

METHODOLOGICAL FUNDAMENTALS OF ASSESSMENT OF TRUCKING COMPANIES BUSINESS AS A COMPONENT OF ITS ECONOMIC SECURITY

Setting the problem. Within a short historical period there have been radical socio-economic transformations in our country. Market reforms make us radically revise understanding of the basics of business enterprises management of any type, and the trucking as well.

Road transport is not only changing by itself as a result of structural changes within the industry, but it also feels a strong additional impact from the side of commodity markets that are created and developed, the activity of which provides road transport. Therefore, it is important to perform an objective assessment of the trucking company business as a component of its economic security.

Analysis of recent research and publications. Domestic and Russian scientists and practices, namely L. Abalkin, A. Aref'eva [1] V. Bezbozhnyi, O. Baranovskyi, I. Binko, O. Vlasiuk, M. Denysenko, T. Vasylytsiv, A. Kozachenko, A. Liashenko, V. Muntiian, V. Ponomarov, G. Savytska [6] V. Shynkarenko [9] and others have dealt with the study of the problems of assessing the financial state of the company, identifying its effect on the economy results, to objectively manage economic security. Analysis of the research results shows a lack of methodological foundations study of motor business economic assessment.

Purpose. The aim of the article is to substantiate the basic approaches to the comprehensive financial evaluation of trucking business, considering the specificity of its activity.

The main material of the study. The assessment of economic activity state is the basis for determining the level of trucking company economic security. With the help of financial performance system we make the calculation and analysis of complex financial indicators of economic activity of trucking companies, namely:

1. Analysis of sources of the capital formation gives a clear idea by which resources the transport enterprise will operate, and what fields of activity are more appropriate to invest. On the quality of capital that is available to the company, its optimal structure and feasibility of transforming it into fixed and current assets depends the financial health of motor business and results of its operations. This in its turn affects the level of economic security of transport enterprise.

2. Analysis of the state and structure of assets allows determining the optimal capital allocation of motor company and appreciating what property is held by the company and how much income they receive. The financial state of the company and its stability and, consequently, economic security of transport enterprise depend on it.

3. Analysis of profit and profitability highlights the quality of the business activity of transport enterprise from its various aspects: production, supply, marketing, sales, investing and financing activities. This analysis allows us to explore the possibilities of getting profit under the existing resource potential of the motor business, improve profitability by reducing costs.

4. Quality and timeliness of providing transport services have an important and direct impact on the level of economic security of transport enterprise. Increasing these parameters helps to strengthen the competitiveness of transport enterprise, increase the efficiency of its operations.

5. The ability of motor company to make payments promptly, finance its activities on an extended basis, move unpredictable shocks and maintain its solvency in adverse circumstances, shows its stable financial position, and vice versa. Trucking companies that have reached a sustainable financial position break the transitional zone of the activity level and achieve economic security moving to the economic security zone of their business activity.

The main feature of the proposed methodology for assessing the economic state of motor company is focusing on the core business of trucking company – providing transport services.

Methodical bases for assessment of business state of transport enterprise are called to consider the impact of the determinants on economic security of transport enterprise. The basis of this technique is a system of financial ratios that characterize the structure of sources of transport enterprise capital formation and its location, the balance between assets and liabilities of transport enterprise, efficiency and intensity of the company capital use, liquidity and asset quality, its investment attractiveness and others. With this aim, the dynamics of each indicator and its growth is determined.

It expanded the total number of indicators with the definition of formulas for calculating them, namely, the ratio of working and fixed capital at initial value of fixed assets, the share of income from transporting in total operating revenues and cost volume of product sales that provides the achievement of equilibrium point in the motor company operations - which allow us to analyze and estimate the financial condition of trucking companies, according to the specifics of its activities, in order to substantiate the factors that affect the equilibrium point.

Table 1 summarizes eight chapters of assessment methods of motor company business activity condition, their names, indexes, that they include, formulas for their calculation and dimension.

