

Economic Evaluation of Labor Productivity of Managers in Joint-Stock Companies

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Abstract: The development of forms of economic activities increases the importance of management functions as a strategic resource in the functioning of an economic entity. Methodologically, the problem of evaluating of the effectiveness of personnel management is that a direct result of the work of a Manager is the elements of the information environment, but not reified product of labor. There is the methodical task of evaluation of the work of a Manager according to quantitative criteria that have absolute and not relative value. The article considers the question of how to evaluate the effectiveness of labor management personnel of the company through quantifying the value of changes in the cost of capitalization of the business entity.

1. Introduction

By its existence, the market economy presupposes the existence of market mechanisms for assessment of economic phenomena, which could effectively implement the functions of monitoring and diagnosing the state of a business entity [1]. Assessment of labor productivity is one of the most important indicators of a comprehensive analysis and diagnosis of the condition of the economic entity for the purposes of tactical planning and implementation of strategic plans. The activities of the main production workers, technical workers is reflected in the indicators of labor productivity: the output and labor intensity. By measuring, output in real terms (less effective in value), labor intensity (an indicator inversely proportional to development) we can quite easily establish the effectiveness of the use of labor resources and what is extremely important, establish the effectiveness of their use [2]. Having a flexible system of planning, adjusting to current production and schedules, the entity, operating with the values of the efficiency of use of labor resources, can be flexible in adjusting targets of current activities and strategies for action. And this is the prevailing practice of economic activities of market entities, which is implemented through the functions of management, control, distribution and redistribution. Effective system of monitoring and diagnosing the efficiency of economic activity will work with the proper qualification of management resources, which, in fact is the implementation of these functions at the managerial level [3]. But here a logical question arises: if the performance of the managerial unit itself is not evaluated at all (for the manager there is no concept of development or labor input, as has already been said: the manager does not produce the final materialized product) and the effectiveness of the work is not quantified, how can we conclude the effectiveness of the work and the compliance with the positions of managerial personnel. This article proposes methodological tools that will allow quantifying the efficiency of management analysis.

2. Methodology

In this study, heuristic methods of analysis of economic processes were used in the form of a quantitative assessment of the absolute and relative values expressed in terms of value. We used the method proposed by Stewart and Stern [4] to assess the economic added value and its modification in the form of increased joint added value, proposed by Rappaport [5] for strategic planning of increasing the value of the company.

3. Results

Let us consider the methodological question – how to evaluate the efficiency and productivity of the managerial staff of an economic entity: what we proceed from when we offer our assessment tools. In our opinion, we proceed from the obvious goals of any business entity, which is primarily the extraction and maximization of the financial result of an enterprise after taxes (actually net profit). But what are the conditions for maximization of the financial result: obviously, this increases level of activity of the economic entity, the scale in turn is determined by the functioning of the company's capital, reflecting the value of enterprise capitalization [6]. That is, an efficiently working deterministic link is an increase in the capitalization of an economic entity – a financial result after taxes and other obligatory payments (recall that net profit is one of the main sources of self-financing of the enterprise). It is logical that the growth of net profit, while maintaining the scale of the enterprise leads to an increase in the capitalization of the enterprise. Thus, one of the main objectives in implementing the management function is to increase the capitalization (cost) of the enterprise. The capitalization of an economic entity is estimated in absolute terms in terms of value, that is, we can argue that the work of managerial personnel is as effective as the magnitude of the company's capitalization changes, the growth of capitalization in a positive direction.

An indicator that reflects a net change in capitalization for the purpose of economic evaluation of business performance was proposed by Stuart and Stern in 1991 and is called Economic Value

Added (EVA) (1) [7]:

where EVA – economic value added, NOPAT – net operating profit after tax, WACC – weighted average cost of capital.

$$EVA = NOPAT - WACC \cdot IC \quad (1),$$

Earlier in 1986, for the implementation of strategic initiatives in the framework of strategic management Alfred Rappaport proposed an indicator of shareholder value (2):

$$SVA = PV(NCF_n) + ([PV(TV)_n - PV(TV)_{n-1}]) \quad (2),$$

where SVA – joint value-added,

PV(NCF_n) – current value of the net cash flow for the step n,

PV(TV)_n, PV(TV)_{n-1} – current value of residual assets (stocks, reserves, etc.) at the beginning and end of step n, respectively.

