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### SEGMENTARY ANALYSIS OF THE EFFICIENCY OF STATE ENTERPRISES

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## **ABSTRACT**

The purpose of the article is to substantiate the main stages and directions of analysis of the activities of state-owned enterprises by operational and geographical segments, taking into account the goals and objectives of strategic management. The information base of the empirical study was the data of the official website of JSC "Ukrzaliznytsia" for 2020. The methodological and methodological basis of the study is the National Accounting Regulation (Standard) 29 "Financial reporting by segments" and International Financial Reporting Standards (IFRS) 8 "Operating segments". The following methodical methods were used in the course of the research, namely: methods as comparison, modelling, time series, structural and dynamic, graphic and coefficient analysis. Based on the proposed methodology, the efficiency of JSC "Ukrzaliznytsia" is analysed and the problematic operating segments of its activities are identified, which reduce the overall financial results of the company. The results of the study are the improvement and systematization of analytical indicators in terms of individual stages and areas of strategic analysis of the effectiveness of state enterprises through the differentiation of performance evaluation of their operating business segments. For this purpose the main stages and directions of the analysis on the following analytical blocks are



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offered: the analysis of external environment of functioning of a business segment; analytical

 $assessment\ of\ the\ competitiveness\ and\ competitive\ position\ of\ the\ business\ segment;\ analysis$ 

of resource potential and efficiency of production capacity of the business segment; assessment

of innovation and investment activity of the business segment; analysis of the efficiency of the

business segment; analysis of the state of execution of budgets of revenues, expenditures,

profits; analysis of management efficiency and quality.

**Keywords:** state enterprises; operating segments; geographical segments; efficiency of

activity; segmental analysis; segment reporting; strategic analysis

1. INTRODUCTION

Transparency of state-owned enterprises and their relations with the government are

critical to ensuring proper control over the efficient use of state property and developing

measures to improve their activities. Bringing state-owned enterprises to the public will

promote transparency and accountability by providing up-to-date, reliable and high-quality

reporting on performance, which in turn will build trust between the state-owned enterprise,

government, the public and other stakeholders.

Analysis of the effectiveness of management of diversified state-owned enterprises with

a wide geography of sales has its own characteristics, as certain areas of business may have

different effects on the overall results of their activities. Large state-owned enterprises usually

have a complex organizational structure and have many branches, representative offices and

subsidiaries in different geographical segments. The contribution to the formation of financial

results of these segments can vary significantly, so in order to strategically manage large

multispectral companies, the issues of differentiation of performance evaluation of each

activity in each geographical segment are relevant.

The purpose of the article is to substantiate the main stages and directions of analysis

of the activities of state-owned enterprises by operational and geographical segments, taking

into account the goals and objectives of strategic management.

2. LITERATURE REVIEW

Such scientists as Gamble, Marcella and Tapp (2007), Kotler (2008), Lambin,

Chumpitaz and Schuiling (2010) and others, who substantiated the need for such an analysis

for large enterprises with a complex organizational structure and different activities. According

to them, accounting for business segments creates the necessary information basis for in-depth



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analysis of factors influencing the efficiency of the enterprise as a whole, allows to find reserves

to increase profits by abandoning non-profit business segments, strengthens control over their

costs, provides information for strategic management for the purpose of optimizing the areas

of activity and expanding the geography of business in more attractive geographical segments

from the standpoint of business climate.

Unfortunately, this area of research in domestic science is practically out of the focus

of Ukrainian scientists. Some issues of segment reporting analysis were considered in the

works of such domestic scientists as Ozeran and Vovk (2014) and Lehenchuk (2016). However,

their scientific achievements are mainly aimed at the formation and improvement of reporting

information by segments. Since state-owned enterprises usually have a complex organizational

structure, multi-item production and pursue not only purely economic, but also social goals.

Thus, the issues of improving the information support of strategic analysis through the

deepening of the segmental analysis of the efficiency of state-owned enterprises that are objects

of public interest remain relevant and require further research.

Determining the role of reporting information by segments in the analytical support of

large corporate governance, American researchers Paul and Largay (2005) emphasize the need

to increase the transparency of such reporting and unify the disclosure of information for

different companies for comparative analysis.

French scientists Barnetoa and Ouvrardb (2015) explored the information capabilities

of segment reporting (IFRS 8) for the purpose of forming business models of large companies.