Table 1

Assessment methods of motor company business activity condition

Constituent methods	Indicators	Calculation formulas	Estimated values
1	2	3	4
I Structure of sources	1) Financial leverage ratio 2) Mobility rate of equity	$r_{f.l.} = \frac{BC}{EC}$ $r_{m.e.} = \frac{EWC}{EC}$	EC – equity capital, BC – borrowed capital, EWC – equity working capital, Initial $FA_{i.v.}$ and residual $FA_{r.v.}$ value of fixed assets, WC – working capital, $G_{r.e.}$ – growth rate of earnings; $R_{r.p.}$ – amount of revenue for the reporting period, $R_{b.p.}$ – amount of revenue for the base period;
II Structure of assets	1) Ratio of working and fixed capital at initial value of fixed assets; 2) Ratio of working and fixed capital at residual value of fixed assets; 3) Growth rate of revenue, % 4) Share of receivables in income	$r_{i.v.} = \frac{WC}{FA_{i.v.}}$ $r_{r.v.} = \frac{WC}{FA_{r.v.}}$ $G_{r.e.} = \frac{R_{r.p.} - R_{b.p.}}{R_{b.p.}}$	$R_{depr.}$ – ratio of depreciation, A_1 – self-sufficiency ratio; A_3 – ratio of full self-financing; R – receivables, income (loss) from sales of transportation for the reporting and $I_{r.p.}$ and base $I_{b.p.}$ periods, $\sum Depr.FA$ – amount of depreciation of fixed assets, P_t – profitability of transportations;
III State of assets	1) Rate of depreciation of fixed assets; 2) Renovation ratio of fixed assets; 3) <i>Ratio of fixed assets depreciation coefficients at different levels of efficiency;</i> 4) <i>Value coverage ratios of fixed assets renovation at various levels of efficiency;</i> 5) Duration turnover: a) fixed assets, years b) intangible assets, years c) working capital, days	$R_{depr.} = \frac{\sum Depr.FA}{IVf.a.}$ $R_{r.depr.} = \frac{Kk1depr.}{Kk3depr.}$ $R_{r.depr.} = \frac{Kk2}{Kk3}$ $R_{ren.} = \frac{Kinp.FA}{ICf.a.}$	
IV Profit and profitability	1) Growth rate of gross profit, % 2) Growth rate of net profit, % 3) Profit per: a) one employee, hr. b) hryvnia salary, kopecs. c) hryvnia of material costs, kopecs. d) hryvnia of fixed asses, kopecs. 4) Expenses for transportation hryvnia, kopecs. 5) Pprofitability level of: a) transportation, % b) turnover, % c) total assets, % d) operating capital, % e) equity capital, %	$G_{gr.pr.} = \frac{Ps. - Pb.p.}{Pb.p.}$ $G_{r.n.pr.} = \frac{NPs - NPb.p.}{NPb.r.p.}$ $L_{tr.} = \frac{Ptr.}{Etr.} \times 100;$	

