

# SOME THOUGHTS ON THE BUSINESS EFFICIENCY AND THE METHODS FOR ITS ANALYSIS

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**Abstract:** The issue of enterprises' business is relevant at all phases and stages of their development. The survival of enterprises and the continuation of their business in the context of the complex and contradictory economic reality require them to be financially stable, properly oriented and positioned on the competitive market that is characterized with certain level of entropy. The achievement and maintaining of market and financial stability require the enterprises to implement measures for the continuous increase of their business efficiency. The importance and relevance of this issue are even higher today due to the effect of a system of internal and external factors, and as a result of the existing crises some of which are still experienced. For example, the enterprises' business is subject to the influence of the Covid-19 pandemic consequences and the health crisis, supply chain disturbance, closing and restriction of many business and activities in the country, etc., it has caused. The business of the Bulgarian enterprises is also influenced by the wars led in the vicinity of the territory of Bulgaria, the occurred gas crisis, the unstable political situation, the high inflation rate, the increase of energy and other resource prices and a number of other factors.

The author's interest to the issues of enterprises' business efficiency and the methods for its analysis is a long-term interest. Observations show that the specialized literature in the country does not offer theoretically substantiated general methodology for efficiency analysis, which is feasible and useful for the business practice. Only individual methodologies for analysis of different aspects of the efficiency are offered, such as methodology for analysis of the efficient use of workforce (analysis of the labour efficiency indicator). Thus, the objectively existing dialectic relations between the resultative indicators that characterise the various aspects of efficiency and the factor indicators that affect the improvement or worsening of the business in general and its specific aspects, cannot be covered. This publication reviews the methodology for analysis of enterprises' business efficiency. The concept of efficiency is consistently highlighted, the sources of the information necessary for its analysis are described, and the system of indicators for business efficiency analysis is justified. The author's objective is to suggest an improved general methodology for analysis of business efficiency, which integrates the individual private methods for analysis of its different aspects in the course of the enterprises' business.

Keywords: methodology, analysis, efficiency, indicators, factors.

Field: Social science.

## 1. INTRODUCTION

Depending on the field the effectiveness is manifested and considered in, it may be differentiated in different types, e.g. economic, social, environmental, energy, etc. Direct and reverse mutual relations and dependencies objectively exist among the main three types of effectiveness (economic, social and environmental).

This publication highlights the economic effectiveness of the enterprises' business in their capacity of business subjects operating in the economy of the country. The interest in this issue is due to the importance and significance of the economic effectiveness of the enterprises' business (business effectiveness) – an issue that is relevant at all stages and phases in the development of each enterprise.

Initially, the article justifies the nature of effectiveness in broad sense as a major and important economic category. Then it clarifies the nature of the economic effectiveness of the enterprises' business. In the course of the study, the author applies the systematic and logical approach. With view of the systematic approach, the elements of the system for business effectiveness analysis and the relations and dependencies among them are justified. These elements are presented on figure 1.

## 2. NATURE OF EFFECTIVENESS

The Bulgarian National Audit Office Act (NAOA, 2015, supplementary provisions, item 4a) gives a legal definition of effectiveness. It provides that effectiveness means the extent to which the auditee has achieved its objectives while comparing actual and anticipated results of its operations. Of course, this effectiveness definition reflects the aspects of carrying out a performance audit (NAOA,

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supplementary provisions, item 4). In its nature, the performance audit is a “review of activities pertaining to the planning, implementation and control at all management levels within the auditee regarding their effectiveness, efficiency and economy.” Defining effectiveness in the national legislation means that the term “effectiveness” has a legal form.

The standards that define the quality management systems provide for the main concepts, principles and terms used for the definition of the quality management system, including the enterprises' management quality. Such standards apply to enterprises with different scope of business, operating in different sectors and branches of the economy, enterprises of different size, in accordance with the requirements of the accounting legal regulations (Directive EU34/26.06.2013, Account Act, applicable accounting standards), organizational structure (functional centers of responsibility), models for their operational organization and other criteria. The standards state that the efficiency is the relationship between the result achieved and the resources used (ISO 9001:2015, paragraph 3.7.10.).

