

Enterprise Performance Analysis of the Selected Service Sector by Applying Modern Methods with an Emphasis on the Creation and Application of the Modified Creditworthy Model (MCWM)

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Abstract

The aim of presented paper was to create and subsequently apply the Modified 3D Creditworthy Model (MCWM) of performance reflecting sectoral characteristics and financial specificities of the selected sample of Slovak tour operators over the years 2013 – 2017. The intention of this research study was to implement the key financial indicators and appropriate prediction models into both dimensions of the traditional 2D Creditworthy Model of performance and to supplement its third dimension applying the selected modern assessment methods – the Economic Value Added and the Return On Net Assets as we consider them to be one of the most important indicators of future success and company's financial growth. This modification will help to better identify the current financial position of tour operators and more accurately identify causes that hinder the development of financial performance of the selected sample of enterprises. However, after adjusting the upper and lower quartile averages of a particular industry, this methodology is applicable in the wider context of enterprises, not only those operating in the tourism sector.

Key words: Creditworthy model, Business performance, Tour operators, Financial indicators, Prediction models.

JEL Classification: C50, C51, M21.

1. Introduction

The enterprise performance is determined by rising financial entitlements, which are (to some extent) the result of globalization, interdependence and internationalization. According to Kiráľová, Pavlíček (2014), the globalization increases the level of competition that already requires applying new strategies. However, the degree of economic disparities of individual enterprises also plays an important role in the business environment. In this regard, there is a growing effort to continually develop new, modern financial performance assessment tools that can access the financial situation as accurately as possible, identify future risks, forecast business performance with the intention of determining the starting position of the business to streamline strategic management decisions. The European Commission launched the European Tourism Indicator System (ETIS) in 2013 with the aim helping destinations to monitor and measure their sustainable tourism performance, by using a common comparable approach. ETIS is a voluntary management tool. ETIS does not set minimum values to be achieved and it does not provide any certification. The ETIS was based on 27 core indicators and 40 optional indicators, subdivided into four categories: destination management, social and cultural impact, economic value and environmental impact (European Union, 2016). For these reasons, we focused on creating a new modified financial performance model for tour operators to provide a comprehensive reflection of the sectoral economic and financial situation, indicating possible future threats and thus helping to achieve business goals. In this paper, we focused on the analysis of a selected sample of Slovak tour operators, which significantly contribute not only to the development of domestic and foreign tourism, but also to the development of the entire Slovak and European service sector as well.

Establishment of tour operators in the Slovak Republic was mainly due to the enormous development of tourism. The United Nations World Tourism Organization (UNWTO, 2018) defines tourism as the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes, not related to the exercise of an activity remunerated from within the place visited. Tourism is essential in achieving the general objectives of the European Union, namely the promotion of the European citizen's interests, growth and employment, regional development, the management of the cultural and natural heritage and the

strengthening of a European identity. The importance that is attached to urban areas can be seen from the communication from the Commission "Sustainable urban development in the European Union" which aims in particular to enhance economic prosperity and employment in towns and cities. (European Commission, 2000). A joint effort of UNWTO and other partners, "Tourism and the Sustainable Development Goals – Journey to 2030" aims to build knowledge, and empower and inspire tourism stakeholders to take necessary action to accelerate the shift towards a more sustainable tourism sector by aligning policies, business operations and investments (UNWTO, 2017). Sarvašová, Királ'ová (2018) state that tourism has a positive impact on the economic growth and employment and it is an essential aspect of the life of people around the world. However, as reported by Királ'ová, Hamarneh (2016), tourism can also disrupt the original lifestyle of the residents and cause environmental deterioration, so it is important to find the right balance between these economic benefits and undesirable impacts. Due to everyday stressful lifestyle, the short-break vacations are becoming global phenomenon. Although Slovakia is not well known on the international tourism market yet, regional specificity and variability predetermine the Slovak area for the development of tourism, which has become increasingly popular in recent years (Štefko, Vašaničová, Litavcová, Jenčová, 2018). So, we can assume the number of Slovak tour operators will be growing. Saranča (2015) concludes that tour operator is one of the basic components of the formation and development of the tourism sector of the country. According to Sysela (2010), the tour operator can be defined as an enterprise organizing tours and providing tourism services for direct sale to passengers or sale via intermediaries. Since 1991, the activity of tour operators in the Slovak Republic has been supported by the Slovak Association of Tour Operators and Travel Agencies, considered to be the most voluntary association of these operators involved in travel and related service activities. Its mission is to represent and protect the economic and other legitimate interests of its members and to create better conditions contributing to the development of tourism in the Slovak Republic. This association is a collective member of the Association of Entrepreneurs of Slovakia, the Association of Trade and Tourism of the Slovak Republic and the European Association of Tour Operators and Travel Agencies established in Brussels (SACKA, 2018).

2. Literature review

Business environment and global market competition is constantly changing. In some periods, these changes are very slow and therefore can make an impression of stability, vice-versa, they can have another pace, i. e. rapid or even hitting (Tvaronavičiene, 2018). From the macroeconomic as well as microeconomic point of view, the enterprise performance measurement is a key topic of many researchers.

2.1 Enterprise performance measurement

For each enterprise, it is very important to be well-performing, successful and competitive, because otherwise, its future may be at risk (Pribeanu, Toader, 2016). Mursalim, Mallisa, Kusuma (2017) state that success depends on financial decisions that are affected by many factors. These choices may influence the capital structure and improve the performance of enterprises. The results showed that capital structure of firms was significantly related to the enterprise performance. The enterprise's profitability, size and volatility have dominant and consistent roles in explaining the variation of the capital structure. Furthermore, the variables of growth opportunity, gross domestic product, inflation rate and corporate governance influence the capital structure variation. Štefko, Gavurova, Korony (2016) emphasise just the importance of financial aspects as key factors in a process of company's development.