1	2	3	4
V Providing transport services	1) The growth rate in gross volume of transportations, % 2) The growth rate in physical volume of transportations, % 3) Rate of production capacity use 4) The level of capital productivity of fixed 5) The share of income from transportation in total operating revenue, %	$G_{gr. v.} = \frac{Vt.v.c.p. - Vt.t.b.p.}{Vt.t.b.p.} \times 100$ $G_{ph. v.} = \frac{Vph.t.v.r.p. - Vph.t.v.b.p.}{Vph.t.v.b.p.}$ $R_{cap.} = \frac{AATV}{ACUE_{av.an.}};$ $R_{l.p.f.a.} = \frac{C_{c.t.}}{V_{f.a.av.an.}}$ $R_{rav.} = \frac{R_{tr.}}{R_{tot.}} \times 100;$	C_{imp. FA} – cost of imposed fixed assets; R_{tr.} – revenue from transportation; R_{c.p.f.a.} – rate of capital productivity of fixed assets; IC_{fa} – initial cost of fixed assets, total traffic volume for the current (V_{t.v.c.p.}) period and for the base one (V_{t.t.b.p.}) physical traffic volume for the current (V_{ph.t.v.r.p.}) period and for the base one (V_{ph.t.v.b.p.}) actual annual traffic volume (AATV), average capacity utilization of the enterprise (ACUE_{av.an.}), cost of carried transportations (C_{c.t.}), average annual value of fixed assets (V_{f.a.av.an.}), revenue from transportation (R_{tr.}), total operating revenue - cost volume of traffic, CA - current assets; working assets - current liabilities, E - equity, M - money, STR - short-term receivables.
VI The ratio between assets and sources of their formation	1) Share in shaping current assets of equity capital, % 2) Share in shaping current assets of borrowed capital, % 3) Ratio of receivables and payables	$S_{e.c.} = \frac{EC \times 100}{CA}$ $S_{b.c.} = \frac{CB \times 100}{CA}$ $C_{rat.} = \frac{R}{P}$	
VII Liquidity indicators	1) Current liquidity ratio 2) Quick liquidity ratio 3) Absolute liquidity ratio	$R_{c.l.} = \frac{WA}{CB}$ $R_{q.l.} = \frac{CA + SFR + STR}{CB}$ $R_{a.l.} = \frac{CA + SFR}{CB}$	
VIII Indicators of risk	1) Ratio of operating leverage 2) Financial leverage ratio 3) The value of product sales that ensures the achievement of economic security of transport enterprise, hr.	$R_{o.l.} = \frac{RI\%}{RCV\%}$ $R_{f.l.} = \frac{EC}{CA}$ $R_{tr.} = \frac{r_2 \times En \times 100\%}{\frac{SI}{Etr.} \times 100\% - \frac{PE_{ph.}}{Etr.} \times 100\%};$	

To develop the table we used the assessment methods of motor company business activity condition by Savytska G.V. [6].

The first chapter is the structure of sources. The analysis of the structure of sources of equity and borrowed capital on the trucking companies is conducted in this chapter.

For the calculation of the indicators we use: equity capital (EC), borrowed capital (BC) and a working capital (WC).

1. Financial leverage ratio (C_{fl}) is one of the main indicators that characterize the ratio of borrowed and equity capital. It is considered as one of the main indicators of financial stability of trucking company and characterizes used borrowed funds which affect on the changing of the coefficient of profitability of equity capital. Higher value of this indicator leads to higher risk of capital investment in this enterprise [2].

2. Equity capital is the source of the formation both fixed and current assets. Optimal proportions in the structure of its distribution should also be achieved here.

Financial stability of the trucking company depends on share of equity capital that is invested in real estate and current assets. The coefficient of its flexibility (C_{fc}) is calculated to characterize the structure of the distribution of equity capital.

It shows how much of equity capital is in its high current and high liquid form [2].

The analysis of assets of trucking company is conducted in the second chapter "The structure of assets".

For the calculation we used such indicators as: initial $FA_{i.v.}$ and residual $FA_{r.v.}$ value of fixed assets, current assets (CA), accounts receivable (AR), income (receipts) from realization of transportation during the reporting period ($I_{r.p.}$) and the base period ($I_{b.p.}$).

The analysis of the movement and technical state of fixed assets is conducted in the third chapter "The state of assets".

For the calculation we used such indicators as: amount of depreciation of fixed assets ($\sum \text{Depr. FA}$), original value of fixed assets (OV_{FA}).

The fourth chapter "Profit and profitability" contains the calculated coefficients that show yield and profitability of the trucking company.

The indicator – expenditures for the hryvnia of transportation is also calculated.

Indicators of profitability are the level of profitability: transportation, turnover, total assets, working capital and equity capital. These indicators are calculated in percentage.

For their calculation we used such indicators as: the amount of the gross profit of the reporting period (before payment of percent and taxes), the amount of net income, amount of income from transportation, the amount of the costs for the transportation, operating expenses, income from operating activity, average number of all employees in equivalent of full employment (persons), wage fund of all employees.

The following indicators are calculated in the fifth chapter "Provision of services on transportations": rate of growth of gross volume of transportations ($G_{v.tr.}$), rate of growth of physical traffic volume ($G_{ph.tr.}$), coefficient of average capacity utilization ($c_{cap.}$), level of capital productivity of fixed assets ($c_{p.f.a.}$), the share of income from transportation in total operating revenue ($c_{rav.}$).

