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EXAMINATION OF THE SOLVENCY OF ENTERPRISES DEALING WITH ACCOMMODATION SERVICE PROVIDING IN THE NORTHERN GREAT PLAIN REGION

Theoretical
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Abstract

One of the most important characteristics of tourism, as an economic and social phenomenon is that it has become a leading sector of the Hungarian economy. The importance of this sector is faithfully reflected by the fact that tourism gives nearly 9% of the GDP. Of course, aim of the enterprises of this type is the liquidity as well i.e. to maintain the short-term solvency that is essential for the long-term successful and smooth operation. The other aim of enterprises is to be solvent for the long-term as well, furthermore, to increase the corporate value and to maximize the ownership value. In our treatise, we have carried out the financial analysis and bankruptcy prediction of those enterprises providing accommodation service which are the biggest from the point of view of employment in the Northern Great Plain region. We think that, due to seasonality, even greater emphasis shall be placed on this area where useful information can be obtained from and the results of bankruptcy model can also provide further useful information and "problem alerts".

1. Situation of accommodation service providing in Hungary

There may be significant differences in the seasonality. In 2014, the units providing tourism accommodation services ensured 249 thousand rooms, 650 thousand places of accommodation for the guests in Hungary. More than half of the rooms and places of accommodation were available in commercial accommodations. Capacity of the other accommodations is 33% of the whole amount. The non-business accommodation proffered the guests 10% of all the places of accommodation. 80% of the overnight stays have been realized in commercial accommodations. Share of the commercial units is the highest in every region considering the number of overnight stays, at the same time, the performance of other accommodation services is still significant in the settlements of Lake Balaton (KSH, 2015a).

The largest part of the Hungarian population's multi-day domestic journeys for tourist purposes has trended towards own regions. The region of Lake Balaton is an exception where almost one quarter of all time spent in travelling were realized; share of Budapest-Central Danube Region was 16%; the periods of residence of persons travelling to Northern Hungary amounted to 12% and the periods of residence of persons travelling to the Northern Great Plain amounted to 10% within the whole domestic tourism.

Number of tourists arrived to the capital (4.2 million) has minimally increased compared to 2013. 58% of the overnight stays spent in commercial accommodations have been registered the capital and further 14% of them have been registered in the region of Lake Balaton – this fact refers to a strong territorial concentration of the foreign tourist traffic. Number of the foreign overnight stays spent in the holiday areas of Lake Balaton has decreased by 3.6% and the overnight stays of foreign tourists visiting to Budapest have increased by 4.4% compared to 2013. Number of the foreign overnight stays has increased in every tourism region with the exception of Lake Balaton and South-Transdanubia (KSH, 2015b). In case of Lake Balaton, where 26% of the domestic tourist traffic have been registered in the accommodations, the number of overnight stays has increased by 7.3%. The accommodations could also reach a significant turnover in the holiday area of Mátra–Bükk where 11% of the national domestic tourist traffic have been realized and the number of nights spent has increased by 13% compared to 2013. As it can be seen on Table 1, the three most popular cities were Budapest, Hajdúszoboszló and Siófok

considering the number of domestic overnight stays, the foreign tourists have spent the most overnight stays in Budapest, Hévíz and Bük (KSH, 2015b).

2. Tourism performance of the Northern Great Plain region

The Northern Great Plain Region is situated on the eastern border of Hungary and it consists of three counties, namely Hajdú- Bihar County, Jász-Nagykun-Szolnok County and Szabolcs-Szatmár-Bereg County. This is the second biggest region of the country and its area is 17.729 km². The most important natural resources of this area are the vast arable lands that have high quality in some places, the natural gas fields and the reserves of carbon dioxide, thermal water and clay.

Tourism of the Northern Great Plain performed well in the year of 2014. The tourist traffic has increased significantly exceeding the national average. Number of the guests has increased by 7.2% countrywide and by 9.9% in the Northern Great Plain. Number of the overnight stays has similarly changed: there was an 8.6-percent positive change in the Northern Great Plain compared to the same period of previous year, significantly exceeding the 5.4-percent national increase.

Number of the domestic tourists continues to dominate in the Northern Great Plain: the home guests are amounting to more than 74% of the number of guests i.e. 491 165 persons in total. 69% of the overnight stays are due to the Hungarian guests in the region, it means 1 255 580 nights in total. Number of the domestic guests has exceeded the performance of 1-12 months of 2013 by 10.3% while number of the overnight stays has exceeded the aforementioned performance by 8.5%. Number of the foreign guests in the Northern Great Plain region has exceeded the data of the same period of 2013 by 8.5% while number of the overnight stays has exceeded those data by 7.9%. Nationwide, the domestic traffic is also less concentrated than the inbound tourism. In 2014, 10% of the overnight stays spent in commercial accommodations were registered in the Northern Great Plain region.