As described by Stříteská, Zapletal, Jelínková (2016), there is a growing number of companies that have realized that improving performance and increasing competitiveness can be achieved by developing effective performance measurement and management. Many scientific papers are devoted to analysis of tour operators' performance from different point of view (Picazo, Moreno-Gil, 2018; Bruni, Cassia, Magno, 2017). The purpose of study presented by Xin, Chan (2014) was to explore the tour operators' perspectives and performance in relation to responsible sustainable tourism indicators. Authors used four main groups of sustainable tourism metrics included ecological, economic, cultural and social indicators. The findings of this paper confirmed the meaning and importance of all tourism indicators in process of tour operators' development. Other view for examining tour operators' performance is provided by Yap, Cheng, Hussain, Ahmad (2018). This study examines the effect of market intelligence practices on the firm performance in the small and medium-sized tour operators. The findings indicate that firm performance is positively related to market intelligence practices both in terms of market intelligence acquisition and market intelligence utilization. Hedija, Fiala (2015) investigated, if the firm performance is independent on

company size in the area of tour operators. When they investigated smaller sample, there was no statistically significant relationship between the size and performance of the selected companies. Otherwise, in the case of bigger sample (118 firms) there was confirmed medium correlation between firm size and its performance. However, increasing the implementation of performance measurement systems in companies is linked to many problems in need of answering. Each model for measuring performance and prediction is according to Hyránek, Grell, Nagy, Ďurinová (2018) different, it uses different mathematical approaches, it works with different indicators; however, the models also have some common features. In the era of rapidly changing economic environment, the standard methods for measuring financial performance and assessing financial health are less adequate. Most authors are focused on enhancing the predictive ability of original models by responding appropriately to the existing changed economic environment.

2.2 Creditworthy Model of performance

One of modern models of enterprise performance assessment is the Creditworthy Model (CWM) of performance, which was created by modifying the creditworthiness model as part of the grant scheme VEGA no. 1/0596/14 – "Creditworthy model formation with the use of financial and sectoral indicators in the energy industry of the European Union and forecasting the indicators development".

As reported by Horváthová, Mokrišová, Suhányiová (2016), the CWM was created by combination of the selected financial ratio indicators (the ex-post analysis) and prediction models (the ex-ante analysis). However, other modern indicators representing key performance indicators can also be incorporated into it. This model analyses and graphically illustrates the position of the enterprise in individual portfolios in terms of two dimensions – the financial performance and company's success. It is the most suitable model for financial performance comparison and development of two or more enterprises over the years. The position of the enterprise is determined by cross point of the values that are plotted along the x-axis and the y-axis. The company's success is plotted along the y-axis and it is determined by the recalculation of prediction models' values using a scoring table. Each chosen prediction model can get a maximum of 20 points, thus the maximum number of points that an enterprise can obtain is 80 points. The authors included the following prediction models: Quick Test, Altman's Model, Taffler's Model, Creditworthiness Index. The results of financial performance indicators converted into points by using the transformation table are plotted

along the x-axis. In this dimension, 10 financial ratio indicators were chosen, whereas each of them can get a maximum of 8 points (80 points in total). The following financial indicators were selected: Days Receivable Outstanding, Days Short-term Payable Outstanding, Days Inventory Outstanding, Degree of Over-capitalization, Total Indebtedness, Share of Short-term Liabilities, Return On Equity, Return On Sales, Total Liquidity, Current Liquidity.

Point evaluation of financial indicators can be realized on the basis of the transformation table created. However, in order to achieve more accurate results, it is more appropriate to use the scoring method according to Rejnuš (2014). Each indicator from a given dimension can get a maximum of 8 points; if the maximum is not reached, points are assigned as follows:

- a) in the case of indicators whose development is *going to be growing*, we calculate the point rating by substituting the highest value of the indicator into the denominator:

$$b_{ij} = \frac{x_{ij}}{x_{imax}} \cdot 8$$

- b) in the case of indicators whose development is *going to be decreasing*, we calculate the point rating by substituting the lowest value of the indicator into the numerator:

$$b_{ij} = \frac{x_{imin}}{x_{ij}} \cdot 8$$

x_{ij} – value of the j -th indicator in the i -th enterprise,

x_{jmax} – the maximum value of the j -th indicator evaluated by 8 points, in case of indicator's character + 1,

x_{imin} – the minimum value of the j -th indicator evaluated by 8 points, in case of indicator's character – 1,

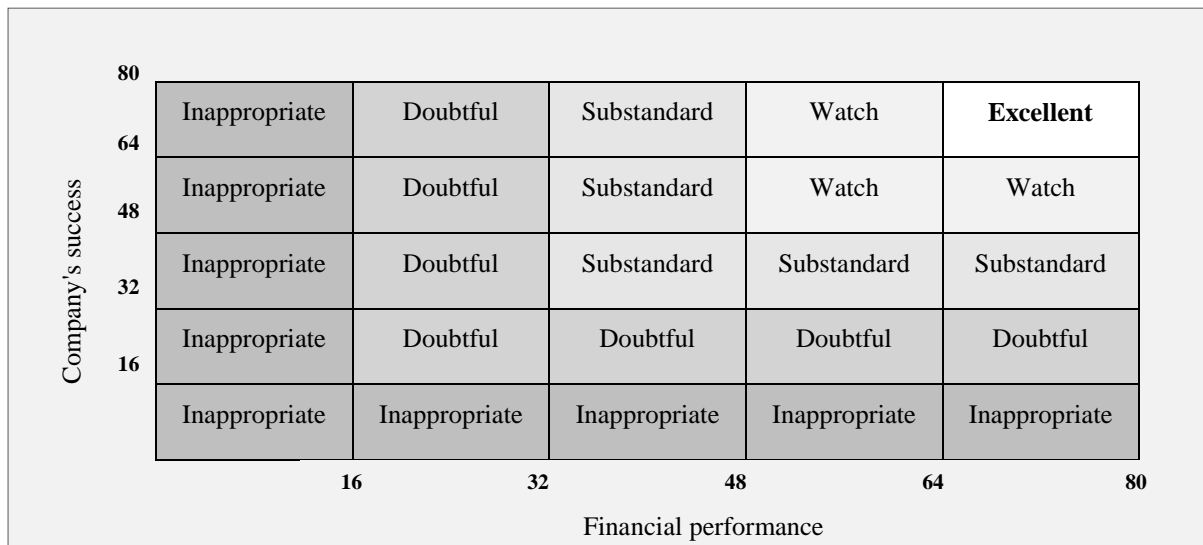
b_{ij} – point evaluation of the i -th enterprise for the j -th indicator.

