

Rolling Stock Leasing: Accounting and Economic Security Issues

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Abstract: The article solves the problems of disclosing the methodology of accounting for rental of rolling stock by the lessee and the lessor in accordance with the new federal accounting standard 25/2018 "Lease accounting", and also highlights the peculiarities of the impact of rental accounting objects on the indicators of economic security of enterprises. The issues of recognition of lease accounting items depend on the classification of leases, which is given in this article with the allocation of key features of operational and non-operational (financial) leases. The general principles of lease accounting have been adapted to the specifics of rolling stock operations. The principles of formation of rolling stock rental accounting objects are highlighted: rights to use wagons and containers, lease obligations, rental investments and interest income and expenses. For each object, the rules of initial and subsequent evaluation, recognition and write-off are given. The subject of accounting issues and further directions of scientific research is developed in terms of developing methodological tools for the application of this FSB: making changes to the Chart of Accounts, updating accounting forms. The ways of the influence of asset use rights, lease obligations, lease investments and interest income and expenses generated in the reporting on financial indicators of economic security of organizations: liquidity, profitability, financial stability with the formulation of proposals for leveling threats of insolvency and deterioration of financial condition are formulated.

1 INTRODUCTION

Modern economic conditions dictate the requirements for establishing stable supplies of goods and restoring disrupted logistics chains during the period of global economic sanctions. In the current reality, the issues of renting rolling stock in order to fulfill the conditions of supply and to meet the needs of the production activities of economic entities and the population with the necessary products are of particular importance. As G.B. Titov notes, "the task of managing the structure of the rolling stock fleet (purchase, sale, rental and leasing of wagons) under the influence of constantly changing demand for transportation for a railway company is practically impossible due to the technological interconnectedness of autonomous participants in the railway transportation market." (Titov, 2010) However, in order to make sound economic decisions, logistics business entities need accurate

and reliable information about the effectiveness of their activities, including rolling stock rental operations, which is formed in accounting and financial statements. At the same time, in the conditions of the program for the development of new FSB and the adaptation of domestic accounting rules to modern requirements, these issues become particularly relevant. General economic and legal issues of rolling stock rental are considered in their works by A.A. Alferova (Alferova, 2020), A.I. Timofeev (Timofeev, 2020), O.N. Glyadysheva (Glyadysheva, 2022) and others. The accounting component of the rental of rolling stock is analyzed by Tarasova T.M. (Tarasova, 2011), Gosteeva O.V. (Gosteeva, 2013), Gorodilov M.A. (Gorodilov, 2020), Ivanenkova Ya.A. (Ivanenkova, 2020) and others. At the same time, these works are mainly based on the provisions of regulatory documents in force before the entry into force of FSB 25/2018 "Lease Accounting" from 2022. The issues of the application of the new "Lease" standard that has

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entered into force and its introduction into accounting practice have already been covered by a number of researchers, in particular Plotnikov V.S. (Plotnikov, 2019), Lisovskaya I.A. (Lisovskaya, 2019), Druzhilovskaya E.S. (Druzhilovskaya, 2019), and others. However, these developments do not affect the specifics of the transport industry. Of scientific interest is also the foreign experience of economic research in the field of vehicle rental, described in particular by Miao R. (Miao, 2022), Long Yu. (Long, 2018), Roy D. (Roy, 2014) and others. In addition, when carrying out rolling stock rental activities, close attention should be paid to economic security issues in order to reflect potential threats to the activities of modern economic entities. These prerequisites confirm the relevance of the chosen research topic and determine its purpose – theoretical and methodological substantiation of the methodology of accounting for rental of rolling stock and assessment of the impact of rental accounting objects on the economic security of organizations acting as parties to a rolling stock lease agreement. Achieving this goal requires solving a number of tasks, including identifying existing accounting problems and assessing the economic security of rolling stock rental operations, offering recommendations on improving accounting methods and reporting on these operations, as well as identifying measures aimed at strengthening the economic security of economic entities in the transport industry in order to ensure sustainable development.

2 MATERIALS AND METHODS

In the course of scientific work, empirical methods of scientific research were used, in particular, a review of the legal and economic foundations of the rolling stock lease agreement was conducted, which have a significant impact on the methodology of accounting for rental operations. When developing the methodology, the classification method was used in terms of the allocation of operating and financial leases, the accounting procedure of which has fundamental differences.