According to them, the content of segment reporting can be improved by disclosing cash flows

of individual business segments, i.e. using the Cash-Flow approach. As a result, the information

support of segment analysis for the purpose of assessing the effectiveness of business models

is significantly strengthened and acquires a different perspective with an emphasis on the

ability of business segments to generate cash flow and increase the value of the company as a

whole.

American scientists Herrmann and Thomas (1996) have shown that the quality of

segmental analysis and its direction depends on the completeness of information disclosure in

segment reporting, which is determined by the level of detail of financial statements, including

information on operating and geographical segments of income, expenses, profit, assets. Based

on regression analysis, they argued that the quality of segment reporting is influenced by factors

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such as company size, type of activity (industry), country of operation of the company, listing

on the stock exchange.

Despite the growing attention of foreign and domestic scientists to these issues, it

should be noted that the problems of accounting and analytical support of strategic management

of state enterprises through the substantiation of priority areas of their development in terms of

individual activities and geographically, require additional research.

3. DATA AND METHODOLOGY

The information base of the empirical study was the data of the official website of JSC

"Ukrzaliznytsia" for 2020.

The methodical and methodological base of the study is the National Accounting

Regulation (Standard) 29 "Financial reporting by segments" and IFRS 8 "Operating segments".

The following methodical methods were used in the course of the research such methods as

comparison, modelling, time series, structural and dynamic, graphic and coefficient analysis.

Comparative analysis was used in the comparative analysis of the efficiency of

individual business segments of JSC "Ukrzaliznytsia".

Coefficient analysis was used to substantiate the system of relative performance

indicators. Graphic technique was used to visualize the results of the analysis of the activities

of individual business segments. When forming a system of evaluation indicators for individual

stages of analysis, the method of modelling was used.

4. RESULTS AND DISCUSSIONS

The formation of accounting and analytical information about the reporting segments

is an integral part of the financial statements of the enterprise and its management. Segment

information mainly contains characteristics that correspond to the principle of economic

relevance. This focus of accounting and analytical information provides an opportunity for

external users (including regulatory authorities) to assess the effectiveness of the entity and

assess the primary factors that are formed in certain segments of the state enterprise and affect

the overall performance of the enterprise as a whole.

Typically, segment analysis includes a set of segmentation procedures, evaluating the

effectiveness of business segments and their positioning for strategic management of the

organization. The advantages of segmental business analysis is that it forms an expanded

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information base on the effectiveness of a particular area of operations, which creates competitive advantages for companies and ensures a stable competitive position in the market in the long run. In turn, the analysis of activities by geographical segments.

To assess the effectiveness of management of state-owned enterprises by segments of activity, we propose to group analytical procedures into the following stages:

• definition of segmentation criteria depending on management objectives;

• conducting segmentation of activities according to selected criteria on the basis of the norms defined by the National Accounting Regulation (Standard) 29 "Financial reporting by segments" and IFRS 8 "Operating segments";

• formation of a system of analytical indicators and development of methods for analysing the effectiveness of individual business segments;

• analysis of the effectiveness of individual business segments on the basis of coefficient and matrix methods, identification of the most promising and unattractive from the standpoint of efficiency of activities;

• development of strategy for the development of individual segments.

The first stage of segmental analysis is the selection of segmentation criteria depending on the chosen goal, substantiation of the segmentation object and determination of its boundaries. When substantiating the list of segmentation criteria, domestic state-owned enterprises should take into account the target orientation and peculiarities of their activities and be guided by the provisions of the National Accounting Regulation (Standard) 29 "Financial reporting by segments" and IFRS 8 "Operating segments".

The rules of the National Accounting Regulation (Standard) 29 "Financial reporting by segments" define the methodological principles of forming information about reporting segments and its disclosure in the financial statements. The provisions of this standard are applied by enterprises, organizations and other legal entities regardless of ownership (except for small enterprises, non-profit organizations, banks and budgetary institutions), if the company is required to publish annual financial statements, or the company has a monopoly (dominant) position in the product market (goods, works, services), or if the products (goods, works, services) of the enterprise before the beginning of the reporting year decided on state regulation of prices.



