

Theoretical framework of accounting and analysis for value-based management

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Abstract. The concept of value-based management is one of the newest cost management technologies of an enterprise. Purpose of this paper: to justify that value-based management accounting and analysis will allow creating an information base for understanding the result of an enterprise activity from the standpoint of the actual value growth. Results: using the methods of analysis, the authors defined the concepts of value-based management accounting and analysis, and revealed their advantages as compared with the financial indicators of an enterprise organization for performance evaluation. Research applications: senior management and company managers can use the results achieved in this study for the effective development of an enterprise.

1 Introduction

The development trends of managerial and organizational models in modern business indicate that the effective business replaces extensive business. The key principle of effective business management is to ensure long-term competitiveness, which determines the strength and sustainability of an enterprise in the market: “value management in project portfolios has centered on the maximization of commercial value and identification of future business prospects” [1]. The profit rate, previously used as a universal indicator of an enterprise’s activity purpose, has been recently replaced by more complex indicators. The primary indicator characterizing their activities is the increase in the company’s value. The concept of value-based management (VBM) is one of the newest cost management technologies successfully applied and developing in foreign companies.

The market economy development, the organizational structure complexity increasing, and the growth of organizations, the increased level of uncertainty, the need for effective ways of overcoming crisis phenomena necessitated the adaptation of cost management technology to the Russian management traditions; recent research suggests that little is known about this [2, 3].

The need for such management dictates the need to create accounting and analytical techniques that would allow measuring, evaluating and analyzing the increase in the company value. It is essential that accounting should be as objective and accurate as possible, and calculation methods and evaluation criteria developed for the analysis of indicators should allow processing the accounting data to receive the information on cost and the factors affecting its growth.

To evaluate their activities, companies need an indicator independent of the lending rates fluctuations and currency levels, protected from manipulation of the indicator value both by the company and its managers and by external users - financial analysts, competitors, etc. The value of an enterprise can act such an indicator, maximization of which becomes the primary purpose of its activities. However, recognizing the value of an enterprise as the main guideline is not enough - a cost calculation algorithm is needed, clear and consistent, accompanied by a mechanism for introducing value-based accounting into the existing accounting system. This will make the cost management process convenient and efficient for managers [4, 5].

Before investing in an enterprise, it is necessary to select an investment direction. This choice should rely on the assessment of the economic effect, determined as the difference between the expected results and the estimated costs. A potential investor, considering investment options, needs to understand the potential investment outcome and its cost. The economic benefit is the difference between the investor's income and the alternative value of not using the opportunity to receive profit from other investments. However, data on the company's value should be obtained by the management as part of management accounting, since management requires information on the company's value. Among other things, this is necessary to understand the conditions required to achieve the necessary investments [6, 7].

While the available financial and management accounting provides adequate information for financial and economic analysis, the information on key indicators reflecting changes in value is very fragmented, difficult to access or completely absent [8]. The information ensuring the decision-making and management processes is required at all stages of management - in formulating a strategy and in the process of its implementation. In this regard, the development of an information system that allows defining strategic goals and measuring the achieved results is therefore considered vital, and "the technical characteristics of change should not be neglected but should be integrated into analysis undertaken" [15]. Recently, traditional accounting methods are unreliable as the basis for generating indicators for evaluating and measuring management systems. This resulted in the development of new measurement and evaluation systems and revealed that "accounting information and techniques do play an important role in relation to organizationally complex and strategic decision situations" [9].

Since the management accounting system is primarily focused on the collection and interpretation of an enterprise data, solely for providing information on factors that may influence the change in its position in the future, then the interaction of the management accounting system with the company's management system is bidirectional. On the one hand, the company's strategy determines the amount and quality of the necessary information; however, on the other hand, the format of the provided information has a significant impact on management decisions.

2 Materials and methods

The authors' approach to management accounting and analysis is based on the definition of key indicators of an enterprise, allowing adding value. Economic Value Added (EVA) is used for mid-term sales and operations planning [10, 11]. The main purpose of the management accounting and analysis system in modern management concepts is to provide companies with high-speed strategy response; its goal is to set the criteria, provide a basis for their ongoing monitoring, measurement, and improvement, under the goals and objectives [10, 12-15].