Overall, the integral indicator is calculated as the weighted average of the number of points achieved per indicator. However, the practical application of this method may be problematic if the selected group of indicators contains negative values (typical examples are profitability indicators). Therefore, Hutera (2013) recommends applying own alternative in the form of a modified scoring method that we have chosen to apply for the third dimension of the MCWM (see Methodology). However, the selection of indicators can be chosen according to our own needs and taking into account the purpose of the evaluation and the

necessary analysis. Based on the cross point of the values achieved, we can determine the position of the enterprise within the five performance fields (Inappropriate, Doubtful, Substandard, Watch, Excellent) that are presented in the following Figure 1 (Horváthová, Mokrišová, 2014).

Figure 1

The Creditworthy model of performance



Source: own processing according to Horváthová, Mokrišová, Suhányiová 2016

As reported by Horváthová, Mokrišová, Suhányiová (2016), the best results that an enterprise can achieve are situated in the performance field of “Excellent”. This position should be a goal for all enterprises and it is defined by a score of more than 64 points achieved in financial performance and more than 52 points within the company's success. The average performance value is located in the field of “Substandard” where the financial performance is below 52 points but higher than 32 points and the company's success may not be lower than 26 points. The worst position is located in the performance field of “Doubtful” and “Inappropriate” with financial performance defined by a score of 32 points and less. It is important for these enterprises to improve their results as they are threatened by bankruptcy in the near future.

The Creditworthy model demonstrates a combination of various financial indicators, early warning models as well as the performance and success of business entities. Horváthová, Mokrišová (2014) emphasize the following benefits and other possibilities of using this model:

- the possibility of modifying the model according to the requirements of analysts,

- the ability to combine internal/external factors affecting enterprise performance,
- the possibility of creating a three-dimensional Creditworthy model by applying internal/external risks, financial performance factors and business success patterns,
- space for applications unlimited number of indicators from all areas of financial health that are subsequently expressed as a single score graphically illustrated in the final performance field.

The Creditworthy model of performance is not the subject of many empirical studies. Its application and various modifications were mainly addressed by the authors Horváthová, Šofranková (2012) who pointed to the use of traditional methods of enterprise performance through the Creditworthy model in terms of its two basic dimensions – financial performance and success. The authors applied this new performance evaluation method on the example of a selected business enterprise, demonstrated its calculation and graphically displayed the position of the enterprise within the final performance fields. Horváthová, Mokrišová (2014) analyzed the performance of the selected transport companies operating in the Slovak Republic using different diagnostic methods, including a Creditworthy model of performance. Horváthová, Mokrišová, Suhányiová, Suhányi (2015) focused on creating a modified Creditworthy model of performance with the application of key performance indicators and risk factors within the selected industry. Therefore, this model can influence and quantify the performance of selected industry in terms of key performance indicators (KPI) as well as eliminate specific risks for the sector concerned. The importance of KPI in order to improve the overall business performance stressed also Rajnoha, Lesníková, Krajčík (2017). Research findings showed KPI have a demonstrable impact on the business performance which means that through its use can be achieved an above-average performance. Another enterprise performance assessment model that accepts the results of selected financial indicators, ex-ante models and risks was designed by Šofranková, Kisel'áková, Horváthová (2017). Based on the application of these approaches, it was possible to identify the impact of internal, external risks, systematic and non-systematic risks on the enterprise performance. Authors constructed new 3D Enterprise Risk Model (ERM) that is a suitable risk management tool for assessing and predicting the risk impact on the enterprise performance. As reported by Yang, Ishtiaq, Anwar (2018), ERM has a significant influence on competitive advantage and increase of performance. Kisel'áková, Horváthová, Šofranková, Šoltés (2015) conclude that the most significant impact on performance of the enterprises has just financial risk. It was also confirmed that the unsystematic risks have a higher impact on the enterprise performance as systematic risks.

3. Methodology

The aim of presented paper was to create and subsequently apply a Modified 3D Creditworthy Model (MCWM) of performance reflecting sectoral characteristics and financial specificities of the selected sample of Slovak tour operators over the years 2013 – 2017. The intention of this research study was to implement the key financial indicators and appropriate prediction models into both dimensions of the traditional 2D Creditworthy Model of performance and to supplement its third dimension applying the selected modern assessment methods – the Economic Value Added and the Return On Net Assets. This modification will help to better identify the current financial position of tour operators and more accurately identify causes that hinder the development of financial performance of the selected sample of enterprises.

The input data (financial statements over the years 2013 – 2017) needed to create the MCWM focused on assessing the financial performance of 57 tour operators operating in the SK NACE 79 120 sector (Tour operator activities) were drawn from accessible internet portal managed by a company DataSpot, Ltd. The median, top and bottom quartiles of the relevant sector (SK NACE 79 120) were provided by a company CRIF – Slovak Credit Bureau, Ltd. When selecting tour operators, we focused on Inc. and Ltd. enterprises with the positive value of equity which employ more than 5 employees. As a result of these criteria, microenterprises were excluded from the entire sector. The key financial indicators reflecting the financial health dimension of the MCWM were selected by determining the strength of dependence with the modern EVA indicator based on the results of the Kendall Tau statistical test, which was processed in STATISTICA and MS EXCEL.

In order to take into account the financial characteristics and specifics of the selected industry, we decided to modify the original Creditworthy model of performance through several adjustments, including, but not limited to, a different choice of input financial ratio indicators, prediction models, modifying the scoring tables, methodology used and defining new performance fields. The main difference between the new MCWM and original Creditworthy model is that MCWM is compiled from three dimensions:

- the dimension of financial health,
- the dimension of prediction analysis,
- the dimension of shareholder wealth creation.

