

Assessment of Financial Health of Selected Transport Companies Conducting Business in the Public Line Transport

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Abstract

As a part of their business, the transport companies provide the traffic services in the given region. For the needs of efficient managerial or financial management, it is necessary to know the detail financial analysis upon which the financial health of the company can be determined. The financial analysis utilizes the diagnostic methods which evaluates the company's management from the viewpoint of the past, the presence and the expected future. Based on the financial health values, we can avoid future problems. The managers are warned against the possible bankruptcy in time. By selecting the appropriate classification models applied to the Czech environment, the financial situations of the carriers can be found out. Then, the intercompany comparison method is applied to assess the economic situation of selected carriers. The results achieved after applying the classification models and the intercompany comparison method serve as the key outcome of verification of credibility of selected classification models.

Keywords

Financial analysis, bankruptcy model, intercompany comparison analysis, financial health

1 Introduction

The aim of the financial management is to obtain a complete overview of the financial situation of the company and the financial aspects. It is necessary to know more information to determine the basic objectives of the company in the future. To do so, it is necessary to identify the customers, suppliers, competitors, a quality of provided services, etc. Assessment of the company's financial health is part of the efficient decision-making. It is necessary to find out the status of financial doubts and which measures can be applied. The efficient management of the company requires the optimum level of the assets, debts, forms of financing the operating activity using the company's own or external capital, the amounts of costs and revenue and the amounts of income and expenditure.

If the company is able to earn sufficient money and to comply with its obligation, it will not become insolvent and there will be no risk of bankruptcy. It means that the financially healthy company can report sufficient return and find the optimal sources of financial risk coverage. The financial risk is associated with the use of various forms of capital and the risk of financial insolvency.

The systems of indicators are used to evaluate the financial situation of the company. More indicators are included in the model which evaluates the financial situation of the company, more difficult is the focus and evaluation of the company. The financial health of the company cannot be directly calculated but it can be determined upon the diagnostic methods using the financial analysis which is used by the general public and various economic entities with the aim to obtain information on the management and economic situation of the given company.

The paper is aimed to characterize the selected models for evaluation of the financial health of the company in the real conditions of the Czech Republic. The selected bankruptcy and creditworthy models determined for the Czech Republic will be analysed. By applying other financial analysis methods, the explanatory power and credibility of the classification models applied to the transport companies will be ascertained. On the other hand, some ratio indicators which are a part of the bankruptcy and creditworthy models will be replaced with the cash flow indicator.

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2 Methodology

Classification models distinguish between two main groups of models, namely:

- bankruptcy models,
- creditworthy models.

Bankruptcy models, also known as prediction models, were compiled and investigated using the detail analysis of individual financial indicators which were applied to the various types of samples of examined companies (accounting entities). It means that we selected and analysed such data of the companies which went bankrupt in the past and the companies which were flourishing. Each company was mostly established upon achieving the profit with a different object of business activities. The fact is that bankruptcy models were created for various fields of business (agriculture, industry, etc.). Various fields cannot be combined. The main goal of bankruptcy models is to warn against a possible bankruptcy of the company “in time”. The main factors are such selected indicators which imply a threat to the financial health of the company. Bankruptcy models differ from creditworthy models in that they are and were created upon the real data. Creditworthy models, on the other hand, take into consideration the theoretical knowledge and on some models they answer the question whether the company creates a certain value for the owner and the investors (financial performance of the company). The advantage of creditworthy models is that they keep in mind the details which are available in the accounting reports. The indices IN 95, IN 99, IN 01 and IN 05 will be characterized and applied. (Neumaierova and Neumaier, 2002; Finanalysis, 2014; Telecky, 2016; Vochozka, 2011; Grunwald and Holeckova, 2009; Kislingerová and Hnilica, 2005)