In addition, in order to achieve the goal of the work, methods of theoretical research were used, in particular, a detailed analysis of the provisions of FSB 25 was carried out with the identification of key features of the formation of objects of accounting for operating and financial leases: rights to use rolling stock, lease obligations, lease investments, interest income and expenses, the adaptation of the norms of the standard to the principles of rolling stock lease

was carried out. Extrapolation and induction methods were used to implement this adaptation. Analogies were also made on a number of scientific issues, in particular, proposals for calculating depreciation of the rights to use an asset similarly to fixed assets, and in addition, an abstraction method was used to justify the impact of lease accounting objects on indicators of economic security of enterprises and organizations. This justification is built using deduction, which allows you to decompose financial security indicators into components and identify the nature of the impact of rental operations on them.

3 RESULTS AND DISCUSSION

To substantiate the methodology of accounting for rental operations, it is necessary to formulate the legal and economic features of rolling stock rental considered in the works of the above-mentioned scientists (Titov, 2010; Alferova, 2020; Timofeev, 2020; Gladysheva, 2022), which, in particular, are established in the letter of the Federal Tax Service of the Russian Federation dated 04.06.2008 N SHS-6-3/407@ "On the direction of the Letter of the Ministry of Transport of the Russian Federation dated 20.05.2008 N CA-16/3729" together with the specified letter. According to it, "the purpose of the rolling stock lease agreement is to obtain temporary possession and use of wagons and containers. The lessee may use the wagons and containers transferred to him at his discretion, both for transportation and for other purposes (for example, temporary storage of goods).

The subject of the rolling stock lease agreement are individually defined wagons and containers (the contracts specify the numbers of wagons and containers to be leased).

The rental fee for rolling stock is not tied to a specific transportation in any way and is calculated based on the number of days the rental object is with the lessee. The lease term is also not tied to a specific transportation and is calculated by agreement of the parties (usually months or years)".

With regard to the accounting of rental of rolling stock, it is necessary to note the need to revise the accounting policy of an economic entity in connection with the entry into force of the Order of the Ministry of Finance of the Russian Federation dated 16.10.2018 N 208n "On approval of the Federal Accounting Standard FSB 25/2018 "Lease Accounting".

The specified Standard is applied by the parties to lease (sublease) agreements, as well as other

Lease:	Operating	Non-operating (financial)
Definitio	a lease that provides for the retention of risks and benefits for the lessor due to the lessor's ownership of the rolling stock	a lease that provides for the transfer of economic benefits and risks arising from the lessor's ownership of the rolling stock to the lessee
Classification features	<ul style="list-style-type: none"> - the lease term is significantly shorter and incomparable with the period during which the rental item will remain usable; - the subject of lease are objects having an unlimited period of use, the consumer properties of which do not change over time; - at the date of provision of the lease item, the present value of future lease payments is significantly less than the fair value of the lease item; - another circumstance indicating that the economic benefits and risks arising from the ownership of the rental item are borne by the lessor. 	<ul style="list-style-type: none"> - the terms of the lease agreement provide for the transfer of ownership rights to the lessee; - the lessee has the right to purchase the rental item at a price significantly lower than its fair value at the date of realization of this right; - the lease term is comparable to the period during which the rental item will remain usable; - at the date of conclusion of the lease agreement, the present value of future lease payments is comparable to the fair value of the leased item; - only the lessee has the opportunity to use the rental item without significant changes; - the lessee has the opportunity to extend the lease term established by the lease agreement with a rent significantly lower than the market; - another circumstance indicating the transfer of economic benefits and risks to the lessee due to the lessor's ownership of the rental item.

Figure 1: Classification of rental of rolling stock for the purposes of application of FSB 25/2018.

agreements, the provisions of which, individually or in conjunction, provide for the provision of property for temporary use by the lessor, leasing company, rightholder, or other person for a fee to the lessee, leaseholder, user, or other person.

For the application of the standard, the identification of the rental object must be made, in particular, as stated by FSB 25, the accounting object is classified as rental accounting objects with the one-time fulfillment of the conditions of paragraph five of the said regulatory act, including:

- there is a fact that the lessor provides the rental item to the lessee for a certain period of time;
- the rental item can be appropriately identified, i.e. its characteristics are precisely indicated in the contract, but neither the terms of the contract nor the business practices provide for the right of the lessor to change the rental item to another or similar one by his decision at a given moment throughout the term of the contract;
- availability of the lessee's rights to receive economic benefits from the use of the rental item during the period of the lease agreement;
- the unconditional right of the lessee to determine the purpose of using the rental item at his discretion, if this purpose is not determined by the technical characteristics of the rental item. (Gorodilov, 2020)

In order to disclose the methodology of accounting for the lease of rolling stock, it is necessary to classify the lease in accordance with FSB 25/2018, which is shown in Figure 1.