To assess the dimension of financial health, 10 selected ex-post ratio indicators were applied (indicators of liquidity, activity, profitability and indebtedness). Their selection was based on the statistically significant dependence with the modern EVA indicator using the statistical test Kendall Tau (see Results) – Current Liquidity, Total Liquidity, Days Short-term Receivable Outstanding, Days Short-term Payable Outstanding, Total Indebtedness, Interest Coverage Ratio, Total Credit Indebtedness, Return On Assets, Return On Equity, Return On Sales. The conversion of the original financial indicator values entering into dimension of financial health was carried out on the basis of a compiled transformation table according to the median, top and bottom quartiles of the SK NACE 79 120 sector. Each financial indicator could get 0 – 10 points, thus the maximum number of points that an enterprise could obtain was 100 points.

In order to evaluate the dimension of prediction analysis, a total of 10 selected ex-ante prediction models were used, focusing on the selection of credit and bankruptcy models developed and applied in European business environment – Quick Test, Douch's Balance Analysis, Aspect Global Rating Model, Altman's Model_(SR), Taffler's Model, Creditworthiness Index, Beerman's Model, Index IN05, Bilderbeek's Model, Poznański's Model. The conversion of the original financial indicator values entering into dimension of prediction analysis was performed on the basis of a transformation table compiled from generally recommended and multilevel rating scales and within the individual credit and bankruptcy models. Each prediction model could get also 0 – 10 points, thus the maximum number of points that an enterprise could obtain in this dimension was 100 points.

The last dimension of the MCWM reflecting financial performance consisted of two modern methods – the EVA and RONA indicator. The conversion of their original values was made on the basis of the modified scoring method according to Rejnuš (2014) (see Literature review). As there are no generally recommended values for EVA and RONA indicator, it is important to achieve their highest positive value and thus generate added value for shareholders.

A summary of points within the individual MCWM dimensions was then plotted along the x-axis (the dimension of financial health), the y-axis (the dimension of prediction analysis) and the z-axis (the dimension of shareholder wealth creation). Based on the cross point of the values achieved, we can determine the position of particular tour operator within the five performance fields:

- < 0 – 20 > Insufficient performance field,
- < 20 – 40 > Problematic performance field,

- < 40 – 60 > Standard performance field,
- < 60 – 80 > Monitored performance field,
- < 80 – 100 > Outstanding performance field.

4. Results and discussion

4.1 Dimension of financial health

The following partial analyses were focused on the assessment of individual MCWM dimensions. To reveal the impact of financial indicators on the EVA indicator, the non-parametric test Kendall tau in Statistica software was applied for the period of 2013 – 2017. Its results were used to identify key indicators representing the financial health dimension of MCWM of the selected tour operators. A summary of Kendall Tau correlation coefficient results is presented in Table 1.

Table 1

The results of correlation analysis

Kendall Tau correlations between the EVA indicator and ex – post indicators			
Marked correlations are significant at $p < 0.05$, $N = 57$			
	Variables	EVA indicator	p (value)
Liquidity	Prompt-cash Liquidity	0.2574	0.0583
	Current Liquidity	0.3444	0.0464
	Total Liquidity	0.5083	0.0239
	Net Prompt Cash	0.3423	0.1739
	Net Cash Assets	0.3198	0.0636
	Net Working Capital	0.2797	0.0524
Activity	Days Short-term Receivable Outstanding	-0.3069	0.0159
	Days Inventory Outstanding	0.0476	0.4153
	Days Short-term Payable Outstanding	-0.3923	0.0127
	Days Cash Outstanding	-0.2841	0.1716
	Total Assets Turnover Ratio	0.3008	0.4664
	Non-current Assets Turnover Ratio	0.1658	0.3513
bt ed	Total Indebtedness	-0.4052	0.0454

	Rate of Financial Independence	0.3771	0.5669
	Degree of Under-capitalization	0.2537	0.4224
	Interest Coverage Ratio	0.4978	0.0286
	Total Credit Indebtedness	-0.4167	0.0189
	Repayment of the loans	-0.3487	0.0619
Profitability	Return On Assets	0.8663	0.0230
	Return On Equity	0.8121	0.0116
	Return On Sales	0.7552	0.0238
	Return On Costs	0.3954	0.1667
	Return On Capital Employed	0.1875	0.1053

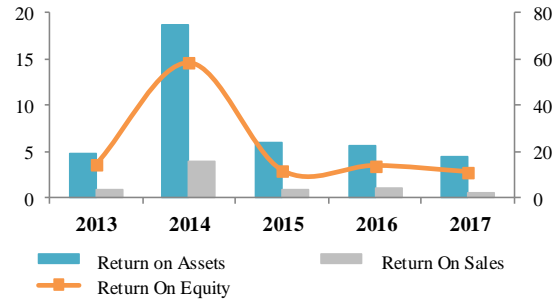
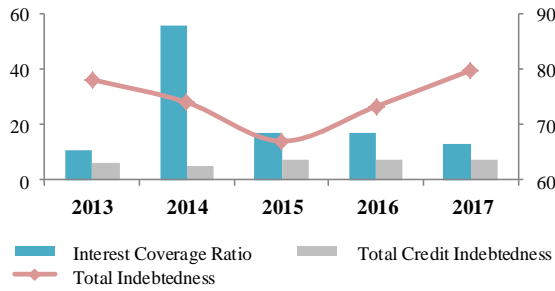
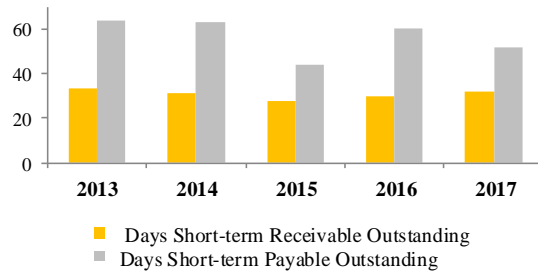
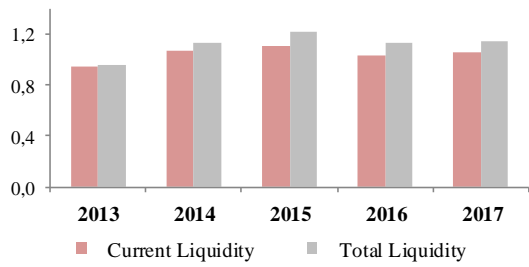
Source: Authors' processing in programme STATISTICA