2.1 IN 95 Index

This bankruptcy model was created by the Neumaier spouses who received the Nobel Prize. They compiled the so-called credibility index IN. The IN 95 index is a specific bankruptcy model designed for the Czech conditions. It means that it does not have the determined market value of the company in any single indicator. The model is designed for those companies which do not trade at the exchange. The advantage is that IN95 takes into account the weights for individual NACEs. The weights V2 and V5 are the same for all industries. (Neumaierova and Neumaier, 2002; Telecky, 2016; Grunwald and Holeckova, 2009)

The index IN 95 for the “transport” industry has the following form:

07 * assets / external resources
0.11 * earnings before interest and taxes (EBIT) / interest payable
14.35 * earnings before interest and taxes (EBIT) / assets
0.75 * revenues / assets
0.10 * current assets / (short-term liabilities + short-term bank loans)
-60.61 * overdue liabilities / revenues

Source: (Grunwald and Holeckova, 2009)

Recommended values of the IN 95 index

IN 95 > 2
An ability to comply with the financial obligations without problems
1 < IN 95 < 2
Grey area
IN 95 < 1
Insufficient ability to comply with the financial obligations

Source: taken from (Grunwald and Holeckova, 2009)

2.2 IN 99 Index

The IN 99 index ranks among the creditworthy models that are specifically designed from the perspective of an owner. The discrimination analysis was used both on the IN 95 index and the IN 99 index. Weights of individual indicators differ from the IN 95 index. The reason is enforcement of achieving a positive value of the economic profit. (Neumaierova and Neumaie, 2002; Finanalysis, 2014; Telecky, 2016; Vochozka, 2011)

-0.017 * assets / external capital
4.573 * earnings before interest and taxes (EBIT) / total assets
0.481 * sales / total assets
0.015 * current assets / short-term liabilities

Source: taken from finanalysis

The following table determines the final qualification of the company:

IN 99 > 2.07
The company creates a new value for the owner
1.42 <= IN 99 < 2.07
It is supposed that the company still creates a value for the owner
1.089 <= IN 99 < 1.42
It is not sure whether the value for the owner is created
0.684 <= IN 99 < 1.089
The company rather does not create the value for the owner
IN 99 < 0.684
The company does not create a value for the owner

Source: taken from finanalysis

2.3 IN 01 Index

This model was created upon the discrimination analysis. The IN 01 index is a specific model which takes into account the previous two models, i.e. IN 95 and IN 99. It is characterized as a bankruptcy and creditworthy model. It consists of five main indicators. This model does not contain the market value of the capital. It means that the model is especially designed for the companies not trading at the stock exchange. (Neumaierova and Neumaier, 2002; Telecky, 2016; Grunwald and Holeckova, 2009)

0.13 * assets / external capital
0.04 * earnings before interest and taxes (EBIT) / interest payable
3.92 * earnings before interest and taxes (EBIT) / total assets
0.21 * sales / total assets
0.09 * current assets / short-term liabilities

Source: taken from finanalysis

2.4 IN 05 Index

The IN 01 was helpful in creating the recent model IN 05. The Neumaier spouses updated the previous model and applied it on the basis of industrial data from 2004. The goal of this model is not only to determine whether the company is near the bankruptcy, but to determine also a value for the owners. The prerequisite of this model is that it should estimate the bankruptcy of the company with probability higher than 72 %. After application to the medium-sized companies, the success of the model is 78 %. In case of the small companies, it is 74 %. Both values are deemed to be very a successful result of the created model which can estimate the financial situation of the company. (Neumaierova and Neumaier, 2002; Telecky, 2016; Grunwald and Holeckova, 2009)

0.13 * assets / external capital
0.04 * earnings before interest and taxes (EBIT) / interest payable
3.97 * earnings before interest and taxes (EBIT) / total assets
0.21 * sales / total assets
0.09 * current assets / short-term liabilities

Source: taken from finanalysis

IN 05 > 1.6
A company creates a value.
0.9 < IN 05 < 1.6
A grey area of neutral results
IN 05 < 0.9
A company destroys a value.