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In turn, IFRS 8 "Operating Segments" is mandatory for separate or individual

statements of an entity whose consolidated financial statements of a group with a parent: debt

or equity instruments that are traded on the open market (on the domestic or foreign stock

exchange or on the over-the-counter market, including local and regional markets); who

submits or is in the process of submitting its financial statements to a securities commission or

other regulatory body for the purpose of issuing instruments of any class on the open market

[paragraph 2].

The National Accounting Regulation (Standard) 29 "Financial Reporting by Segments"

provides for the separation of economic and geographical segments, information on the results

of which should be disclosed in the notes to the financial statements of the enterprise.

Geographical segment is a separate part of the enterprise for the production or sale of a

particular type (or group) of products (goods, works, services) in a particular economic

environment, which differs from others: economic and political conditions of the geographical

region; the relationship between activities in different geographical regions; territorial location

of production (works, services) or buyers of products (goods, works, services); activity risks

specific to the geographical region; currency control rules and currency risks in such regions.

The economic segment is a separate part of the enterprise's activity of production and /

or sale of a certain type (or group) of products (goods, works, services), which differs from

others: type of products (goods, works, services); method of income (method of distribution of

products, goods, works, services); the nature of the production process; risks specific to this

activity; category of buyers.

In International Financial Reporting Standard 8, the term "reporting segment" is

replaced by the term "operating segment", which is engaged in an economic activity and from

which it can derive revenue and bear costs (including income and expenses related to

transactions with other components of the same entity), the operational results of which are

regularly reviewed by the senior manager of the entity's operations to decide on resources to

be allocated to the segment and evaluation of its performance, and for which discrete financial

information is available.

Segment reporting in accordance with IFRS 8" Operating Segments" is based on a

management approach. This means that the formation of information that is reflected in the

reporting segments depends on the characteristics of the activities and organizational structure

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of the enterprise. The main principle of disclosure of reportable segments in accordance with

IFRS 8 is to enable the user of the financial statements of the entity to assess the nature and

financial impact of the economic activities in which it operates and the economic conditions

under which it operates.

In accordance with paragraph 13 of IFRS 8 "Operating segments", the entity reflects

separately in the reporting information about the operating segment, which meets any of the

following quantitative thresholds:

a) its reported income, including both sales to external customers and cross-segment sales

or transfer transactions, is 10% (or more) of the total (internal and external income) of

all operating segments;

b) the absolute value of the reported profit or loss is 10% (or more) greater than the

absolute value of the amount: the total reported profit of all operating non-loss

segments, and the total reported loss of all operating loss segments;

c) its assets account for 10% (or more) of the total assets of all operating segments.

Operating segments that do not meet any of the quantitative thresholds may be

considered and disclosed separately if management believes that information about that

segment will be useful to users of the financial statements.

Information on other economic activities and operating segments that are not reported,

aggregated and disclosed in the category "all other segments" separately from other items that

require reconciliation, should describe the sources of income included in the category "all other

segments" [paragraph 16].

If the total external revenue reported in operating segments is less than 75% of the

entity's revenue, additional operating segments should be defined as reportable segments until

at least 75% of the entity's revenue is included in the reportable segments [paragraph 17].

It should be noted that the requirements of the two standards for the disclosure of

information about reporting segments are virtually indistinguishable and do not contradict each

other. However, unlike the National Accounting Regulation (Standard) 29, the application of

IFRS 8 is based on the formation of professional judgment on material and non-essential

information, and its subsequent disclosure in the financial statements of the entity.

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For the purposes of strategic management, segmentation is usually carried out by strategic business units, among which are the following:

• product or group of products (products, types of work, services);

• segments of the external environment of the organization (geographical region, market,

consumer group).

centres of responsibility.

The next step is to verify compliance with the quantitative limits for each business segment in accordance with the requirements of IFRS 8 "Operating Segments" or the National Accounting Regulation (Standard) 29 "Segment Reporting". In case of non-compliance with the necessary requirements of these standards, aggregation and mergers of small business segments (formed on the basis of previously selected features) should be carried out taking into account the following criteria:

• specific characteristics of the business segment, in particular the features of the

production process, purchase of goods, performance of works, provision of services;

• external conditions of business segment development, in particular social and economic

conditions of development of a specific region, market conditions;

• specific characteristics of products, goods, works, services;

• legal conditions for carrying out the activity (for example, the need for licensing,

taxation);

• special conditions of cooperation with buyers and customers, methods and conditions

of sale of products, goods, works, services;

• responsibility of specific individuals for the results of a particular business segment;

• technological and innovation policy of the enterprise as a whole and individual areas of

activity;

• information support of segmental analysis on the basis of management accounting by

centres of responsibility.