Based on the correlation analysis between the EVA indicator and ex – post indicators, a statistically significant dependence was confirmed in the case of 10 indicators: Current Liquidity, Total Liquidity, Days Short-term Receivable Outstanding, Days Short-term Payable Outstanding, Total Indebtedness, Interest Coverage Ratio, Total Credit Indebtedness, Return On Assets, Return On Equity, Return On Sales. All correlation coefficients were identified at the significance level of $p < 0.05$. The most significant dependence (0.8112 on average) was identified in the case of Profitability indicators. The statistically significant positive EVA indicator dependence in relation to Liquidity indicators with medium intensity was proved. In the case of Activity indicators, the medium negative dependence intensity was revealed. According to Cohen scale, we also detected significant positive dependence between the EVA indicator and Interest Coverage Ratio (at the level of 0.4978) and negative statistical dependence in relation to Total Indebtedness and Total Credit Indebtedness indicator. In the case of other indicators, the correlation coefficients were identified, but not confirmed at the significance level of $p < 0.05$.

The development of average indicators' values reflecting the financial health of Slovak tour operators is shown in the following Figure 2.

Figure 2

The development of ex-post financial indicators over the years 2013 – 2017



Source: Authors' processing based on the financial statements of analysed enterprises

Based on the results of Kendall Tau statistical test, the Current and Total Liquidity can be considered as key performance indicators of Slovak tour operators within the generally known Liquidity indicators. Over the years 2013 – 2017, the Current Liquidity moved around the recommended range above 1, except in 2013 (0.94). According to Horváthová, Mokrišová, Suhányiová (2016), this situation indicated the illiquidity of analysed tour operators which were consequently rated by financial risk at the level of 10%. Over the following period, the favourable development of this indicator was mainly due to a faster growth rate of current assets excluding inventories (by an index of 1.2362), compared with short-term current liabilities with the increasing pace of 1.0189. When assessing the Total Liquidity development, the selected group of enterprises did not reach the recommended values in any year of the period analysed. However, taking into account the level of other Liquidity indicators, the cause of this result arises from the insufficient value of inventories within the current assets which are needed to cover the above-mentioned short-term current liabilities.

The analysis of Days Short-term Receivable Outstanding indicator confirmed the ideal payment discipline of tour operator customers, as receivables were received once in 30 days (on average). Similarly, the tour operator's payment discipline also achieved the desired results and development. The Days Short-term Payable Outstanding indicator ranged from 45

to 65 days, so the analysed enterprises attempted to avoid drawing the long-term business loans.

Based on the average value of the Total Indebtedness indicator (74.45%) reached over the years 2013 – 2017, the Slovak tour operators may have serious problems with the long-term functionality and financial stability in the future. The cause of this development can be attributed to enterprise financing mostly by foreign capital (€ 1,209,508 on average), which demonstrates their financial independency. The Interest Coverage Ratio indicator was identified as another key performance indicator of Slovak tour operators. Over the analysed period, the selected group of enterprises were able to pay the cost of foreign capital with no obstacles, as the above-mentioned indicator ranged above the recommended value of 8. This positive development was influenced by the fact that the average Earnings Before Interest & Taxes (EBIT) were 22.66 times higher than the interest expense. The last key indicator within the Indebtedness indicators was the Total Credit Indebtedness which recorded the recommended value in each year of the period analysed. In this regard, the selected enterprises were able to use their total assets for covering the overall loans drawn.

Over the years 2013 – 2015, the tour operators did not reach profitability at a favourable level. The Return On Assets, as another key performance indicator, reached the average value of 7.88%, indicating the weak production power of the selected sample of enterprises. When evaluating the Return On Equity development, optimal results above the recommended level of 20 – 25% was not achieved with one exception in 2014, when overall profitability increased by an index of 4.0668 to 58.38% compared to 2013. The main reason for this positive result is the increase in tour operator's net profit by € 254,173. However, it is worthy to note that the Return On Equity reached the higher average value than the Return on Assets, which indicated that the selected enterprises utilized liabilities and debts efficiently. A set of key indicators that enter into the financial health dimension caps the Return On Sales. The results of the indicator reflected positive but inadequate values as their level ranged only from 0.51% to 3.94%.

4.2 Dimension of prediction analysis

The following partial analysis was aimed at evaluating the results of the 10 predictive models that formed the second dimension of the MCWM model. The average values of credit and bankruptcy models applied to selected Slovak tour operators are presented in Table 2.

Over the monitored period, the average values of selected prediction models applied to analysed group of tour operators varied mildly. According to the Quick test results, Slovak tour operators were situated in "red zone" in 2013, 2016 and 2017. The financial situation in "red zone" is characterized as unsatisfactory and future prospects are unfavourable. The unfavourable financial evaluation was determined mainly by low level of cash flow in revenues and inefficient Return On Assets caused by decreasing value of EBIT. According to above mentioned prediction model, the financial position was indicated as the best performing in 2014 with positive development in the following period". However, the achieved results did not match the expectations. The main reason consisted in significant year-on-year decrease of EBIT indicator by 73.39% in 2015. The expected development of analysed enterprises was also quantified using the Douch's Balance Analysis, which demonstrated much better results in comparison with the Quick test. The financial situation was favourable and the future prospects of analysed enterprises were identified as very positive with exception in 2013 and 2017, as Slovak tour agents were located in uncertain "grey zone". Despite this fact, the financial situation was identified as acceptable because of the point rating just below the "green zone". The last and less known credit model applied within the prediction analysis was Aspect Global Rating Model. Over the entire reviewed period, all tour operators achieved AAA rating that reflects optimal business management approaching to ideal balance.