Source: taken from finanalysis

The paper is aimed to apply selected indices IN 95, 99, 01 and 05 to the selected sample of transport companies conducting business in the Czech Republic. The financial health analysis will be made for 13 transport companies providing the mixed transport services, i.e. the bus, trolleybus and tram transport; 8 transport companies provide the bus transport only. Then, the ratio indicators containing the profit will be adjusted in the classification models and replaced with the cash flow indicator. After that, the intercompany comparison analysis will be applied to the individual transport companies. The goal is to verify credibility of classification models using another method of financial analysis.

The intercompany comparison analysis is used for the purposes of determining the economic situation of selected carriers, but the final results have the limited explanatory power. The result of this method is determining of the order of companies from the strongest one to the weakest one. The results, however, fail to show what is the content of adverse factors having effect on the economic situation of the company. The carriers will be compared using the:

- Simple sequence method,
- Simple proportion method,

- Scoring method,
- Standardized variable method,
- Distance from a fictitious object method.

The selection of basic indicators evaluating the financial health of the company was made. It is the indicators which are contained in the indices IN 95, 99, 01 and 05. The reason is the final classification of models evaluating the financial health of the company. The following was chosen:

- EBIT / assets,
- Revenues / assets,
- EBIT / interest payable,
- Current assets / (short-term liabilities + short-term bank loans and financial assistance),
- External resources / assets, (Kislingerova and Hnilica, 2005; Marik and Mariková, 2005; Marik, 2011/12; Kislingerova et al., 2007; Synek and Kislingerova, 2010)

The **simple sequence method** can be applied using the formula (1):

$$C_i = \sum_{j=1}^n b_{ij} \quad (1)$$

where

C_i ... total evaluation of the i th company according to all indicators,

b_{ij} ... order of the i th company according to the j th indicator,

m ... number of evaluated companies,

n ... number of evaluated indicators,

i ... index of evaluated companies,

j ... index of financial indicators.

General rule: the company with the lowest total is evaluated as the best company. (Kislingerova et al., 2007; Ruckova, 2015; Petrik, 2009)

The **scoring method** is based on the principle that each company obtains a certain amount of points on the basis of its position as compared with other companies. The calculation will be done as follows (2,3):

$$b_{ij} = \frac{x_{ij}}{x_{j\max}} * 100 \quad (2)$$

(for maximising);

$$b_{ij} = \frac{x_{j\min}}{x_{ij}} * 100 \quad (3)$$

(for minimising), where

b_{ij} is the score of the i th company according to the j th indicator,

x_{ij} ... value of the j th indicator in the i th company,

$x_{j\max}$... the maximum value of the j th indicator in the set of companies,

$x_{j\min}$... the minimum value of the j th indicator in the set of companies. (Kislingerova et al., 2007; Fotr and Svecova, 2010; Valach, 2006)

$$b_{ij} = \frac{y_{j0} - \bar{y}_j}{S_{yj}} \quad (9)$$

(for maximising);

$$b_{ij} = \frac{\bar{y}_j - y_{j0}}{S_{yj}} \quad (10)$$

The standardized variable method uses the values of the determinative variable, a line of statistical procedures. It is calculated as follows (4), (5):

$$b_{ij} = \frac{y_{ij} - \bar{y}_j}{S_{yj}} \quad (4)$$

(for maximising);

$$b_{ij} = \frac{\bar{y}_j - y_{ij}}{S_{yj}} \quad (5)$$

(for minimising), where

b_{ij} ... a value of the standardized method of the j th indicator and the i th company,

y_{ij} ... value of the j th indicator of the i th company,

\bar{y}_j ... an average of j th indicator for the given set of companies,

S_{yj} ... determinative variable of j th indicator.

The determinative variable is calculated as follows (6):

$$S_{yj} = \sqrt{\frac{\sum_{j=1}^n (y_{ij} - \bar{y}_j)^2}{n}} \quad (6)$$

where

n ... number of indicators,

y_{ij} ... value of the j th indicator of the i th company,

\bar{y}_j ... an average of j th indicator for the given set of companies.