For the calculation of these indicators we used: total traffic volume for the current ($V_{t.v.c.p.}$) period and for the base one ($V_{t.t.b.p.}$), physical traffic volume for the current ($V_{ph.t.v.c.p.}$) period and for the base one ($V_{ph.t.v.b.p.}$), actual annual traffic volume (AATV), average capacity utilization of the enterprise ($ACUE_{av.an.}$), cost of carried transportations $C_{c.tr.}$, average annual value of fixed assets ($V_{f.a.av.an.}$), revenue from transportation ($R_{tr.}$), total operating revenue $OR_{tot.}$

The sixth chapter "The ratio between assets and sources of their formation" contains the following indicators: share in shaping current assets of equity capital ($S_{e.c.}$), ratio of receivables and payables ($c_{rat.}$).

The most complete financial stability of the enterprise, including the trucking, can be considered on the basis of study of equilibrium between the articles of assets and liability balance. Financial equilibrium can be considered in two approaches that complement each other [6].

First (property) approach to evaluation of financial equilibrium comes from a position of creditors: assumes balance of assets and passives in terms and the ability of the enterprise to pay its debts in time (liquidity balance).

The second (functional) approach based on the position of the management is based on a functional balance between capital sources and use them in the main cycles of economic activity (operating, investing, money cycles).

The balance of positive and negative cash flows is possible for equilibrium of assets and liabilities in terms of usage and cycles. Consequently, the financial balance actives and passives balance underlying the assessment of financial viability of enterprises, its liquidity and solvency [6].

Liquidity indicators are calculated in the seventh chapter "Liquidity indicators".

Current liquidity ratio (r_{cl}) (general ratio of cover debts) shows the degree of coverage the current inventories by the current assets [8].

Quick liquidity ratio (r_{ql}) is ratio of funds, short-term investments and short-term receivables for which payment is expected within 12 months after the balance sheet date, the amount of short-term financial liabilities. As usual satisfy the relation 0,7–1 [8].

Absolute liquidity ratio (rate of cash reserves) (k_{al}) is determined by the ratio of funds and short-term investments to total amount of short-term debts of the enterprise [8].

Presence or lack of overdue obligations, their frequency and duration complements the overall picture of solvency of the enterprise.

The eighth chapter "Risk indicators" helps to analyze the degree of influence of the numerous risks on results of the activity and level of economic security of the trucking companies.

Operational activity is the main activity of trucking company. It does not include financial and of investment activity. Development of operational activity provides trucking companies sustainable economic growth and increase the level of profitability.

The equilibrium point of the trucking company displays valuable volume of traffic at which trucking company has neither profit nor loss, and net income from its operations is equal aggregate operating expenses.

Conclusions and further research. The proposed integrated system of assessing the financial condition of the trucking company allows for economic analysis of indicators to consider the specifics of the trucking company its economic activities, including its main form of activity – provision of services on transportation.

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Duleba N.V. METHODOLOGICAL FUNDAMENTALS OF ASSESSMENT OF TRUCKING COMPANIES BUSINESS AS A COMPONENT OF ITS ECONOMIC SECURITY

Purpose: is to substantiate the basic approaches to the comprehensive financial evaluation of trucking business, considering the specificity of its activity.

Methodology of research: In assessing the state of business trucking companies the methods of financial and economic analysis, namely the analysis of absolute figures, the horizontal analysis, vertical analysis, trend analysis and the analysis of financial (analytic) coefficients have been used.

Findings. The basic approaches to the comprehensive financial evaluation of trucking companies, taking into account the specificity of its activity have been substantiated; the methods of economic analysis and assessment of business activity of enterprises considering features of the motor complex enterprises have been improved.

Originality. The methods of analysis and evaluation of the business activity of enterprises, based on a set of financial performance considering a specific activity of motor business have been improved.

Practical value. Presented methods of a comprehensive assessment of the business activity of enterprise can be used to assess the financial state of trucking companies.

Key words: trucking company, the level of economic security, economic activity, financial performance, economic security.