processes.

The “Production Activity” block – is an activity which is generally aimed to the increase in the corporate sales, but surely, subject to meet the clients' requirements. The corporate management should find the main activities which require improvements or changes when drawing up the strategy of this trend. If the index system is balanced in whole, it is possible to evaluate the effectiveness of the internal processes of the corporate performance on the basis of the clients’ expectations, needs and requirements identified upon the studies. For this purpose we offer to use the capital-output ratio and output index values.

Proceeding from the analysis, carried out above, it is possible to detect the relationship between such indexes of the corporate business blocks, as: “Personnel Development and Vocational Training” and “Production Activity”. It is worthwhile to determine the relation between the rates of the output growth and the employees' remuneration rate. If there is a situation in which the rates of the labour efficiency growth are ahead of the relevant remuneration growth rates, then it is possible to talk about saving the product cost and, as a consequence, the increase of the corporate financial results as a whole. It is comfortably and clearly, when this relation is defined both for the corporate in whole and in the context of its various business aspects [3].

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<td>- Possibility to use innovative methods of the personnel training and development</td>
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For convenience the identified balanced corporate performance index system could be diagrammed (Fig. 1).
Fig. 1: System of the Balanced Corporate Strategy Indexes

The determination of the relationship between the output index and the working time utilization rate for each process is also of rather high importance. The factory workers' efficiency level for the period depends on the actual working time fund for completing the i-th process \((f_i^a)\) and the hourly output upon this process \((o_i^h)\) [3]:

\[
E_{work,i} = f_i^a \times O_i^h
\]  

(1)

The hourly labour efficiency upon the process is defined as [3]:

\[
O_i^h = \frac{A_o_i}{(N_{work,i} \times f_i^a)}
\]

(2)

Where:

\[
A_o_i = \text{the actual output upon the i-th process, ths. rubles.}
\]

\[
N_{work,i} = \text{the average number of the factory workers, involved in the i-th process, person;}
\]

\[
f_i^a = \text{the actual fund of a factory worker's time in the i-th process, hour.}
\]

When comparing the indexes of the hourly output and the efficiency for the period indicated it is possible to evaluate the impact of using the working time spent on the direct performance of workers. The excess of the hourly output index over the index of the factory worker's efficiency, will indicate the working time losses during the analysed process. The analysis will allow detecting the processes with the maximum working time losses.

The capital-output ratio (as to the use of the capital assets) upon the process could be defined by calculating the extensive \((f_i^c)\) and intensive \((f_i^i)\) equipment load factors using the following formulas [3]:

\[
F_i^c = \frac{f_i^{a eq}}{f_i^{a eq}}
\]

(3)

Where:

\[
F_i^i = \frac{O_i^{h eq}}{O_i^{h eq}}
\]

(4)
are the actual fund of the equipment item operating time in the i-th process, the real and planned one respectively, hour; \( O_{pl, i}^{eq} \) and \( O_{eq, i}^{eq} \) are the hourly equipment item output (output per loom hours) upon the i-th process, the real and planned one respectively.

The indexes allow detecting the processes with lower resource output and taking measures to improve corporate capital use efficiency.

When analysing the “Attracting and keeping a client for a long term” block indexes it will be possible to determine the clients' area and the consumer's market sectors, on which the corporate should base when selecting business areas. The identified segments will subsequently become a source of income on which it will be possible to identify and to formulate the main promising strategic objective of the corporate development. The main components of the “Attracting and keeping a client for a long term” block are: the degree of meeting the clients' requirements, the generation and further expansion of the client base, detecting the possibilities to increase the profit, which is brought by the largest clients, will contribute to the possibility of ranking the consumer pricing groups and market segments in the corporate business area. The analysis of the block components will help to determine the consumer value of the clients' expectations and preferences, which in general will be indexes when evaluating the results of the performing work with the corporate clients and analysts.

In general, the indexes of meeting the clients' needs in the market are: sales of the required quality and its market price. The relationship between the price and quality is thoroughly considered in the literature on economics [1]. Our task is to determine the relationship between the client and process component of the balanced index system.

The relationship between the sales (\( S \)) and output indexes is defined by the common formula [3]:

\[
S = N_{work} \times E_{work}
\]  

When substituting in the formula (5) the expression (1) we obtain the following model [3]:

\[
S = N_{work} \times \sum_i F_i^a \times O_i^b
\]

The sales as a result of the capital use is expressed by the following model [3]:

\[
S = C \times C_o
\]

\( C \) – is the corporate capital value, ths. rubles;

\( C_o \) – is the capital-output ratio, rub./rub.

Using the index method we will obtain [3]:

\[
J_s = J_c \times J_o
\]

\( J_s, J_c, J_o \) – are, accordingly, the sales, capital and capital-output ratio indexes.

Using the differentiation method we will obtain [3]:

\[
\Delta S = C_o \times \Delta C + C \times \Delta C_o
\]

\( \Delta C \) and \( \Delta C_o \) are the increase in the capital value and capital-output ratio.

The capital-output ratio is a qualitative factor; hence, its impact on the increase in sales meets the strategic objectives.

The “Financial Performance” block is a certain sequence of steps which are to be taken in all four components of the overall balanced corporate performance index system to obtain the required results in long term. In our opinion, the major index is the increase in return on the corporate equity. When analysing the financial component the indexes of each several components are combined, which allows defining the return on equity index. For this purpose let's build the following model of six factors using the extension method during the factorial modelling of indexes [3]:

For example, the indexes of the fixed assets output and these fixed assets availability for employees will help to determine an innovative field of activity. In its turn, the capital-output ratio and output indexes determine the production field. The sales profitability indexes will help to evaluate the level of working with clients. Such indexes as the unit costs and the reinvested net profit share will determine the financial field of activity.

When making tactical decisions on the minimization of the negative factors, it is important to consider not only its common manifestation, but also it is important to detect and to analyse in which specific corporate companies and why they occur. In our opinion for facilitating the detection of the negative effects, it is convenient to use the composite variable indexes.

For example, the changes in the certain companies efficiency and its ratio according to the total number of its employees with different employees' performance level affect the change in the output level.

The actual corporate output could be defined as

\[ AO = \sum E_{\text{work}, i} \times N_{\text{work}, i} \]

Where:

\( I \) – is the index of the \( i \)-th company.

The average corporate labour efficiency

\[ E_{\text{work}} = AO / N_{\text{work}} = \sum E_{\text{work}, i} \times d_i \]

\[ N_{\text{work}, i} / \sum N_{\text{work}, i} = \sum E_{\text{work}, i} \times d_i \]

Where:

\( d_i \) – is the ratio of the \( i \)-th company among the operating corporates.

The composite variable output index could be derived from the expression

\[ J_{E_{\text{work}}} = E_{\text{work}}^l / E_{\text{work}}^0 = \sum E_{\text{work}}^l \times d^l / \sum E_{\text{work}}^0 \times d^0 \]

\( J_{\text{const}} \times J_{\text{str}} \)
Where:

\( J_{\text{cont}} \) – is the composite constant output index (characterize one worker's output without structure shifts);

\( J_{\text{str}} \) – is the output index which reflects the influence of the structure shifts [3].

As a result of the index calculation it will be possible to detect the problem companies which slow down the labour efficiency. The next task is to analyse the causes of the observed reduction.

The composite variable indexes could be defined using other indexes in a similar way. The proposed method will help to determine the causes of the deviations from the strategic line of the corporate development, to detect the "causers" and to work up a set of activities to make the tactical measures on eliminating or minimization of the deviations in future.

REFERENCES