The average of the j th indicator for the given set of companies is calculated in line with the formula (7):

$$\bar{y}_j = \frac{\sum_{j=1}^n y_{ij}}{m} \quad (7)$$

The final value of each company is calculated as an arithmetic average of standardized values according to the formula (8):

$$C_j = \frac{1}{n} * \sum_{j=1}^n b_{ij} \quad (8)$$

(Kislingerova et al., 2007; Fotr and Svecova, 2010; Valach, 2006)

The method of distance from a fictitious object functions on the principle of creating the non-existing (fictitious) company. This company is created if the best values are attributed to individual indicators. The recalculated indicators are based on the calculation using the standardized variable method. The Euclidean distances of individual companies from the fictitious company will be calculated. The optimum value of the standardized variable will be calculated as follows (9), (10):

(for minimising), where

b_{ij} ... optimum value of the standardized variable,

y_{j0} ... the best value of the j th indicator,

\bar{y}_j ... the average value of the j th indicator,

S_{yj} ... determinative variable of j th indicator.

The company with the lowest distance from the fictitious company is evaluated as the best one. (Kislingerova et al., 2007; Synek and Kislingerova, 2010; Fotr and Svecova, 2010; Valach, 2006)

3 Results

The profit/loss generated by the transport company has a lower level of explanatory power than the cash flow. Why? The Czech accounting legislation seeks to capture the business activity upon the accounting operations by recording them on the active, passive accounts and accounts of costs and income or off-balance sheet accounts. They serve for finding the economic benefit and the profit/loss of the company. In the Czech conditions, the generated profit/loss, however, is used for determining the tax base and calculating the tax liability. It means that the profit should equal to the financial means which are freely available. This is, however, not true. (Otrusinova and Steker, 2016; Dostalova, 2007)

During the process of determining the profit or loss, there are many mistakes and faults made in keeping accounts in the Czech conditions. The accounting entities violate the principle of a true and fair view of the subject of accounting in the following cases which occur most often:

- Provisions are not posted;
- Otherwise the provisions are not cancelled and, therefore, the costs of the transport company are overestimated, which affects the profit/loss;
- Services in the phase of unfinished production are not posted due to the administrative demandingness;
- The most frequent mistake in appraisal of the unfinished production is inclusion of the profit margin in the input price;
- Depreciations of the tangible fixed assets should exactly reflect the physical tear and wear with respect to their performance;

In providing the traffic services, the transport companies are obliged to inform the client (orderer) of transport services by means of the Report on Costs and Sales from Transport Operations (newly: Financial Model in the Public Line or

Track-Based Transport). The carrier is obliged to include the accounting depreciation in the total costs. With respect to the performances of the used buses, the tax depreciations fail to have a sufficient explanatory power. Due to the lower administrative demandingness, accounting depreciation is considered the same as tax depreciation. The tax depreciation cannot be carried out to capture the real performances of buses. The tax depreciation serves especially for determining the tax base which reflects the profit/loss of the company. (Drabkova and Kourilova, 2009; Hula, 2009)

- Mistakes and faults in accounting stem from the imperfect and obsolete internal guideline which should be updated and changed into a such form to comply with the principle of a true and fair view of the data used in accounting;
- The mistakes are also made in case of the assets appraisal when the ancillary costs which should be a part of the input price of the assets do not enter the purchase price;

In fact, the ancillary costs are posted as the cost items. This leads to the cost overestimation and changing of the amount of the profit/loss.

From the auditor's viewpoint, the accounting mistakes are made during the wrongly conducted stock-taking. The stock-taking differences are not posted. As a result, the values of assets, liabilities, costs and revenue are distorted. An incorrect value of the net assets is caused by wrong quantification of the value of assets due to the temporary or permanent reduction which is not reflected in accounting consequently. (Hula, 2009)

In nearly all items of the balance sheet it is possible to intentionally distort the details to the benefit of the company. (Drabkova and Kourilova, 2009)

The cash flow gives an overview of the cash flows (movement of financial means and their equivalents during the accounting period as per the types of activities – operational, investment and financial). The task of the cash flow is to inform a user for what purpose the cash flows and the resources of their coverage are used for a defined period. The secondary task is to reflect the difference between the costs and revenues on one side and the income and expenditure on the other side. (Kliment, 2010)