In addition, Paragraph 11 of FSB 25/2018 allows the lessee to treat the lease as an operating one in any of the following cases:

- the rental period does not exceed 12 months;
- the market value of the rental item does not exceed 300,000 rubles, which can be typical only for extremely worn-out rolling stock;
- the lessee refers to small business entities and other economic entities that have the rights to use simplified methods of accounting and financial reporting. (Plotnikov, 2019)

With regard to the accounting of rolling stock rental operations, if the lease is recognized as operating, a comparison of the norms of the FSB 25/2018 put into effect with the accounting procedure previously in force, in particular, provided for by the Accounting Regulations, the Chart of Accounts, etc. The basic accounting principles are presented in table 1.

With regard to finance leases, the new accounting standard provides for a fundamentally new procedure based on the provisions of IFRS 16 "Leases".

The lessee recognises the leased rolling stock as the right to use the asset with simultaneous recognition of the lease obligation. The assessment of the right to use the asset (rolling stock) is made at the actual cost, including the amount of the lease obligation and the costs associated with the receipt of the object.

The lease obligation is estimated as the sum of the present value of lease payments payable for the entire term of the contract based on the discount rate at which the total amount of payments planned under the contract corresponds to the fair value of the rolling stock (Ivanenkova, 2020). At the same time, the

Table 1: Methodology of accounting for operations on operating lease of rolling stock

Lessee	Lessor
<p>The rental item is accepted by the lessee to the off-balance sheet account 001 in the assessment provided for by the contract.</p> <p>The lessee of rolling stock recognizes lease payments as an expense on a straight-line basis over the lease term or on the basis of another systematic approach reflecting the nature of the lessee's use of economic benefits.</p>	<p>The lessor of the rolling stock does not change the previous accepted accounting procedure for the asset in connection with its lease, except for changes in estimated values, i.e. continues to take into account wagons and containers as part of fixed assets, only a revision of the period of use, depreciation method and other parameters is possible.</p> <p>Operating lease income is recognized on a straight-line basis or on the basis of another systematic approach reflecting the nature of the lessee's use of the economic benefits of the leased item. Depending on the subject matter of the owner of the wagons, these revenues are recognized as either revenue or other income.</p>

problems of fair value assessment are dealt with in accordance with IFRS 13 and are beyond the scope of this study.

The cost of the right to use the rolling stock is repaid by depreciation. In order to calculate depreciation, the useful life of the right of use, as a rule, should not exceed the lease term, unless the transfer of ownership of the rolling stock to the lessee is assumed. The lessee chooses the depreciation method by analogy with the depreciation of fixed assets in accordance with FSB 6/2020, in particular, the most common is the linear method and the method proportional to the volume of transportation in kind.

The amount of the lease obligation after its recognition increases by the amount of accrued interest calculated using mathematical methods or based on expert assessment discount rate and decreases by the amount of actually paid lease payments. Accrued interest according to the general rules is included by the lessee in other (financial) expenses in accordance with PBU 15/2008 (Accounting Standards), except in the case of using a rolling stock to create another investment asset, i.e. an object that requires a long time or significant costs for its acquisition, construction or manufacture.

By the time the lease agreement is completed, the cost of the right to use the rolling stock usually corresponds to the liquidation value, and the obligation must be fully repaid. Accordingly, the specified liquidation value is written off at the expense of the estimated liability formed upon recognition of the right to use rolling stock, and in case of its insufficiency - as part of other expenses. If the ownership of the rolling stock passes to the lessee, then he makes notes in the analytical accounting on the accounts of fixed assets and depreciation, which took into account the corresponding right to use the rolling stock and its depreciation.

The lessor, upon the entry into force of the lease agreement and the transfer of wagons to the lessor,

writes off the rolling stock from the balance sheet and recognizes the investment in the lease as an asset.

An investment in a lease is estimated at its net value, which is determined by discounting its gross value at an interest rate at which the present gross value is equal to the sum of the fair value of the rolling stock and the costs incurred by the lessor in connection with the lease agreement. (Popov, 2021)

The net value of the investment in the lease increases by the amount of accrued interest and decreases by the amount of actually received lease payments. (Popov, 2021)

Interest accrued on investment in the lease is recognized by the lessor as income, while also the specified income should be classified either as revenue or other income, depending on the subject of activity.

In addition, Standard 25 provides for the lessor's obligation to check the net value of the investment in the lease for its impairment in accordance with IFRS 36 "Impairment of assets".

When the rolling stock is returned to the lessor, wagons and containers are accepted for accounting as fixed assets with simultaneous write-off of the remaining net value of the investment in the lease, and in the case of transfer of ownership to the lessee, the investment in the lease is subject to write-off as part of other expenses if it was not fully repaid.