Table 2

The development of ex-ante prediction models over the years 2013 – 2017 (coefficients)

Ex – ante Analysis		2013	2014	2015	2016	2017
Credit Models	Quick Test	15*	9***	13**	15*	15*
	Douch's Balance Analysis	0.93**	2.49***	1.01***	1.01***	0.97**
	Aspekt Global Rating Model	9.02***	9.27***	9.86***	9.37***	10.64***
Bankruptcy Models	Altman's Model _(SR)	2.42**	2.47**	2.78***	2.24**	2.62***
	Taffler's Model	0.96***	1.07***	1.07***	0.91***	1.00***
	Creditworthiness Index	1.11***	2.95***	1.38***	1.23***	1.11***
	Beerman's Model	0.79*	1.17*	1.42*	1.15*	1.35
	Index IN05	1.75***	4.15***	2.23***	2.00***	1.91***
	Bilderbeek's Model	-2.21***	-1.87***	-2.68***	-2.40***	-2.25***
	Poznański's Model	0.57***	1.03***	0.79***	0.58***	0.47***

The Legend:

*** favorable financial situation and stable environment, future prospects are very good (so called "green zone");

- ** zone of neutral results, zone of potential threats, future situation is indeterminate (so called "grey zone");
- * unfavorable financial situation, an enterprise is threatened by bankruptcy (so called "red zone").

Source: Authors' processing based on the financial statements of analysed enterprises

During the years 2013 – 2017, the selected bankruptcy models recorded desirable point evaluation. The bankruptcy probability of Slovak tour operators reached the minimum level, so their financial situation was characterized as favourable. A stable development is expected in the future as well. Based on the Altman's Z-score Model compiled for the conditions of Slovak enterprises, the analysed group of tour operators was situated in the potential threat zone. These evaluations require improving financial metrics control system and in the case of any risks, it is necessary to implement preventive measures immediately. Considerably less favourable results were detected within the Beerman's model. The financial situation was evaluated as insufficient with negative prospects for development. A deeper analysis revealed problems with high value of external financial resources, the insufficient level of cash flow and limited ability of enterprises to generate profit.

4.3 Dimension of shareholder wealth creation

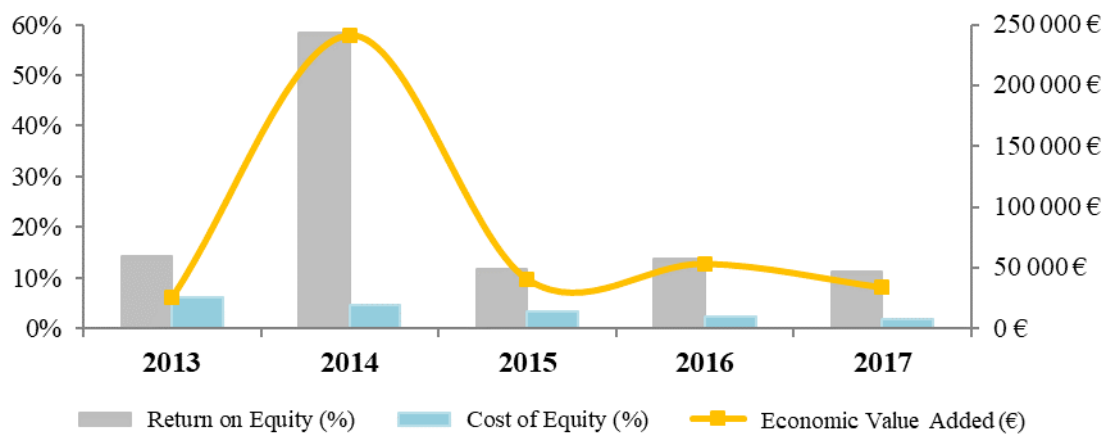
In order to meet the research goal, the next part of paper was focused on evaluating the third performance dimension of MCWM (added to original 2D CWM). The dimension of shareholder wealth creation reflects the tour operators' performance using two modern indicators, namely the EVA and RONA indicator. At first, we analysed financial performance using the EVA indicator over the period of 2013 – 2017. The development of indicators' values (on average) is presented in the following Figure 3.

In the first analysed year, the selected Slovak tour operators recorded the lowest value of the EVA indicator at all, since the average net profit of enterprises ranged only around € 31,502. On the contrary, the value of the cost of equity reached the highest level (6.11%), mainly due to the high risk-free rate of return (4.55%). Overall, year 2014 was identified as the best-performing one within the whole period analysed. A key determinant of this positive year-on-year performance change was a significant increase in net profit by € 1,153,671 compared to cost growth by € 937,567 and the fact that the value of the cost of equity dropped to 4.50%. The decrease in total revenues (by an index of 0.9820) in combination with the total cost growth (by an index of 1.0101) was the main reason for reducing the net profit to the level of € 56,779 in 2015. Despite the continuing decline in cost of equity and an increase in

the enterprises' equity by an index of 1.0769, this significant decline in net profit influenced the achievement of low Return On Equity values and subsequently the indicator EVA. In the following year 2016, Slovak tour operators again succeeded in increasing net profit while lowering cost of equity, which, despite the decline in equity, led to an increase in EVA indicator value to the level of € 53,085. The analysed group of enterprises was also able to generate added value for their shareholders in the last year of the monitored period, however, with a year-on-year decline of 36.68%. This development was mainly due to a decrease in profit by € 23,392 as well as a decrease in equity by € 99,328 (on average). Moreover, the cost of equity reached the lowest level at all (1.80%).