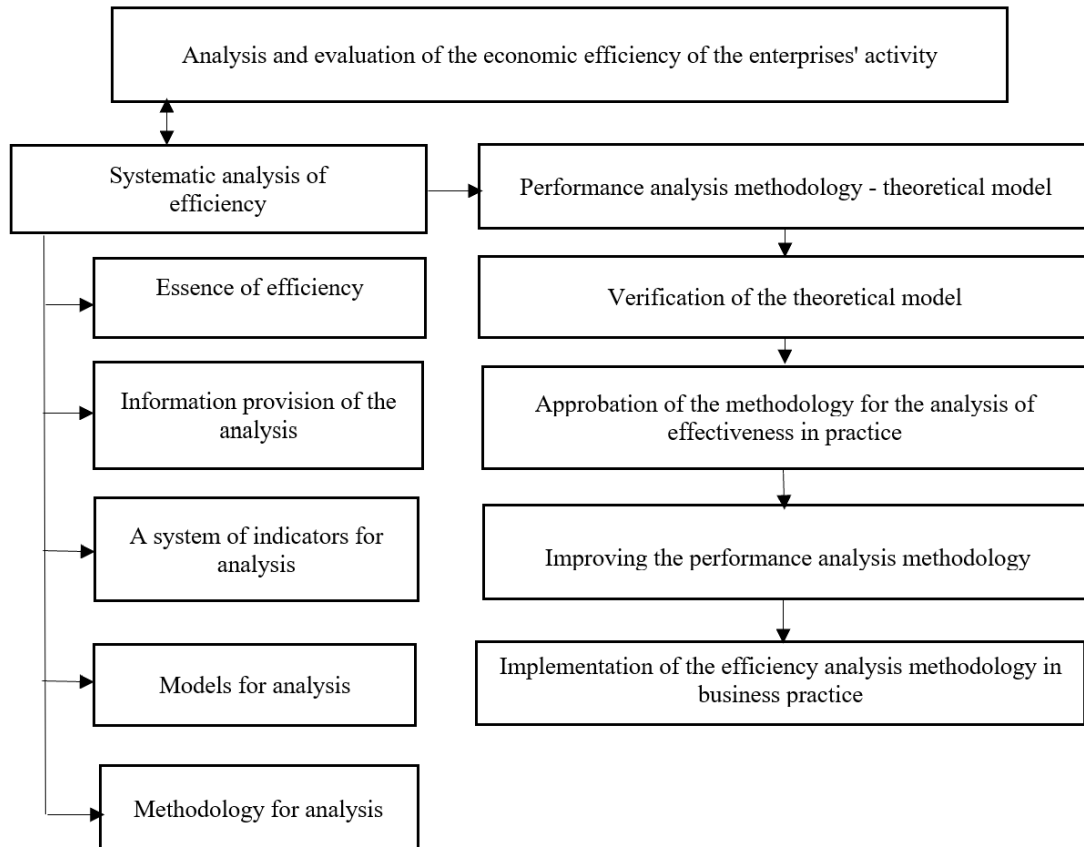


Figure 1. System for analysis and assessment of the economic efficiency of the enterprises' activity and the methodology for its analysis

To our opinion, effectiveness, in the broad sense, is manifested upon the comparison of achieved results and the costs incurred, respectively, the resources used for their achievement. In quantitative terms, efficiency may be measured by means of the ratio between the effect and the amount of costs, respectively, the resources used for its achievement. The result of each activity is summarized and characterized exactly through the effect that it has achieved.

In terms of effectiveness, the achieved results are originally related to and compared with the price for their achievement. The publication highlights that effectiveness may be expressed in two major ways: (Economic Encyclopedia, 2005)

1) As a relationship between the achieved effects (results) and the costs incurred (used resources) for their achievement. Such ratio shows the achieved effects (results) of specific type ensured by a unit of costs (resources). The objective here is that the achieved effects (results) are higher than the costs incurred, respectively, the resources used.

2) As a relationship between the costs incurred (used resources) and the achieved effects (results). Such ratio shows the amount of costs incurred or resources used for the achievement of a unit of effect (result) of specific type. In this case, the objective is to minimize the costs, respectively, the resources used for the achievement of a unit of effect (result).

The economic effectiveness is an element of the system that characterizes effectiveness in general. To the opinion of Galabov (2007, p.209) "the use of resources (property and capital) is related to the economic effectiveness. Actually, it is an expression of such use. The analysis of economic effectiveness is made with the help of a number of indicators. All of them reveal what economic effects (useful results) the company (enterprise – comment, R.I.) realizes (achieves – comment, R.I.) with the help of a unit (one BGN – comment, R.I.) of costs or a unit one BGN – comment, R.I.) of resources (assets or capital). The economic effectiveness may be defined as a quantity of economic effect (value of the economic effect – comment, R.I.), which is created with the involvement of a unit (one BGN – comment, R.I.) of costs or a unit of (one BGN – comment, R.I.) resources. Or as the amount of costs or resources used for the creation of a unit (one BGN – comment, R.I.) of economic effect." Galabov (2007, p.209) With view of his opinion about the nature of the economic effectiveness, Galabov (2007, p.209) suggests to calculate and use four indicators for effectiveness analysis by using the following formulas:

$$1) \frac{\text{Economic effect}}{\text{Expenses}} \quad 2) \frac{\text{Expenses}}{\text{Economic effect}} \quad 3) \frac{\text{Economic effect}}{\text{Resources}} \quad 4) \frac{\text{Resources}}{\text{Economic effect}}$$