On the other hand, if the selected business segment, on the contrary, is too large, then

for in-depth analysis it is recommended to grind certain business segments.

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The second stage involves direct segmentation according to certain criteria, i.e. the

separation of functional areas for performance analysis and collection of necessary information

for individual segments of the enterprise and the enterprise as a whole. Given that the selection

of relevant segments and their evaluation is at the discretion of the compiler, it is necessary to

take into account a certain element of subjectivity that may affect the final results of the

analysis.

Therefore, in addition to the formal criteria for the formation of economic and

geographical segments, it is necessary to take into account the goals and objectives of the

analyst, the features of the organizational structure of the enterprise, the functional focus of its

operation.

An important area of research is the formation of a system of criteria for assessing the

effectiveness of individual segments, which primarily depend on their income, expenses and

cash flows. The third stage includes the development of methods for analysing the

attractiveness of individual business segments and assessing their economic efficiency. The

information base of segmental accounting and analysis is management accounting and

management reporting.

To assess the effectiveness of enterprise management in terms of relevant operational

and geographical segments, it is necessary to substantiate the list of key financial and non-

financial indicators that affect the quantitative and qualitative changes in performance relative

to the strategic goal of the enterprise as a whole. This aspect is especially relevant for state-

owned enterprises, as their goals usually go beyond economic efficiency but also include social

functions. The analysis of these indicators is aimed at monitoring changes in performance and

should be carried out on the basis of established weights in the context of each functional area.

At this stage, the analysis can be carried out in the following areas:

• development of a system of analytical indicators to assess the attractiveness and

efficiency of the functional segment;

• determining the significance of individual functional areas and geographical segments

and the formation of weighting factors for individual indicators;

• substantiation of generalizing integral indicators of efficiency of functioning of separate

segments and ways of their aggregation.





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In order to control the level of costs and operational impact on the indicators of "net profit" and the indicator of "profitability of activities" for state enterprises, we consider it appropriate to replace the indicators of return on assets and profitability to replace the indicator "expenditure per 1 UAH of income", which should be included in financial plans, assessed for compliance and subject to strict operational control.

This indicator can be calculated both for all operating costs and for some of their components, for example, labour costs of all staff (including the head of the company and other management staff, certain categories of employees, material costs, staff insurance costs, entertainment costs, costs for advertising, etc.

The calculation of the norms of the expenditure limit per 1 UAH of income can be carried out according to the data of the previous period, or in case of unprofitable activity in the previous period it is planned based on the average industry data. For non-profit enterprises that are created to perform socially important functions, the criterion value of this indicator can be set at the level of one, i.e. costs should not exceed income.

Comparative analysis of indicators characterizing the financial efficiency of individual business segments of JSC "Ukrzaliznytsia" is given in Table. 1.

Table 1: Analysis of the efficiency of certain business segments of JSC "Ukrzaliznytsia" for 2020 (UAH million, unless otherwise stated)

Indicators	Freight	Intercity	Suburban	Additional	Other	Total
	transportation	passenger	passenger	international	segments	
	_	transportation	transportation	activity		
1.Income from sales to	65330.1	3679.6	453.5	5458.0	843.2	75764.3
external buyers						
2.Income from sales to other				1584.4	8861.3	10445.7
segments						
3. Total income	65330.1	3679.6	453.5	7042.4	9704.6	86210.0
4. Personnel expenses	26009.8	6172.6	3100.6	5827.0	998.0	42108.0
5. Depreciation	8712.3	1891.8	754.2	918.2	99.4	12375.9
6. Electricity	5777.0	919.4	576.2	1004.0	6903.5	15180.0
7. Fuel	4245.8	469.8	303.4	407.4	38.1	5464.5
8. Materials, repair and	4760.8	988.0	518.7	310.4	1242.7	7636.5
maintenance						
9. Other operating expenses	4712.8	988.0	576.4	1383.6	189.6	7850.3
10. Costs redistributed				-3973.9		-3973.9
between other segments						
11. Total segment costs	54218.5	11429.6	5829.5	5876.7	9471.3	86641.3
12. Operational result of the	+11111.6	-7565.9	-5375.9	+1165.7	+233.2	-431.3
segment						
13. Profitability ratio of sales			· · · · · · · · · · · · · · · · · · ·			
(ROS), coefficient	0.170	-2.056	-11.854	0.165	0.024	-0.005
14. Total profitability ratio,			· · · · · · · · · · · · · · · · · · ·			
coefficient.	0.205	-0.673	-0.922	0.198	0.025	-0.005