The strategy determines the main directions of the company's development; it is the basis for planning of its activities. Strategic management should constitute certain blocks of management processes with a feedback. These blocks include:

1. Diagnostics. Management decision-making requires industry analysis, competitor analysis, financial and economic analysis, and other types of analysis depending on the company's needs.

2. Definition of objectives. Objectives emerge as a compromise between the company's possibilities and the ambitions of its leadership or owners.

3. Planning. To achieve strategic goals, starting with the current state of an enterprise, it is necessary to develop plans.

Management accounting and analysis. The company's managers should be able to track the implementation of the plan by key indicators and, if necessary, adjust plans or revise objectives. Management accounting and analysis systems serve as indicators for diagnosing the state of an organization.

3 Results

Problems in implementing the VBM concept result from the established traditions of accounting, analysis, and management, as well as the impact of the owners' mentality. Investors' dissatisfaction with the existing performance measurement systems, which rely only on the financial indicators of current activities, contributes to the development of the VBM accounting and analysis system. In the majority of Russian companies, management decisions are made based on financial indicators of profit, revenue, liquidity, and solvency. However, such evaluation has a significant disadvantage since it assumes that the business is effective if the profit covers its costs. At the same time, these indicators do not indicate the company's investment needs and the amount of funds for withdrawal by the owners. In other words, financial indicators show the company's current efficiency, but not its future.

The authors believe that the main disadvantages of the use of the company's financial indicators for evaluating the effectiveness of its activities should include the following:

1. The company's performance evaluation by financial figures ignores the opportunity costs. In accordance with accounting, the indicator of the company's efficiency is the net profit shown in the income statement. At the same time, this approach ignores the alternative income of the company's owners, which they could receive when investing their funds in other projects with a similar risk level. If one calculates the alternative income of owners from investing in other projects and this alternative income will exceed the company's net profit, then the company's activities can no longer be called successful. Therefore, the accounting profit does not reflect the actual results of an enterprise from the position of owners. In this regard, the need to use other criteria for calculating the benefits of owners from invested funds becomes obvious.

2. No attention is paid to the problems of investment and business operations risk since in accounting they are reflected without considering risks and forecasts.

3. Financial indicators characterize the situation in the short term. This can lead to the fact that the company's managers will focus only on immediate results. This can result in overproduction, overstocking of warehouses, inadequate level of working capital, insufficient or excessive capital investment and other negative consequences.

4. The time value of money is ignored. Accounting (financial) statements do not show the uniformity of cash flows distribution over time. Assets and liabilities recorded in the balance sheet regardless of the timing of receipt or payment of money, may lead to the decrease in the value of funds in the long term.

5. The company faces problems with the accounting of individual operations, such as:

- Unorganized accounting for off-balance sheet financing;

- Use of various reserves as a means of artificially smoothing profits;
- Linear depreciation, distorting the value of fixed assets;
- Problem of reflecting intangible assets, both created and acquired by the company;
- Problem of reflecting the deferred taxes;

Other features of accounting and taxation.

6. Financial indicators calculated based on accounting (financial) statements depend on the company's accounting policy. For example, companies can calculate depreciation using both the linear and the accelerated method, which, with equal values of profit before tax and the initial cost of fixed assets, will lead to different values of profit before tax. This results in issues of comparing companies in terms of their performance. A similar problem may occur with different stock recording methods.

7. The possibility of intentional data corruption. These distortions include:

- Misleading practice of recognizing income and expenses;
- Shift of income of the current period to future periods;
- Recognition of dubious and false income;
- Recognition of dubious, unsubstantiated and false costs;
- Shift of costs of the current period to future and past periods;
- One-off operations in order to improve profitability;
- Restructuring to improve future profitability;
- Creating dubious reserves for profit optimization;
- Tax distortions.

8. The increasing complexity of accounting (financial) reporting hampers the use of financial indicators for assessing effectiveness. The number of pages in financial statements is constantly increasing, while information is becoming increasingly difficult to use in management. The larger the enterprise, the more difficult it is to evaluate its efficiency and return on investment.

