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IMPROVED METHOD FOR ASSESSING THE COMPETITIVENESS OF TRANSPORT COMPANIES

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Abstract

The purpose of the article is to analyze methods for assessing the competitiveness developed by modern economic science and applied to the Russian transport enterprises. The main tasks are to identify the competitiveness of a transport company in accordance with an integrated approach, systematize the components of the structure of these factors, identify areas for developing a method for assessing the competitiveness in the context of an integrated approach, develop individual indicators characterizing the competitiveness of transport companies, identify disadvantages and advantages of the methodological tools. Currently, in assessing the competitiveness of companies, a fragmentary, one-sided approach is used. The novelty of the article is due to the results of an analysis of methodological tools which can be used by Russian transport enterprises, striving for a comprehensive assessment and forecasting their competitiveness; continuous monitoring is carried out using an integrated approach which differs in complexity of practical implementation due to the significant number of methodological aspects. The results can be taken into account when integrating the methodological tools with information technologies and solutions for more detailed calculation taking into account numerous factors affecting the competitiveness of a modern transport company. The state of the modern market of transport services and the national transport industry is crucial in ensuring economic growth and social development of the country. The quality of transport services correlates with the competitiveness of companies.

Keywords: Socio-economic sphere, transport, transport enterprises, competitiveness, competitiveness assessment method.

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1. Introduction

The state of the modern market of transport services and the national transport industry is crucial for ensuring economic growth and social development of the country. The competitiveness of most sectors of the national economy depends on the quality of transport services. In recent decades, due to the growing processes of globalization, there has been a steady increase in competition in all economic sectors. The transport industry is no exception. Russian transport enterprises have to withstand serious competition on the domestic and international markets.

2. Problem Statement

The state of the modern market of transport services and the national transport industry is crucial for ensuring economic growth and social development of the country. The competitiveness of most sectors of the national economy depends on the quality of transport services. The identification of the effectiveness and complexity of methodological tools for assessing the competitiveness of transport enterprises has economic and social effects, ensuring the qualitative development of the transport market.

3. Research Questions

Currently, in assessing the competitiveness of various economic entities, a fragmentary, one-sided approach often prevails in economic science. The novelty of the article is due to the results of an analysis of methodological tools which can be used by Russian transport enterprises, striving for a comprehensive assessment and forecasting their competitiveness; continuous monitoring is carried out using an integrated approach which differs in complexity of practical implementation due to the significant number of methodological aspects. The results can be taken into account when integrating the methodological tools with information technologies and solutions for more detailed calculation taking into account numerous factors affecting the competitiveness of a modern transport company.

4. Purpose of the Study

The main objective is the analysis of methods for assessing competitiveness developed by economists and applied for Russian transport enterprises. The authors specify the concept of competitiveness of a transport enterprise in accordance with an integrated approach, systematize factors that make up the structure of these factors, determining the directions of development of a method for assessing competitiveness.

5. Research Methods

The article provides a comparative, structural and problem analysis of relevant methods for assessing the competitiveness of transport enterprises in terms of their compliance with an integrated approach.

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6. Findings

The continuing increase in integration in the global economic space confirms the need to develop the national transport industry taking into account international requirements and methodological innovations to ensure their effective functioning and competitiveness.

Improvement of competitiveness as a scientific and methodological category is a multifaceted and complex process due to the influence of numerous factors. The assessment of the competitiveness of modern transport companies is of particular importance in the current conditions.

Attention should be paid to the method for assessing competitiveness developed by Fathutdinov (2017). According to the author, the competitiveness should be assessed in accordance with the aggregate competitiveness of the largest enterprises, "whose share is approximately 60 % of sales".

Thus, it the process of assessing the level of competitiveness of various transport companies is not easy for researchers and practitioners due to a number of reasons: a large number of indicators whose variability and number are increasing in the domestic and foreign markets and scientific and technological progress; there are no international documents on assessing the competitiveness level.

At the same time, the ambiguity existing in science is related to the debatable content of the concept of competitiveness in relation to the transport companies. According to the analysis of theoretical sources, there is no uniform definition of this category.