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15. Coefficient "Costs per 1						
UAH of income", coefficient.						
	0.830	3.106	12.854	0.834	0.976	1.005
16. Salary intensity	0.398	1.677	6.837	0.827	0.103	0.488
17. The level of depreciation						
costs per 1 UAH of income						
	0.133	0.514	1.663	0.130	0.010	0.144
18. Energy consumption	0.153	0.377	1.939	0.200	0.715	0.239
19. Material consumption	0.073	0.218	1.144	0.044	0.128	0.088
20. The level of other costs						
per 1 UAH of income						
	0.072	0.269	1.271	0.196	0.020	0.091

<sup>\*</sup> Compiled by the author on the basis

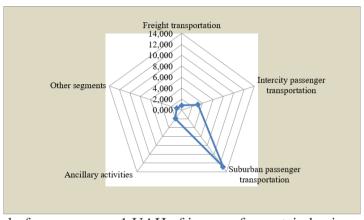


Figure 1: The level of expenses per 1 UAH of income for certain business segments of JSC "Ukrzaliznytsia" in 2020

The conducted analysis of the efficiency of certain business segments of JSC "Ukrzaliznytsia" showed that the greatest efficiency of the activity was illustrated by the segment "Freight transportation", which includes freight services provided by JSC "Ukrzaliznytsia". The rate of return on sales for this segment in 2020 was 17.0%, and the overall rate of return was 20.5%.

Accordingly, the indicator "expenses per 1 UAH of income" was 0.83 UAH, which illustrates the high efficiency of this business segment.

Profit for this segment in 2020 was 11,111.6 million UAH. In the overall revenue structure, this segment occupied a significant share and amounted to 75.8% in 2020.





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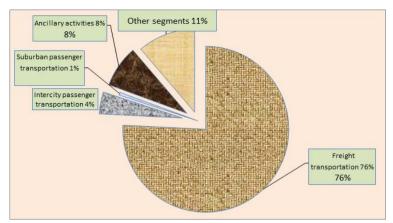


Figure 2: Revenue structure of JSC "Ukrzaliznytsia" by operating segments for 2020

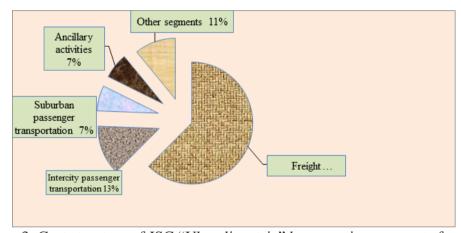


Figure 3: Cost structure of JSC "Ukrzaliznytsia" by operating segments for 2020

The second place in terms of efficiency is occupied by the segment "Ancillary activities", which generated a profit of 1,165.7 million UAH. Expenditures per 1 UAH of income of this segment were at the level of 0.834 UAH, profitability of sales -16.5%, total profitability was -19.8%

The segment "Ancillary activities" includes the activities of certain structural units of regional branches and branches of the Company, which produce products and provide services for their own consumption within the Company, as well as for sale to third parties who are not part of the Joint Stock Company. The segment "Auxiliary Activity" manufactures industrial products and provides services related to freight transportation, suburban passenger transportation, construction, reconstruction and modernization of the railway line and transport infrastructure, repairs and maintenance of various types of railway equipment, etc.

The transfer of products (works, services) between structural units of one branch and between branches within the Company is considered internal turnover and is reflected as a redistribution of costs (line "Costs redistributed between other segments") without reflection





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in income accounts (except for certain transactions). The segment that receives redistributed costs displays them in the category "Other operating expenses".