The cash flow report structure should be in such a form to be as much identical as possible with the overview of real income and expenditure of the undertaking. The cash flow has a higher level of explanatory power than the profit. The profit calculation is affected by the influence of accounting standards and procedures. For example the unsold inventories or high expenditure for research and development will not be reflected in the profit but in cash flow. Majority of users, therefore, focus on the cash flow rather than the profit due to the ability to repay. In the defined areas of financial analysis, the profit is replaced with the cash flow from the operational activity for the purpose of determining the financial health of the company. (Drabkova and Kourilova, 2009; Hula, 2009; Krupova, 2001)

When applying the IN 95 index as seen in Table 1, it can be noted that the Transport Company Děčín is not able to comply with its obligations due to a negative value of its economic result. By replacing the profit with the cash flow indicator, however, the carrier is in a different situation – it prospers and shows no sign of bankruptcy. The cash flow report has a better explanatory power and is not too dependent on the operation which affects the profit/loss. The similar case is the Transport Company Ústí nad Labem. Other transport companies prosper or find themselves in the so-called grey area.

Better situation is with the carriers which do business in the bus transport. Most of them flourish and have no problems with repaying of their obligations. The exception is ČSAD Jihotrans when the change of the cash flow indicator resulted in the same value.

Table 1 Index IN 95: profit versus cash flow

	Use		Total order as per EBIT
	EBIT	CASH FLOW	
TC (Transport Company) Karlovy Vary, a. s.	49.55	193.20	2.
TC Ostrava, a. s.	508.00	29,655.46	1.
TC Chomutov and Jirkov, a. s.	3.62	13.47	3.
TC Liberec and Jablonec nad Nisou, a. s.	0.84	4.28	9.
TC Most and Litvinov, a. s.	0.44	1.66	11.
TC České Budejovice, a.s.	1.10	13.97	7.
TC Decin, a. s.	-19.93	30.09	13.
TC Hradec Kralove, a. s.	1.38	2.18	6.
TC Jihlava, a. s.	0.93	1.78	8.
TC Olomouc, a. s.	0.79	1.97	10.
TC Pardubice, a. s.	2.04	3.51	4.
TC Usti nad Labem, a. s.	-1.34	3.51	12.
TC Zlin and Otrokovice, s. r. o.	1.96	3.37	5.
CSAD Autobusy Ceske Budejovice, a. s.	2.58	10.19	5.
CSAD Jindrichuv Hradec, a. s.	5.28	11.32	2.
CSAD Jihotrans, a. s.	0.31	0.31	8.
CSAD Slany, a. s.	1.44	4.51	7.
CSAD Sttrans, a. s.	4.54	7.41	3.
CSAD Vsetin, a. s.	3.71	7.99	4.
CSAD Liberec, a. s.	1.88	4.45	6.
CSAD Frydek - Mistek, a. s.	35.49	54.51	1.

Source: Author

Table 2 lists the results of financial health of transport companies calculated using the indices IN 99, IN 01 and IN 05. The IN 99 index is closest to the reality. The reason is the provided subsidies in the form of a provable loss. In providing the traffic

services, we can hardly find a carrier which would cover its total costs with the total revenue and generate the accounting profit. The IN 99 index reports all carriers as the companies which do not generate a new value for the owner. When the index level is at least 1.42, we cannot directly determine whether the value is generated for the company owners. The index values less than 1.423 represent the situation when the companies do not generate the value for the owner. The transport company ČSAD Frýdek – Místek generates the value when the cash flow is reported. Generally, ČSAD buses are more successful than the transport companies of selected locations.

When assessing the financial health of the company, the intercompany comparison analysis was made as it can rank individual carriers from the best one to the weakest ones. The result is comparison of individual indices IN xx with regard to their position based on the achieved results of the intercompany comparison analysis.