Figure 3

The EVA indicator development of Slovak tour operators over the years 2013 – 2017 (in €)

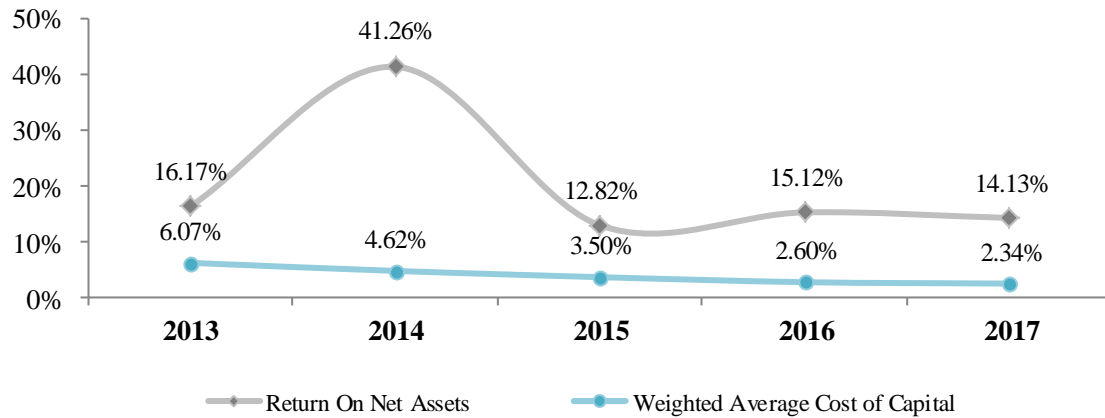


Source: Authors' processing based on the financial statements of analysed enterprises

The second indicator applied to evaluate the performance of the selected sample of Slovak tour operators within the third dimension of MCWM (the dimension of shareholder wealth creation) is the RONA indicator. It is a relative ratio indicator that measures enterprise performance not in %. However, much more important than quantification of the RONA indicator value is to quantify the difference between the profitability measured by the RONA and the Weighted Average Cost of Capital (WACC). The average financial performance development of the Slovak spa enterprises quantified on the basis of the comparison of the RONA with WACC indicator values is presented in Figure 4.

Figure 4

The RONA and WACC indicator development of the Slovak tour operators (in %)



Source: Authors' processing based on the financial statements of analysed enterprises

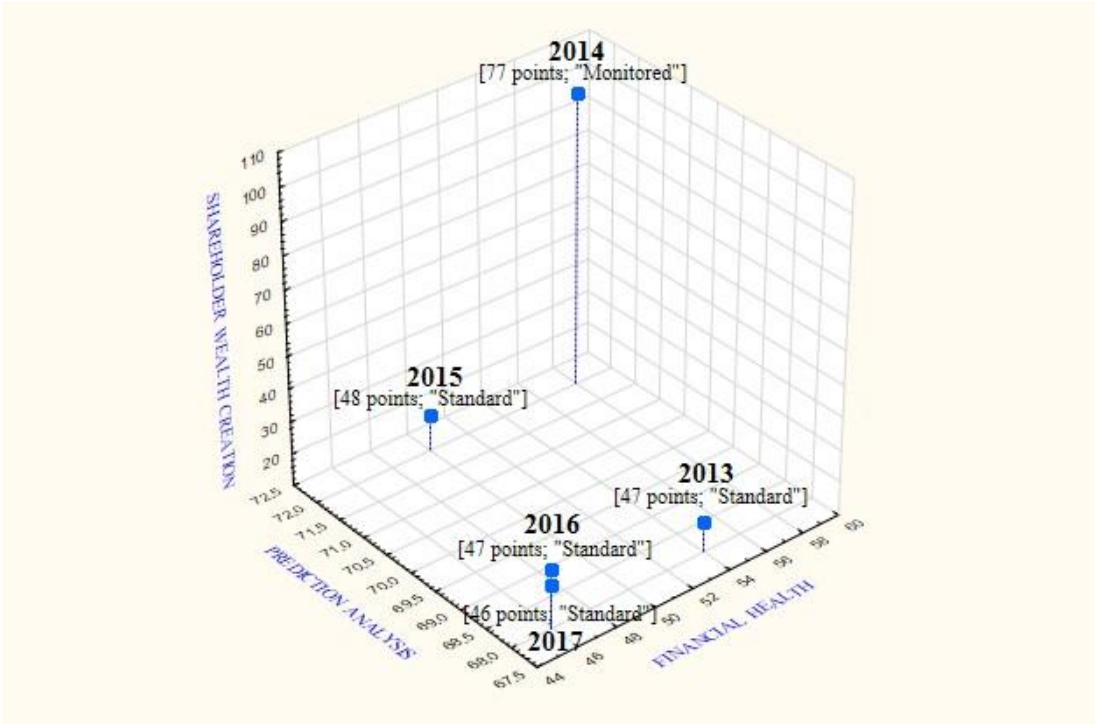
Over the whole period analysed, the RONA indicator recorded the same development like EVA indicator. Thus, results confirmed assertion, that both indicators provide identical findings, but from different point of view. In 2013, Slovak tour operators achieved the second highest value of the RONA at the level of 16.17%, but the WACC indicator achieved its maximum (6.07%) that consequently led to negative decrease in difference between these indicators. In the following year, the most favourable result was detected, as difference between indicators ranged around 36.64%. The Net Operating Profit After Taxes growth by an index of 4.4647 resulted in increase of the RONA value by 25.09% and the decline of the equity cost and debt (by an index of 0.8085) affected the drop in the WACC indicator by 23.86%. Despite of decreasing the WACC value in 2015, Slovak tour operators did not reach such a positive result as in previous year, since the fall in profit by € 181,638 on average significantly affected this negative development. In the following period, the desirable development was recorded, as the average value of the RONA indicator increased by 2.31% as a result of increasing Net Operating Profit and declining value of fixed assets. The positive development trend was recorded also in the case of WACC indicator, since its value decreased by 25.81% compared to the previous year. As a result of this, the desired relation "RONA > WACC" was respected and the difference between indicators ranged around 12.53%. The decrease in tour operators' net profit by € 14,277 compared to 2016 caused the drop in the difference between the RONA and WACC indicator by 11.79%. Thus, in 2017 the enterprise performance was almost identical as in 2013. To conclude, Slovak tour operators' performance was favourable, as they were able to generate value added for shareholders.