Number of the overnight stays spent by foreign guests has widened in the most dynamic way in the Northern Great Plain (+7.9%) and in Northern Hungary (+7.2%).

Most of the foreign guests arrived from Rumania to the region: 33 465 tourists of that country (+ 2.3 %) spent 88 758 overnight stays in total in the accommodations of the region in 2014 (Innovative tourism cluster, 2015).

3. Material and method

In our treatise, we analyse enterprises dealing with accommodation service providing whose registered offices are in the Northern Great Plain region and the number of their employees is above 50 heads. Without any exceptions, their principal activity is hotel accommodation service which is an accommodation service provided for purpose of short-term residence, typically daily or weekly periods.

As an effect of the economic crisis emerged after the international financial crisis (Böcskei, 2015), a significant number of enterprises were at a disadvantage and some of them went bankrupt as well as many of them fight for the survival very seriously (Bácsné, 2012). Consequently, the enterprises shall also be better aware of their own present and future financial situation as well as their funding opportunities (Gábor – Zéman, 2016). As a consequence of the uncertainties and difficulties that have emerged and are increasingly becoming conspicuous in the economy, the issue of risk measurement and management plays (Gergely, 2011) a bigger and bigger role in the work of corporate governance (Katits-Szalkai, 2015). There is a stronger demand for such solutions by means of which the risk of bankruptcy can be predicted (Tarnóczy et al, 2014).

The financial risk is unavoidable in the course of a company's life. It is hard to determine such economic activities in which one or other types of financial risks would not occur in one form or another. One type of the financial risks accompanies all of the processes of purchase, production, investment or borrowing. The specialized literatures mention several components of the financial risk, including market risk, liquidity risk and credit risk. However, in order to be able to measure these ones, we need such indices that provide a reliable prediction of the occasional risk factors for the decision-makers (Tarnóczy et al, 2014).

I agree with the above: there is a need for indices ensuring reliable information and supporting the decisions for the future therefore, in this treatise, we have examined the short-term solvency of companies i.e. we have run liquidity indicators as well as two bankruptcy models which can give us relevant information.

One of the bankruptcy prediction models can also draw attention to the problems and risks occurring in case of an enterprise. Over the past few decades, many different kinds of the aforementioned models have been made taking the different types and sizes of company into consideration (Tarnóczy-Fenyves, 2010). We have used Altman's and Springate's bankruptcy models in the treatise.

One of the best known representatives of bankruptcy prediction models is the so-called Z model of Altman that can now be described as

classical. This model was originally specified in 1968, based on empirical data, by means of regression calculation (Virág et al, 2013).

Altman's Z model has already recognized the insolvent and solvent companies with a 95-percent precision. We apply the following version among the models of Altman's:

$$Z = 0.717X1 + 0.847X2 + 3.107X3 + 0.42X4 + 0.998X5$$

Where:

X1 = net working capital/ total assets

X2 = balance sheet earnings/ total assets

X3 = EBIT/ total assets

X4 = book value of equity/ total liabilities

X5 = net sales revenues/ total assets (Altman–Sabato, 2005)

In case of those enterprises which are not quoted on the stock exchange, value of Z model is as follows:

- If $Z < 1.23$ then the enterprise will go bankrupt

- If $Z > 1.23$ then bankrupt is not expected

- If $Z > 2.90$ then bankruptcy of the enterprise is unlikely (Heine, 2000)

By applying the determination of a critical interval, Altman's model is intended to predict the financial situation of a company and, consequently, to draw up the target of operative and strategic decisions to be applied in the future, by correcting values of the model's five indicators (being primarily intended and suitable to predict insolvency) with the appropriate weights. The model was based on a research examining the financial data of 66 companies (33 solvent ones and 33 ones gone bankrupt) and two groups were separated by means of the discriminant analysis (Pető-Rózsa, 2015).

Springate's model has kept only 4 of those 19 popular financial indicators which are reckoned as the best. Springate's model is also a method applied for predicting the insolvency but it uses less indicators than the previous models.

Indicators used by the model are the following:

X1 = Capital employed / Assets in total

X2 = Earnings before taxes + Interests paid / Assets in total

X3 = Earnings before taxes / Current liabilities

X4 = Net sales revenues / Assets in total

The indicators explained previously are to be substituted into the following expression:

$$Z = 1.03X1 + 3.07X2 + 0.66X3 + 0.40X4$$

The critical value of Springate's model is 0.862 under which the Z value means an expected insolvency (Ékes – Kolozsár, 2014).