9. Failure to take strategic decisions based on financial performance. Financial indicators do not provide answers to the following questions:

- Does the selected development strategy effectively create value for owners?
- Which of the company's activities create value, and which eliminate it?
- Which investment strategy should the business use?
- What value can be provided by alternative development strategies?
- What financial performance is required for the managers to focus on the long-term value, instead of short-term results?
- What indicators should be fundamental for the decision-making system?

The authors believe that these goals define the following objectives of management accounting:

- Accounting of the presence and movement of the company's property and sources of its formation, including in the context of non-financial indicators, and the provision of this information to managers;
- Accounting of deviations of significant indicators from established norms and estimates;
- Monitoring the company's activities, individual business units and other centers of responsibility;
- Planning and budgeting of the company's activities;
- Activity forecasting.

The concept of management analysis and its relation to management accounting are interpreted differently; besides, this term is absent in regulatory documents. Therefore, the authors propose the following definition: "Management analysis is the analysis based on information received from management accounting and other sources, aimed at processing and preparing information for optimal management decision-making".

The authors identified the following features of management analysis:

- It is the basis for management decision-making;
- Uses both internal and external information;
- Is forward-looking;
- Managers of all levels can use the analysis results;

The analysis has no external regulation;

- Study of all aspects of the company's activities;
- The analysis results are of a confidential nature.

The analysis of economic literature makes it possible to propose the following definition of management accounting. Management accounting is an independent scientific and practical accounting area, ensuring the constant formation of specific information within its facilities, which can be used as an information base for optimal decision-making at different management levels.

As can be seen from the characteristics of management accounting, the main users of information collected in the management accounting system are the company's senior management, heads of departments and experts. Management accounting provides a constant accumulation, classification, and synthesis of necessary information according to a specially developed methodology. Management analysis provides a qualitative and quantitative assessment of ongoing changes in the managed object.

Management analysis reveals the development trends of both unwanted and progressive phenomena. The results of management analysis allow developing solutions that can slow down the development of adverse events and create favorable conditions for development. Moreover, the management analysis can identify unused internal reserves of an enterprise, as well as reserves that additionally arise in new situations, making it possible to accelerate the development of a managed object or transfer it to a more efficient mode of operation.

The analysis of problems in the use of conventional financial indicators allows concluding that VBM should focus not only on financial indicators since they do not allow assessing the effectiveness of the selected strategy. Management accounting and analysis for VBM make it possible to mitigate or even eliminate the disadvantages associated with business management based on financial indicators. Management accounting and information analysis systems that are the basis for VBM may require a drastic change in conventional accounting and analytical methods. At the same time, the existing accounting software allows obtaining the indicators required for the calculation of the value (cost) of an enterprise.

For the effective management of an enterprise, it is necessary to provide the necessary information to the management personnel. Currently, the trend of weak demand for accounting data for management decision-making is gradually waning. This is partly because accounting does not generate the information necessary for cost management. However, with the improvement of digital technology, such problems lose relevance. Any software product designed for accounting and analytical management support can be adjusted to obtain the required indicators. Such indicators may be purely accounting, obtained by summarizing the primary and calculated data, that is, determined based on the calculation of accounting indicators.

The shape and volume of the required information, the methods of collection and analysis of technologies generated in the system of management accounting and analysis determine the management decisions on the strategy implementation. This strategy, in turn, is continuously adjusted under the influence of various factors, including the effective organization of the management accounting and analysis system. Therefore, modern management is a continuous process, and the management accounting and analysis system determine its organization.

4 Conclusions

To comply with VBM requirements, it is necessary to apply new approaches to interpreting information for management accounting and analysis. The development of a management accounting system should necessarily be accompanied by creating a management analysis system since they constantly interact with each other and exchange information. Therefore, both management accounting and analysis should be adjusted to VBM goals. They can be considered as an integrated management accounting and analysis system for the purposes of VBM. Management analysis for VBM and management accounting based on VBM should be developed simultaneously.

Therefore, the authors propose the concept of VBM accounting and analysis as an independent accounting and analytical management system. VBM accounting and analysis can be defined as an independent scientific and practical area, ensuring the constant formation and assessment of the necessary information within its facilities to further use it as an information base for optimal management decision-making while managing the enterprise's value". The information base, formed based on VBM accounting and analysis, can be applied in science and practice to ensure companies' effective development.

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