In the last part of presented paper by applying individual dimensions' results, we created the MCWM of performance for the period of 2013 – 2017 that reflect sectoral

characteristics and financial specificities of the selected Slovak tour operators. The methodology of calculating the original values of financial indicators, predictive models and modern indicators into point rating of the individual MCWM dimensions is defined in the Data and Methodology section. The average performance development of Slovak tour by means of the MCWM is presented in the following Figure 5.

Figure 5

The development of Slovak tour operators' performance based on the MCWM application



Source: Authors' processing in programme STATISTICA

Over the whole analyzed period, the tour operators were located in the performance field of “Standard” and “Monitor”. In this regard, the best-performing year was 2014, as all three dimensions reached the highest values. The dimension of financial health achieved 58 points, dimension of prediction analysis achieved 72 points and newly added dimension of shareholder wealth creation reached the maximum (100 points). This positive development was caused mainly by year-on-year increase in net profit by 581.10%, which led to achieving

more favourable values of ratio indicators, prediction models and desirable values of modern indicators. This result also effected that the analysed enterprises were placed in the performance field of "Monitor". In the following years, the negative development trend was recorded and financial performance ranged constantly in performance field of "Standard". The most significant decrease of all dimensions within the MCWM was identified in 2017 in comparison to 2014. The dimension of shareholder wealth creation determined unfavourable MCWM's evaluation in 2017, as Slovak tour operators reached only 23 points due to sharply decreasing Return On Equity (by 47.21%) and the value of equity by an index of 0.7832.

The evaluation of financial health dimension recorded a decreasing trend since 2014 that subsequently led to declining point assessment to the level of 46 points. Based on results we also found out that the dimension of prediction analysis grew worse only by 4 points and it is considered the most stable. Moreover, if we evaluate dimensions of the MCWM separately, the financial health dimension would be located in the performance field of "Standard", dimension of prediction analysis would be situated in the performance field of "Monitor" and the last dimension of shareholder wealth creation achieved the worst results (except in 2014) so it would be situated in the performance field of "Insufficient" or "Problematic".

5. Conclusion

The tour operators represent one of the most influential bodies in the tourism sector that are established with aim to control, book and devise the whole trip for customers. They create a package holiday by combining all elements such as hotel, airport transfers, activities, restaurants, tours and so on. As reported by Goncharuk, Lazareva, Alsharf (2015), the main objective of management (not only tour operators) is to ensure continuous and sustainable growth of the enterprise performance.

The main aim of this research study was to create and subsequently apply a Modified 3D Creditworthy Model (MCWM) of performance reflecting sectoral characteristics and financial specificities of the selected sample of Slovak tour operators over the review period of 2013 – 2017. The purpose of this paper was to identify key financial indicators and appropriate prediction models and to implement them into both dimensions of the traditional Creditworthy Model of performance. In order to assess actual financial position of tour operators more exactly, attention was paid to creating the third dimension into original model by applying the selected modern evaluation methods – the Economic Value Added and the Return On Net Assets. However, this 3D model is applicable in the wider context of

enterprises, even though this research study is presented on a sample of Slovak travel agencies. By adjusting the upper and lower quartiles of the average values of a particular sector, it can be modified for enterprises not only operating in the field of tourism.

To assess the first dimension of the MCWM (the dimension of financial health), the following 10 key ex-post financial indicators were selected: Current Liquidity, Total Liquidity, Days Short-term Receivable Outstanding, Days Short-term Payable Outstanding, Total Indebtedness, Interest Coverage Ratio, Total Credit Indebtedness, Return On Equity, Return On Assets and Return On Sales. Their selection was based on the statistically significant dependence with the modern EVA indicator using the statistical test Kendall Tau. In order to evaluate the second dimension of the MCWM (the dimension of prediction analysis), a total of 10 selected ex-ante prediction models were used, focusing on the selection of credit and bankruptcy models developed and applied in European business environment: Quick Test, Douch's Balance Analysis, Aspect Global Rating Model, Altman's Model_(SR), Taffler's Model, Creditworthiness Index, Beerman's Model, Index IN05, Bilderbeek's Model, Poznański's Model. The last dimension of the MCWM (the dimension of shareholder wealth creation) consisted of two modern indicators: the Economic Value Added and Return On Net Assets as we consider them to be one of the most important and leading indicators of future success and company's financial growth. The conversion of the original indicator values entering into individual MCWM dimension (into points) was carried out on the basis of a compiled transformation tables and multilevel rating scales.

As results of MCWM application over the years 2013 – 2017, Slovak tour operators were located in the performance field of "Standard" and "Monitor" (on average). In this regard, year 2014 was identified as the best-performing one, as all dimensions achieved the highest point rating. In the following years, the negative development trend was recorded and financial performance ranged constantly in the standard performance field, mainly due to decreasing Return On Equity. As a result, year 2017 was considered the worst-performing one within the whole period analysed. However, if we focus on average evaluation of individual dimensions of the MCWM separately, the financial health dimension was located in the performance field of "Standard", dimension of prediction analysis was situated in the performance field of "Monitor" and the last dimension of shareholder wealth creation achieved the worst results (except in 2014), therefore, it was situated in the performance field of "Insufficient" or "Problematic".

The presented study offers another effective financial tool for performance evaluation of Slovak tour operators (but not only for them) by applying modern methods into traditional

2D Creditworthy model. Despite the fact that these indicators and methods assess financial enterprise performance from different point of view, each dimension of the Modified 3D Creditworthy Model has its added informative value. In this regard, the above-mentioned tourism service sector should try to apply comprehensive modern methods for the purpose of effective performance measurement and improvement of strategic financial management processes leading to an improvement in financial growth.

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