The segment "All other segments" includes enterprises that provide services for the repair and maintenance of rolling stock and other services provided by subsidiaries of the company. In the structure of revenues, this segment took second place and amounted to 11.3% (9,704.6 million UAH) and had a positive financial result of 233.2 million UAH. Relative efficiency indicators had the following values: profitability of sales – 2.4%, total profitability – 2.5%, costs per 1 UAH of income –0.98 UAH, which positively characterizes the cost management system of this segment. However, taking into account the peculiarities of the activities of structural units included in this segment, it should be noted that it is characterized by high energy intensity of services –0.715 UAH per 1 UAH of income, and low specific labour costs – 0.103 UAH per 1 UAH of income (the best figure among all segments).

The Board, as the chief operating decision maker, monitors the operational performance of each unit separately for decision-making purposes on resource allocation and evaluation of the results of their activities. Segment performance is measured on the basis of their operating profit or loss, which is measured in accordance with the estimate of operating profit or loss in management reporting, which differs from consolidated financial statements prepared in accordance with IFRS, as management accounting is based on management indicators.

The most problematic segment was "Suburban passenger transportation" (loss of 5,375.9 million UAH) and "Intercity passenger transportation" segment (loss of 7,565.9 million UAH). At the same time, the relative efficiency of activities, characterized by indicators of profitability of sales and overall profitability was the worst in the segment "Suburban passenger transportation". In analytical practice, with a negative value of the financial result, usually, the profitability indicators are not calculated, so for comparative analysis, it is advisable to use the indicator "expenses for 1 UAH of income".

Thus, this indicator for this period for the segment "Suburban passenger transportation" was 12.85 UAH, for the segment "Intercity passenger transportation" – 3.11 UAH, and for the segment "Ancillary activities" – 1.96 UAH. As the segment "Suburban passenger transportation" in the overall revenue structure of JSC "Ukrzaliznytsia" occupies a small share – 0.5%, in the end the most negative impact on the financial result had the segment "Intercity passenger transportation", the loss of which was 7565.9 thousand UAH, and in the structure of income its share was 4.3%.



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In order to find reserves for improving the efficiency of unprofitable segments, a more

detailed analysis of the reasons for the significant deviation of their efficiency indicators

compared to other segments in terms of individual cost components should be conducted. So,

for example, per 1 UAH of income material consumption in this segment was -1.14 UAH,

salary – 6.84 UAH, the level of depreciation costs per 1 of income was – 1.66 UAH, energy

consumption – 1.94, other costs – 1.27 UAH, which significantly exceeds similar indicators in

all other segments.

When analysing the reasons for this state of cost management in this segment, firstly

we must examine the factors that negatively affected income. It should be noted that since JSC

"Ukrzaliznytsia" is a state-owned enterprise, in addition to economic tasks, this enterprise also

performs social functions, in particular, transportation of privileged categories of passengers

(pensioners, students, pupils, the disabled, etc.), which leads to lower incomes. However, the

results of the "Suburban Passenger Transportation" segment show that the cost management

company's policy is extremely inefficient.

Therefore, the main attention of managers should be paid to optimizing the costs of the

segment through more efficient loading of trains, streamlining the train schedule, regulation of

transport tariffs, control over labour costs of certain categories of workers in certain directions

and more.

At the final stage, we propose a strategic analysis of functional business segments,

which can be carried out in the following areas:

analysis of the external environment in which the business segment operates;

assessment of the competitiveness and competitive position of the business segment;

analysis of resource potential and production capacity of the business segment;

assessment of innovation and investment activity of the business segment;

analysis of the efficiency of the business segment;

execution of budgets of revenues, expenditures, financial results by business segments;

the level of development of the components of the management system.



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Table 2: System of key benchmarks of strategic analysis of business segment efficiency