We should note that namely the economic effect is "the useful result and it has different forms of manifestation (sales revenue (net revenue from sales of products, goods and/or services – added, R.I., and profit (accounting, book profit, profit from sales of products, goods, and/or services – added, R.I.)." Galabov (2007, p.209)

To our opinion, we should make a difference between the concepts "economic effect" and "economic effectiveness". In its nature, the economic effect is the achieved useful result, which is an absolute indicator for analysis. The economic effectiveness expresses the useful result achieved with costs incurred or resources used in the amount of one BGN, and vice versa. In this particular case, these are relative indicators that are widely applied in the theory and practice of the enterprises' financial and business analysis.

Our many years' work on the issues of effectiveness of enterprises' business enables us to present our views on the basis of which we will elaborate a definition for the nature of the effectiveness.

First of all, our understanding is that the effectiveness is an economic category. This opinion is based on the following considerations:

1) The effectiveness reflects and characterizes important and definitive economic relations existing objectively and being manifested in the course of the business of enterprises operating in the different sectors and their related industries in the country's economy. Effectiveness is a result that is formed and changed under the influence of the factors (causes, conditions) that describe the relations between the different aspects of the enterprises' business and that are being permanently changed due to the performed business operations and the ongoing business processes in the course of their activity. The relations between the key indicators are objectively reflected in the enterprises' financial statements being manifested in the form of different ratios between the elements presented in them: assets (resources), sources for acquisition of assets (own capital and liabilities), revenue, costs, financial results (profit or loss, respectively), cash flows. Thus, we can come to the conclusion that effectiveness is manifested in the course of each enterprise's business, which is a fundamental reason for the thesis we support that the effectiveness is an economic category. The universal nature of effectiveness manifestation allows us to define it as an economic category that has a deep essential basis. We should emphasize that philosophy defines the concept of "nature" as a category that is of key importance for the theory and practice of the financial and business analysis science. Based on these positions, we clarify the nature of effectiveness in general and in broad sense, and of the effectiveness of enterprises' business in the narrow sense as an economic effectiveness.

2) The nature of effectiveness is expressed both with view of the logical relations of formation and change of enterprises' assets and the sources for their funding, as well as with view of the revenue, costs and financial performance, including the cash flows. These elements presented in the financial statements of the enterprises are formed and developed by the external signs of effectiveness manifestation to the internally inherent and specific ratios, which define its internally inherent nature. Thus, we are able to analyze and evaluate effectiveness both in broad and narrow sense.

3) The ratios between assets and their funding sources express the logical relations between the business means considered from two aspects as assets and as sources for their acquisition. By means of the interrelations between assets and their funding sources (own capital and borrowings), and those between costs, revenue and financial results, effectiveness is manifested both in broad and in narrow sense. Furthermore, taking into account the fact that each going concern holds and controls assets and their funding sources, incurs costs, gains revenue, forms financial result and operates with cash flows,

in the form of inflows and outflows for the reporting period, the universal nature of effectiveness as an economic category may be determined.

4) The ratios between different values of profit (accounting, book, operating profit, profit from sale of products, etc.) and the assets, capital (own capital and borrowings), revenue, net revenue from sales of products, goods, works and/or services, costs and other elements, define profitability as a summary indicator of effectiveness. Profitability is of universal nature and is manifested in the course of the business of all economic and financial subjects in practice.

As a result of these deliberations, we think that the economic effectiveness – as an element of effectiveness in general, may be defined as an economic category that expresses in relative terms the objectively existing relations and dependencies between the achieved results and the costs incurred, respectively, the resources used for their achievement. Such relations and dependencies are manifested in two directions. Firstly, as a relation between achieved results and costs incurred (resources used) for their achievement. In this respect, achieved results (resultative indicators) are functionally dependent on the amount of incurred costs and used resources (factor indicators). The second direction is the relation between the amount of incurred costs and used resources and the achieved results. These relations and dependences are, per se, an expression of, and characterize, the dialectic cause-and-effect relations between the resultative and factor indicators.