The competitiveness of the transport company can be defined as "the ability to organize and implement services that are more attractive from a consumer than the ones offered by competitors in terms of quality, cost and other parameters". The transport company should "rely on consumer demands and make sure that these advantages are positively evaluated by them" in a separate period or in dynamics (depending on the type of assessment). However, these criteria are not exhaustive.

The existing methods are differentiated by researchers by such categories as the type of an enterprise (property, etc.);

- the type of methodology (calculation, graphic, calculation and graphic methods);
- the specifics of indicators and their types;
- the ability to predict;
- weight of indicators;
- a source of data for the assessment (internal reporting, industry and internal statistics, expert opinions, etc.);
- complexity of calculations, etc.

According to Palnikova (2016), the methods can be categorized into the following groups:

1. Depending on the method of obtaining information,
2. The nature of the information used,
3. Depending on the form of data presentation.

Within the first group, sociological methods (interrogation, questioning, statistical data processing), organoleptic and measuring methods (using special equipment) are the most common. Describing the effectiveness of this group of methods, it should be noted that they form a limited idea of the competitiveness of the transport company, as they may be oriented to the external environment, leaving out

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the internal parameters of competitiveness. In addition, their limited nature is due to the need for personal interaction with the consumer or the material and technical sphere of the enterprise (Melo et al., 2016).

Within the second group of methods, it is necessary to distinguish qualitative assessment tools, which include the SWOT analysis as an instrument for assessing strengths and weaknesses of an organization in correlation with capabilities and threats of the external environment; quantitative assessment tools: the marketing method, the financial analysis of company's performance; methods for assessing the competitiveness of products (based on the direct proportionality of the competitiveness - the competitiveness of its products, the assessment is based on the quality / price ratio); a group of methods based on the theory of effective competition, in which the assessment of competitiveness is reduced to assessing the effectiveness of company resources (the equilibrium theory, the theory of comparative advantages, functional analysis, etc.). The appropriateness of the first tool is to assess the potential competitiveness of the company and identify the "bottlenecks" in its activities.

However, the ability to use only qualitative characteristics is a limitation of this method. At the same time, the quantitative assessment tools allow you to evaluate the current level of competitiveness without interpreting the reasons for the results achieved. In addition, the coverage of the criteria evaluated may be insufficient and may not be modified taking into account specific activities of a transport enterprise.

Within the third group of methods, there are graphical tools (polygon, competitiveness radar, etc.) which assess the competitiveness level. This group should include matrix methods used to evaluate the marketing strategy with key matrix variables such as market growth rates and the relative share of the company in this market. Despite the visibility of the results, it should be noted that they have an extremely low information content, without determining the reasons for the fixed state of competitiveness. The third group can also include computational methodological tools (the method of weighted arithmetic, the hierarchy analysis, the index method, etc.).

Thus, we can conclude that methods for assessing the competitiveness of transport enterprises are focused on certain aspects of competitiveness. The interest of transport enterprises in maximizing the results of their activities actualizes the improvement of the competitiveness assessment method and the need to develop and apply a comprehensive assessment method aimed at maximizing the number of relevant indicators, using current and promising assessment of the competitiveness.

One of the attempts to implement an integrated approach to measuring the competitiveness is the application of rating assessment methods. The Logistics Performance Index (LPI) developed by World Bank specialists is used to assess the dynamics of indicators of the world transport market. This tool provides an opportunity to systematize the information obtained from international transport companies. Based on this information, it is necessary to identify attractive ways of delivering goods. This rating assessment method is based on a 5-point scale. The parameters include the efficiency of the customs clearance process, the quality of activities of border agencies, logistics, transport information and technological infrastructure, the accessibility of international deliveries, the level of competence of local logistics enterprises, the ability to track international deliveries, and terms of deliveries.