	of strategic analysis of business segment efficiency			
Functional sphere	System of indicators			
Analysis of the external environment of	The level of competition in the industry based on the The			
business segment operation	Herfindahl-Hirschman Index			
	Demand and supply of specific products (services, works) in			
	the geographical segment			
	Actual and future market growth rates in this industry and			
	geographic segment,%			
	Product life cycle stage (product)  Market conditions and its stability			
	·			
Analytical assessment of the	Political and economic stability in the region			
Analytical assessment of the competitiveness and competitive position of	Absolute market share of the business segment Relative market share.			
the business segment	Growth rate of absolute and relative market share,%			
the business segment	The relative level of efficiency of the business segment in the			
	market in terms of return on assets			
	The growth rate of the relative level of efficiency of the			
	business segment			
	Summary indicator (coefficient) of competitiveness of the			
	business segment			
	Competitive position of the business segment based on matrix			
	analysis			
Analysis of resource potential and efficiency	Fund security of the enterprise and its growth rate			
of production capacity of the business	Return on assets (return on capital) of the segment and its			
segment	growth rate			
	Growth rate of capital intensity (resource intensity)			
	Degree of automation of production processes,%			
	Coefficient of completeness of use of fixed assets (certain			
	types of equipment) by the degree of involvement in the			
	production process and by time Availability of unique types of resources and completeness of			
	their use			
Assessment of innovation and investment	Efficiency of innovations,%			
activity of the business segment	Coefficient of progressive equipment upgrade			
detivity of the business segment	Coefficient of renewal of new (innovative) products			
	R&D expenditure growth rate,%			
	Efficiency of innovations,%			
	Coefficient of progressive equipment upgrade			
	Coefficient of renewal of new (innovative) products			
	Profitability index of innovative projects			
The efficiency of the business segment	Profitability of sales (rate of return)			
The efficiency of the business segment	Cost recovery (income-expenditure ratio), %			
	Gross profit growth rate,%			
	Return on assets (economic return),%			
	Costs per 1 UAH of income (consumption capacity),%			
	Asset turnover, times			
Execution of budgets of income, expenses,	Total marginal revenue and the level of budget execution on			
profit	this indicator,			
r · ·	Execution of expenditure budget,%			
	Execution of revenue budget,%			
	Execution of the net profit budget,%			
	Execution of the budget of the level of expenses for 1 UAH of			
	income (expenditure limit)			
Analysis of management efficiency and	The level of digitalization of the management system			
quality	Availability of automated control systems			
•	Coefficient of reliability of the control system			
	Coefficient of duplication of functions			
	1			





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Coefficient of efficiency of corporate governance

Staff loyalty

Source: compiled by the author

The proposed system of indicators meets the characteristics of the performance appraisal system of individual business segments through key performance criteria and allows assessing their contribution to achieving strategic goals of state enterprises aimed not only at profit but also at achieving social efficiency and efficiency of state property use.

In the future, it is necessary to establish the significance (weight) of each functional area for the effectiveness of segmental analysis as a whole, as well as the significance of individual indicators within each functional area.

At the final stage, the analysis of the efficiency of state-owned enterprises in individual segments is carried out directly on the basis of certain individual and generalizing indicators, monitoring of their dynamics. In the process of segment analysis, first of all, it is necessary to assess their contribution to the formation of income, expenses and profits of the enterprise as a whole.

Comparative analysis of indicators that characterize the activities of operational and geographical segments and assessment of dynamic changes in such indicators allows us to assess the problems of their operation and risks. Accounting and analytical information in terms of geographical and operational segments satisfies the needs of managers in justifying management decisions aimed at reducing risk situations and improving the effectiveness of strategic management of state-owned enterprises.

### 5. CONCLUSIONS AND RECOMMENDATIONS

The proposed method of analysing the activities of economic entities in certain areas of activity in terms of operational and geographical segments, assessment of dynamic changes in such indicators allows finding "problem areas" of their activities, which should be considered in developing strategies to improve efficiency and minimize entrepreneurial risks.

Accounting and analytical information in terms of geographical and operational segments satisfies the needs of managers in substantiating management decisions aimed at reducing risk situations and improving the effectiveness of strategic management of state-owned enterprises. This approach to assessing the effectiveness of large enterprises contributes to the formation of their competitive advantages in the market by focusing the attention of





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managers on those segments of activity that require a radical change in their development strategy.

Thus, the relevance of leasing transactions for public sector entities is not in doubt, as well as the need to bring the accounting of such transactions to modern requirements. IFRS 16 contains objectively the best accounting policies for accounting and reporting.

Of course, this standard has many nuances of a practical nature that remain open, and its individual paragraphs are difficult to interpret unambiguously. However, the IFRS Board and the Interpretations Committee are constantly working to improve them. Therefore, we believe that the basic approaches of IFRS 16 can reasonably be implemented both in International Public Sector Accounting Standards (and such a process is already underway) and taken into account in the reflection of lease transactions by domestic public sector entities.

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