The methodology for assessing the economic security of enterprises engaged in rental operations with rolling stock is based on the general principles formulated by Podmolodina I.M. (Podmolodina, 2012), Esembekova A.Yu. (Esembekova, 2016), Mironova O.A. (Mironova, 2015) and others. As noted by S.E. Metelev, "the most important tasks of railway transport are to ensure the stable operation of railways, accessibility, high quality of services provided, reduction of total economic costs for the transportation of passengers and cargo, satisfaction of growing solvent demand. The solution of these tasks,

ultimately, provides the transport component of national economic security". (Metlev, 2006)

The most important group in the structure of indicators of economic security of enterprises are financial indicators, which are emphasized in this paper.

The first indicator is the absolute liquidity ratio, defined as the ratio of cash and cash equivalents to the amount of short-term liabilities. According to the FSB 25 methodology, the current part of the lease obligation, including accrued interest, is included in the short-term obligations of the lessee of the rolling stock, respectively, the presence of this obligation reduces liquidity.

The next indicator is the current liquidity ratio (coverage ratio), determined by the ratio of current assets to the value of short-term liabilities. In this case, the specified indicator of the lessee, in addition to the lease obligation, is influenced by the amount of accrued depreciation of the right to use rolling stock and accrued interest on the lease obligation, since in the case of using rolling stock for the purpose of creating investment assets, which include, in particular, work-in-progress, the specified depreciation and interest are included in the cost of inventories, accordingly, the current liquidity ratio due to these interest rates can be increased in a certain way.

Profitability indicators determine the efficiency of companies and their economic security, which, depending on the type of profitability, are calculated by the ratio of profit to revenue, cost, balance sheet currency and other indicators. In this case, the impact of lease accounting objects on the economic security of the lessee of the rolling stock can be disclosed using factor analysis, since, as indicated above, depreciation of the right to use the asset and interest on the lease obligation are included in the cost and expenses, which reduces the company's profit (negative impact), also in the case of calculating the return on assets, if by increasing the amount of the right to use the asset, profitability decreases. The nature of the influence of interest on the lease obligation on the coefficient of security of interest payable is similar.

An important group of indicators are indicators of financial stability, in particular the financial independence coefficient, determined by the ratio of equity to the balance sheet currency and the level of financial leverage calculated by the ratio of long-term liabilities to equity. According to these groups of factors, the presence of lease accounting objects in the form of lease obligations also has a negative impact, since these lease obligations are included in long-term

liabilities, increasing the share of borrowed capital and increasing the balance sheet currency without creating corresponding assets and leading to an increase in expenses.

Thus, taking into account the predominantly negative nature of the impact of rental accounting objects on the indicators of economic security of the lessee of rolling stock, it is necessary to consider options for assessing the effectiveness of the acquisition of rolling stock from appropriate sources in order to reflect the threats of insolvency. To make a decision on the acquisition or lease of rolling stock, a recommendation may be proposed for calculating a financial cash flow model based on discounted value and calculating the NPV (net present value) indicator.

For the lessor of rolling stock, the presence of an asset in the balance sheet - an investment in lease does not have a fundamental impact on economic security indicators, since this investment is formed by retraining other types of non-current assets. The recommendation for strengthening economic security in this case is the calculation and comparison of the efficiency of using rolling stock in its own transport and logistics activities and use by leasing also based on the analysis of the cash flows generated by the specified rolling stock.

4 CONCLUSION

Thus, the results of the study made it possible to formulate a number of conclusions and proposals in accordance with the designated goal. At the moment, there is a need to develop methodological tools for assessing rental accounting objects in accordance with FSB 25/2018, as well as for applying the discount rate, since the provisions of the standard disclose general approaches, but do not contain the necessary tools for correctly reflecting rolling stock rental operations. The chart of accounts should be adapted to the application of FSB 25/2018, in particular, accounts should be entered into it to account for the rights to use the asset, lease obligations and lease investments. Changes should also be made to the financial reporting forms, in particular, the articles Right to use the Asset, Investments and Leases should be included in the composition of non-current assets, and the article Lease obligations should be included in the composition of long-term liabilities. These developments should be attributed to further areas of scientific research that allow us to form better and more analytical financial information for making investment and financial decisions.

The indicator approach to assessing the level of financial security of the enterprise and the analysis of the financial condition is also subject to clarification, since the financial coefficients provided for by generally accepted methods do not take into account the specifics of the new objects introduced into accounting practice. One of the directions of further scientific research in the field of strengthening the economic security of subjects of the transport industry is risk hedging, analyzed in particular by M.V. Leshchev (Leshchev, 2015) The development of these areas will allow the appropriate interpretation of financial information regarding logistics and manufacturing companies participating in the rolling stock lease agreement, which will allow them to reflect threats to economic security and comply with the vector of sustainable development.

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