The fields marked in green in Table 3 show the same position of the company when the simple sequence method, simple

proportion method, scoring method, standardized variable and method of distance are applied. The fields marked in yellow show the deviation in the position of the company. ČSAD Frýdek – Místek, a. s. is evaluated by individual methods with the same final values. It ranked in first place as compared with other carriers of ČSAD. On the other hand, the results of transport companies of selected locations are very similar.

To verify the credibility of classification models using the intercompany comparison analysis, in Table 4 the arithmetic average of individual methods was calculated and the total placing of 3 best carriers ČSAD and TC was determined. In case of the TC Ostrava, the IN 99 index considerably deviates from other indices. The reason is the influence of interest coverage in the index.

The indices IN 95, IN 99, IN 01 and IN 05 are almost identical with the result of intercompany comparison analysis. We can conclude that it is highly likely that the credibility of indices is reliable.

Table 2 Index IN 99, IN 01 and IN 05: Profit versus cash flow

	Use			Total order as per EBIT	Use			Total order as per EBIT	Use			Total order as per EBIT
	EBIT	CASH FLOW			EBIT	CASH FLOW			EBIT	CASH FLOW		
IN 99 Index	TC (Transport Company) Karlovy Vary, a. s.	0.59	1.05	1.	18.46	70.56	2.	18.46	70.57	2.		
	TC Ostrava, a. s.	0.21	0.46	9.	185.68	10,784.69	1.	185.68	10,784.69	1.		
	TC Chomutov and Jirkov, a. s.	0.50	0.89	2.	1.76	5.23	6.	1.76	5.23	6.		
	TC Liberec and Jablonec nad Nisou, a. s.	0.22	0.49	8.	0.77	1.94	9.	0.79	1.97	9.		
	TC Most and Litvinov, a. s.	0.07	0.45	12.	0.57	0.91	11.	0.57	0.91	11.		
	TC České Budejovice, a.s.	0.27	0.71	6.	1.12	5.68	7.	1.16	5.72	7.		
	TC Decin, a. s.	0.22	0.57	8.	-6.09	12.00	13.	-6.08	12.01	13.		
	TC Hradec Kralove, a. s.	0.20	0.46	10.	1.90	2.12	5.	1.90	2.12	5.		
	TC Jihlava, a. s.	0.30	0.57	5.	0.74	0.97	10.	0.74	0.97	10.		
	TC Olomouc, a. s.	0.24	0.62	7.	0.97	1.29	8.	0.97	1.29	8.		
	TC Pardubice, a. s.	0.44	0.91	3.	2.34	2.74	4.	2.34	2.75	4.		
	TC Usti nad Labem, a. s.	0.09	0.46	11.	-0.13	1.53	12.	-0.11	1.55	12.		
	TC Zlin and Otrokovice, s. r. o.	0.34	0.78	4.	2.53	2.91	3.	2.91	2.92	3.		
IN 01 Index	CSAD Autobusy Ceske Budejovice, a. s.	0.69	1.43	5.	1.10	3.67	5.	1.11	3.68	5.		
	CSAD Jindrichuv Hradec, a. s.	0.50	0.73	7.	2.23	4.37	2.	2.24	4.37	2.		
	CSAD Jihotrans, a. s.	0.04	0.04	8.	0.27	0.27	8.	0.27	0.27	8.		
	CSAD Slany, a. s.	0.51	1.05	6.	0.57	1.53	7.	0.57	1.54	7.		
	CSAD Sttrans, a. s.	1.26	1.62	2.	1.76	2.70	3.	1.77	2.71	3.		
	CSAD Vsetin, a. s.	0.89	1.45	4.	1.41	2.81	4.	1.41	2.82	4.		
	CSAD Liberec, a. s.	0.90	1.44	3.	0.67	1.45	6.	0.67	1.46	6.		
	CSAD Frydek - Místek, a. s.	1.67	2.17	1.	13.35	20.12	1.	13.36	20.14	1.		
IN 05 Index	CSAD Autobusy Ceske Budejovice, a. s.	0.69	1.43	5.	1.10	3.67	5.	1.11	3.68	5.		
	CSAD Jindrichuv Hradec, a. s.	0.50	0.73	7.	2.23	4.37	2.	2.24	4.37	2.		
	CSAD Jihotrans, a. s.	0.04	0.04	8.	0.27	0.27	8.	0.27	0.27	8.		
	CSAD Slany, a. s.	0.51	1.05	6.	0.57	1.53	7.	0.57	1.54	7.		
	CSAD Sttrans, a. s.	1.26	1.62	2.	1.76	2.70	3.	1.77	2.71	3.		
	CSAD Vsetin, a. s.	0.89	1.45	4.	1.41	2.81	4.	1.41	2.82	4.		
	CSAD Liberec, a. s.	0.90	1.44	3.	0.67	1.45	6.	0.67	1.46	6.		
	CSAD Frydek - Místek, a. s.	1.67	2.17	1.	13.35	20.12	1.	13.36	20.14	1.		