### 3. INDICATORS FOR ANALYSIS AND EVALUATION OF ECONOMIC EFFECTIVENESS OF THE ENTERPRISES' BUSINESS

The elaborated definition of the nature of economic effectiveness allows us to say that two groups of indicators can be used for the analysis and evaluation of economic effectiveness:

1) Indicators that may be expressed through the ratio of achieved result to costs incurred or resources used for its achievement. In this case, the effectiveness indicators characterize the amount of achieved result (for example, accounting or book profit, revenue, net revenue from sale of products, etc.) in the course of enterprises' business with costs of one BGN incurred (e.g. total amount of costs, amount of different types of costs by economic elements, amount of costs by types of activities, etc.) or input (used) resources (e.g. average amount of fixed tangible assets, amount of costs on materials, average number of employees, etc.).

2) Indicators that may be expressed through the ratio between incurred costs and used resources and achieved result. In this particular case, the effectiveness indicators characterize the amount of costs incurred or the resources used for the achievement of result of one BGN.

For the purposes of introducing the system of indicators for analysis and evaluation of the economic effectiveness of the enterprises' business, we need to raise the following questions:

1) Can the system of indicators be determined as a set of indicators for analysis of objectively existing relations and dependencies between the elements of the overall business of the enterprise (marketing, innovation, investment, principal (industrial, trading, tourist, transport, construction, agricultural, etc.), trading and financial activity).

2) When considered independently, individual effectiveness indicators may not ensure full information for the economic effectiveness of the enterprises' business.

3) While analyzing and evaluating effectiveness, we should take into account the "multi-aspect research of the phenomena and processes within the enterprise" (Mirkovich, 2006, p.63-72).

4) The importance and significance of the analysis indicators are determined by the fact that "each economic phenomenon or process may be expressed through specific (relevant – comment, R.I.) indicators. ... Thus, it is a requirement to select them correctly in order to fully reflect the economic phenomena and processes." (Yovchev, 2017, p.206)

5) "The issue of measurement, (which – added, R.I.) refers to the selection of indicators and the clarification of their reality and to the technical ability to reflect the development and the cause-and-effect relations while using one or other statistic and economic models" (Nikolov, 1988, p.117) is crucial for the system of analysis indicators

6) Upon elaborating and making a management decision for the development of the enterprise's business in short- and long-term perspective, the management team must analyze and evaluate "the effect of such decision on the most important financial coefficient (on the values of financial indicators and their dynamics – added, R.I.) (Project under Leonardo da Vinci Program, 2009)

7) Every indicator within the system of indicators is interrelated with other indicators, without overlaps both in terms of calculation, as well as in terms of the information obtained from it.



8) The analysis indicators, including the indicators for analysis of effectiveness, must comply with the relevant requirements, for example: independence (each indicator should provide useful information for the enterprise's management, without overlapping the information provided by other indicators); materiality (indicators should reflect material (important) aspects of the enterprise's business; necessity (without the relevant indicator, the analysis is considered incomplete and cannot provide the information required for making proper management decisions for the development of the enterprise and its business); comparability in terms of: unity of the time period the indicators are calculated for; input information (technical, natural, climate, methodological, etc.); uniformity of analyzed objects; measurability (availability of information for determining the value of indicators).

To our opinion, four groups of indicators, among which objective relations and dependencies exist, may be included in the system of indicators for analysis of the economic effectiveness of the enterprises' business. (see figure 2).

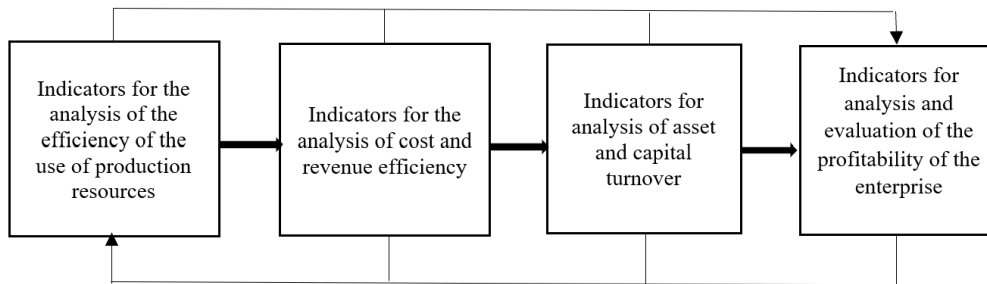


Figure 2. System of indicators for analysis and evaluation of the economic efficiency of the enterprises' activity

1) The first group of indicators is composed of indicators for analysis of the effective use of manufacturing resources:

A) indicators for analysis of the effective use of fixed tangible assets: loading ratio and absorption ratio of fixed tangible assets.

B) indicators for analysis of the effective use of material resources: material productivity ratio and materials-output ratio.

C) indicators for analysis of the effective use of workforce: productivity of labour.