An example of using this tool is the rating “Logistic Operator of Russia”, which evaluates the transport market using the weighting method (measurement from 0 to 1) and determining the total

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indicator based on a set of multicomponent criteria corresponding to the features of modern transport companies in the Russian and international markets and characterizing key aspects of their financial and production activities: the level of competence, financial position, the range of logistics services, technical and technological equipment, the volume of works and services, reputation, presence of branches.

However, in our opinion, it is difficult to implement integrated assessment tools. Firstly, they have a narrow focus on measuring current activities of operators of the transport services market, and secondly, there is no assessment of the quality of transport services in terms of consumers (consignors and consignees) (Graham, 2017).

The efforts of researchers and practitioners are aimed at developing comprehensive methods for assessing competitiveness, taking into account the above-mentioned shortcomings. A comprehensive rating technique developed by Belozertseva and Shendrik (2018) is one of them. Despite the regional focus of the method developed for the Far East, it can be applied in other Russian regions. The following complex criteria are used for assessing transport companies:

- criteria for consumer preferences;
- complexity of logistics services (based on data provided by companies); company position in the market;
- customer satisfaction.

The calculation of the overall rating of the transport company is based on the arithmetic average of the indicators. The method is based on the integral calculation method which involves the combination of several assessment methods: measuring the data provided by the companies being assessed, expert assessment, consumer assessment (based on questionnaires). The consumer assessment is carried out using coefficients (0.01–0.4) for ten assessment parameters: compliance of transportation terms with the declared ones, tariff policy, timely provision of documents, tracking of shipped goods, possibility of sending groupage cargoes, geography of deliveries, reputation of the company, frequency of deliveries, the level of staff qualification, different speeds of deliveries. To assess the company's position in the market, the following indicators are used: weighting factors (from 0.1 to 0.4), working hours in the market, the number of employees, the volume of cargo transportation, storage facilities and own means of transportation, opinions of the expert community about activities and services of the company (Suresh & Pallapa, 2018).

The integrated assessment method is characterized by simple calculation of indicators and allows for the multi-aspect assessment of transport companies, identification of current competitive advantages of individual market participants, and assessment of the overall state of the freight transportation market within a particular region. However, that the collection and processing of data on a large number of market participants, taking into account the need for consumer and expert assessment, can be quite difficult and resource-intensive. At the same time, it is necessary to indicate the flexibility of the method whose calculation formula allows for introducing other assessment criteria, modifying and adapting the tools to the specifics of the activities of specific economic entities. It is an extremely important factor, since it is quite difficult to ensure the comprehensiveness of the transport company competitiveness assessment tools in modern conditions because of the large number of assessment criteria. This explains attempts to develop a method for assessing the competitiveness of transport companies in a different, more focused way by developing methods that allow for comprehensive coverage and evaluation of

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individual indicators, for example, financial stability of a transport company. A similar method was developed by Ivanova (2017) and tested by the author on the example of Novorossiysk transport hub.

The parameters of the competitiveness of transport services are reliability, the service time, completeness of services provided, a relative price indicator. The criteria for assessing the integral indicator of financial stability are as follows:

- the ratio of borrowed money to own funds;
- the coefficient of maneuverability of own funds;
- the coefficient of the structure of equity, the ratio of receivables to payables.

There are attempts to develop this assessment method are productive.

However, the calculation of competitiveness indicators by humans is time-consuming which contradicts the nature of competitiveness requiring maximum efficiency.

This method can be productive when it is combined with information technologies and tools, company management and business intelligence systems which allow for the differentiated assessment using numerous indicators, data with maximum efficiency and minimal time, especially when using mathematical tools. These solutions are being implemented by Russian and foreign development companies (Prognoz JSC, SAP, etc.); however, these attempts do not comply with the integrated methodological approach, providing users with predominantly standard solutions requiring further adaptation for a specific business unit.

7. Conclusion

It should be recognized that the problem of improving the method for assessing the competitiveness of transport companies using the integrated approach remains one of the most important tasks whose solution can improve the competitiveness of the national transport industry. Moreover, the solution of this problem requires scientific efforts of various specialists. The article is not an exhaustive analysis of the problem under study; however, it identified certain directions for further development taking into account the integrated methodological approach.

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