Source: Author

Table 3 Results of the intercompany comparison method

	Simple sequence method	Simple proportion method	Scoring method	Standardized variable method	Method of the distance
TC (Transport Company) Karlovy Vary, a. s.	2	13	2	4	4
TC Ostrava, a. s.	4	5	4	1	1
TC Chomutov and Jirkov, a. s.	3	12	5	5	5
TC Liberec and Jablonec nad Nisou, a. s.	9	9	9	11	11
TC Most and Litvinov, a. s.	10	4	12	12	12
TC České Budejovice, a.s.	5	8	8	7	7
TC Decin, a. s.	6	2	11	8	10
TC Hradec Kralove, a. s.	6	7	6	6	6
TC Jihlava, a. s.	7	11	7	10	9
TC Olomouc, a. s.	8	3	10	9	8
TC Pardubice, a. s.	1	10	1	2	2
TC Usti nad Labem, a. s.	11	1	13	13	13
TC Zlin and Otrokovice, s. r. o.	2	6	3	3	3
CSAD Autobusy Ceske Budejovice, a. s.	5	5	2	5	5
CSAD Jindrichuv Hradec, a. s.	3	3	4	3	3
CSAD Jihotrans, a. s.	8	8	5	8	8
CSAD Slany, a. s.	7	7	7	7	7
CSAD Sstrans, a. s.	2	2	3	2	2
CSAD Vsetin, a. s.	4	4	6	4	4
CSAD Liberec, a. s.	6	6	8	6	6
CSAD Frydek - Mistek, a. s.	1	1	1	1	1

Source: Author

Table 4 Determining of credibility of classification models

Best placing as per the intercompany comparison	Model				
	IN95	IN99	IN01	IN05	
TC Ostrava, a. s.	1st place	1st place	9th place	1st place	1st place
TC Pardubice, a.s.	2nd place	4th place	3rd place	4th place	4th place
TC Zlin and Otrokovice, s. r. o.	3rd place	5th place	4th place	3rd place	3rd place
CSAD Jindrichuv Hradec, a. s.	3rd place	2nd place	7th place	2nd place	2nd place
CSAD Sstrans, a. s.	2nd place	3rd place	2nd place	3rd place	3rd place
CSAD Frydek - Mistek, a. s.	1st place				

Source: Author

4 Conclusion

Ultimately, the public transport is a specific area. Without the aid of the government, regions, towns and municipalities which pay for the provable loss and the adequate profit, the traffic services cannot be provided. Also the fleet of vehicles of a sufficient quality could not be maintained without the financial injection.

The goal of the paper was to assess the financial health of transport companies. The financial health evaluation was considered using the classification models and the intercompany comparison analysis. As far as credibility of bankruptcy and creditworthy models is concerned, the most

exact results were obtained after application of the IN 99 index which belongs to the creditworthy models. Assessment of credibility of other indices IN 95, IN 01 and IN 05 can be confirmed as appropriate for the conditions of the Czech business environment. The results of classification models allow us to identify the affected area which also reduces the total performance of the company and to propose such effective measures which would avoid the future insolvency. The managers of the company have sufficient amount of information on the future development of the company in the short-term horizon. The task of the managers is also to analyse the development of non-financial indicators.

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