These are typical indicators for internal effectiveness analysis the values of which are calculated on the basis of internal information created in the enterprise – mainly accounting and operational information.

2) The second group of indicators is composed of indicators for analysis of effectiveness of enterprise's revenue and costs. To our opinion, it is expedient to classify these indicators in the following two groups:

A) external analysis indicators: cost effectiveness ratio and revenue effectiveness ratio. The values of these indicators are calculated on the basis of information disclosed in the enterprises' financial statements that are public. The information obtained from this analysis is intended both for external and for internal users.

B) indicators for internal analysis: depreciation attributable to net revenue from sale of products of one BGN (depreciation attributable to sales of one BGN) and cost of production attributable to net revenue from sale of products of BGN 100 (full cost per production of BGN 100). The values of these indicators are calculated on the basis of data created in the enterprise – mainly accounting and operational information. The resultative information is intended only for internal users (management, financial management) and is of confidential nature.

3) The third group comprises the indicators for analysis of asset turnover (fixed tangible assets and short-term assets) and of capital turnover (total invested capital, own capital, borrowings, and fixed capital).

4) The fourth group comprises the indicators for analysis of rate of return calculated on different bases: assets, manufacturing assets, capital, own capital, borrowings, fixed capital, revenue, net sales revenue, costs, etc.

## 4. CONCLUSION

As a conclusion, we can summarize that effectiveness is an economic category that is of key importance for the activity of business subjects and the economic development of the country. From fundamental point of view, effectiveness is bound with the achieved results, incurred costs and/or used resources, which enables us to go deep in and substantiate the fundamental theoretical nature of effectiveness both in broad sense, and of the economic effectiveness in narrow sense. This allows us to give proof of a general methodology for analysis of effectiveness by clarifying its specificity and concrete manifestation in individual enterprises.

## REFERENCES

- Galabov, M. (2007). Indicators and models for analysis of the company's financial condition. Sofia: Scientific works of the UNSS, item 2.
- Directive of the European Union EU34/26.06.2013
- Law on the Audit Chamber, published State Gazette no. 12/13/02/2015, amended no. 98/9.12.2016, no. 96/1.12.2017, no. 99/12.12.2017 add. no. 103/28.12.2017, amended no. 7/19/01/2018
- Law on Accounting, published SG No. 95/8.12.2015 ..., amended and add. SG No. 37/07.05.2019, amended and add. SG No. 96/6.12.2019, add. SG No. 26/22.03.20202, amended SG No. 104/8.12.2020, add. SG No. 105/11.12.2020, amended and add. DV. No. 19/5.03.2021
- Ivanova, R. (2019). On the question of the analysis of the effectiveness of the use of material resources in the conditions of a circular economy. The Economy of Bulgaria and the European Union: Circular Economy and Corporate Social Responsibility, Sofia. IC-UNSS.
- Ivanova, R. (2020). On the question of the different approaches to the analysis of business efficiency, jubilee international scientific conference on the occasion of the 100th anniversary of the Department of "Accounting and Analysis", Sofia. IC-UNSS.
- Ivanova, R. (2020). Analysis of business efficiency - problems and solutions, XVIII International Scientific Conference "Management and Engineering" 20, TU, Sofia. link to the collection: <https://dox.abv.bg/download?id=c35465083b>
- Ivanova, R. (2022). Analysis of the efficiency of leading enterprises from the construction and real estate sector, "Real Estate & Business" electronic magazine, issue 6 (3), <http://realestatejournal-bg.org/arhiv/tom-6-1>.
- Ivanova, R. (2022). Analysis of the efficient use of manufacturing resources /models and methodology for analysis/. International journal "KNOWLEDGE", Institute of Knowledge Management, Skopje, Vol.54.1, p. 37-43.
- Ivanova, R. (2023). Employee defined income programs after leaving the enterprise /methodology of accounting and analysis/, International journal "KNOWLEDGE", Skopje, Vol.57.1, p.69-74.
- Yovchev, I. (2017). Theoretical and methodological foundations of the analysis of the financial situation and application at leading construction enterprises. Varna: Yearbook of the University of Economics.
- Collective. (2005). Economic Encyclopedia. Science and art. Sofia.
- Mirkovic, K. (2006). Validation of the systemic approach in economic theory, Sofia: Economic Thought Magazine, No. 5.
- Nikolov, N., N. Angelov. (1988). Indicators and criteria in social management. Varna: Kl G. Bakalov.
- Project under the "Leonardo da Vinci" program. (2009). Analysis of the Operational and Financial Condition of the Enterprise, London, UK: Institute of Professional and Financial Managers.