What is the logic of evaluating the results of labor of the managing personnel of an economic entity: if the indicator of enterprise value increases during the reporting period, it is obvious that management decisions were effective and the performance was positive; if the indicator decreases, then the productivity of labor is negative. At the same time, shareholder value added does not appear as the main indicator of valuation, but as indicative, that is, its growth confirms the current trend. This is illustrated in Table 1.

Table 1 The ratio of the trends in the indicators EVA and SVA for the purposes of economic evaluation of managerial performance.

Indicators SVA/EVA	rows/columns	EVA	
		1	2
SVA	1	+/+	-/-
	2	-/+	+/-

The Plus (+) and minus (-) reflect the trend of growth (+) or decrease (-), and their combination, on the left SVA, on the right EVA, we give a detailed explanation for each of the possible situations:

- Cell 1.1: both indicators grow during the reporting period, this is evidence of the

effective work of management personnel in the enterprise, which is confirmed by the SVA indicator;

- Cell 1.2: Both indicators are reduced over the reporting period, this indicates that the company reduces the cost of capitalization, loses shareholder value, respectively, this is direct evidence of the ineffective work of management personnel and the negative productivity of labor;
- Cell 2.1: The value of SVA is decreasing, while the value of EVA is increasing, as we can see from this situation, the trends are heterogeneous, but the EVA is reflecting changes in the fundamental value of the company, while the SVA is tied to the value of net cash flow, the reduction of which will result to a decrease in the shareholder value added indicator, but cannot be interpreted unambiguously as a negative trend (for example, indicators such as the turnover of current assets and capital profitability increased then, in order to maintain the scale of activity, the amount of cash flow can be reduced, and the difference can be used to finance alternative sources of income, the inflow of which will appear in the forecast period). Hence, by the value of EVA, we can conclude about the effectiveness of the managerial staff, but with low efficiency, given the negative value of shareholder value added;
- Cell 2.2: Here the opposite situation of the previous example, the value of the SVA indicator grows while the value of the EVA indicator falls, economic added value for our purposes has a higher priority, as the value reflects a change in the fundamental indicator of the scale of activity, therefore there is no labor efficiency of managerial personnel, effectiveness persists, but with a negative trend.

We make a distinction between labor efficiency and labor productivity, because there is always some kind of result (positive or negative) in economic activity, but it does not indicate effectiveness, it is the magnitude of the result that will indicate how efficient the work of managers is. Thus, using the absolute values of the indicators of economic value added and shareholder value added, we can determine in quantitative terms how effective the work of managers is.

4. Discussion

We do not focus on the final financial result and the net profit of the economic entity due to the fact that the amount of net profits goes to paying dividends in joint-stock form of management, which undoubtedly increases the market value of the enterprise. But net profit cannot speak clearly of a change in the fundamental value of an economic entity. Accordingly, net profit, which is also adjusted by deferred tax liabilities, cannot serve as evaluation criterion [8]. It should be further noted that it is necessary to consider the fundamental value of an economic entity, not the market value. The fundamental value of the business entity is determined by the amount of capital invested in the activities of the enterprise, the cost of using capital and net assets in value terms. The market value of the entity with joint-stock form of management, is defined as the market cost of the supply and demand of shares of the company, which significantly distorts the result of the evaluation (it should be noted that the practice of impact assessment management is common in Western valuation practice). Market value is speculative in nature and, to some extent stochastic in pricing, exchange players or strategic investors can buy securities based on their subjective expectations of the effectiveness of the enterprise, which is undoubtedly not suitable for the objective assessment of the performance of management personnel [9].

Having a quantitative expression of the indicator of economic value added, we can also determine the specific indicator of performance per unit of the managerial staff of the enterprise, by dividing the absolute value of economic value added by the average value of managerial personnel.

5. Conclusion

In modern conditions of market management, the economic entity is faced with the task of not only increasing the productivity of operating personnel, but also increasing the productivity of

managerial personnel. The tools that Stern, Stuart, Rappaport proposed, and we adapted for the purpose of evaluating labor productivity, adequately meet the requirement of an objective assessment. Significant remuneration of management personnel, which are not confirmed by objective values of the result of labor, unreasonably increase the expenditure part of the total cash flow of an economic entity, which leads to a decrease in the efficiency of operations. Timeliness of productivity assessment and objectivity of conclusions, quantitative expression of the assessment is necessary, first of all, to the owners of the enterprise and strategic investors who transfer the shares of their capital to the activities of the business entity.

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