4. Analysis of financial situation of the biggest accommodation service providers

Liquidity ratio is the most frequently used ratio. By means of this ratio, the danger is quantified that the payment of debts being in the balance does not happen. Rate of these ones is expressed by the general liquidity ratio comparing the current assets to the current liabilities. Liquidity ratio generally

characterizes the financial situation of an enterprise: an undertaking is solvent if its easily negotiable assets exceed its current liabilities. The desired value is between 1.3 and 1.7. Presumably, the larger this rate is, the better the position of creditors is. A large current assets surplus towards the due liabilities usually protects the business interests of creditors in such a case if, for instance, a firm has to dispose of the inventory at forced prices or the recovery of the outstanding bills is problematic. However, from another angle, a too high liquidity rate may mean loose management practices. It may indicate, for instance, an unused cash balance or disadvantageous lending practices. A high liquidity ratio may refer to that a company does not totally utilize the credit opportunities offered (Virág et al., 2013).

At first, we have calculated the general liquidity ratio of enterprises.

Table 1 shows the values obtained. We have indicated the values being in and above the ideal interval by green colour and the values situated under the lower limit are indicated by red. A value of only 3 enterprises can be found in the ideal interval: Hajdú Park's data of 2011 (value of 1.5) as well as enterprises Divinus' (value of 1.6) and Geotherm's (value of 1.3) data of 2012. Other values of the enterprises Hajdú Park and Divinus are highly exceeding the upper limit of the ideal interval. And, it can be seen well that Alföld Ltd. is separate among the enterprises; its every value is exceeding the ideal value. It can be explained by that current assets and current liabilities of the enterprise have changed contrary to each other or have increased equally. These changes result in high values result from these changes. At the same time, it should be noted that too high liquidity values are not good either since those ones refer to that an enterprise ties too many resources in its current assets.

Values of enterprise Geotherm are forming a quasi-borderline.; it is true that its data of 2012 is appropriate but data of other years are not in the ideal interval, even if the lag is minor.

Values of the following three enterprises (Lospiti, Luximpex and Fundus) are even far from the lower limit of the ideal interval. In case of Lospiti and Luximpex, the low values can be explained by that the current assets of enterprises have overall decreased but their current liabilities have increased. However, in case of Fundus Ltd, the current assets have increased from year to year but the current liabilities have also increased largely in total – this results in low values.

Next indicator is the acid test ratio. This indicator is a refined version of liquidity ratio where it is considered that mobility degrees of the different current assets are dissimilar. Within the current assets, a relatively lower mobility is peculiar to the stocks therefore the numerator of acid test ratio can

be obtained if the current assets are decreased by the stocks. The expected value of acid test ratio moves between 0.8 and 1.0. The values obtained can be seen Table 2. Green colour indicates the value which can be found in the ideal interval and red colour indicates those ones which cannot even reach the lower limit of interval. Consequently, it can be seen well that only Geotherm's data of 2011 are ideal but, at the same time, this company's last data of 2014 are not among the appropriate values. Every value of firms Lospiti, Luximpex and Fundus is red i.e. these values are absolutely not within the expectable limits. And, the values indicated by black are the ones exceeding the maximum value of 1.0. These values result from the liquidity indicators calculated above. In case of the last three enterprises, complementing the explained above, the low values are also explained by that the stocks have overall increased in case of all three enterprises.

After the calculation of financial indicators, we have examined the data of enterprises by means of Altman's Z model. Critical value of the model is 1.23 i.e. the enterprises producing values under the aforementioned critical one will very likely go bankrupt. The upper limit is 2.9, which means that the enterprises overfulfilling this value should not be afraid of bankrupt.

The results obtained can be seen on Table 3. We have indicated the values exceeding the value of 2.9, red colour indicates those ones which have performed under value of 1.23 and the intermediate values belonging to the uncertainty zone have remained black. It can be seen well that the companies Alföld, Hajdú Park and Luximpex have overfulfilled the limit of 2.9 every year. The highest value has been produced by Alföld Ltd. According to the model these enterprises are not threatened by bankruptcy.

One of the values belonging to the uncertainty zone is concerning Divinus Ltd. The firm produced this value in 2011 but it managed to change and progress in the right direction which has resulted in the fact the values obtained in the following three years are exceeding the limit of 2.9.

Lospiti Ltd. is the next enterprise that has produced a value falling into the uncertainty zone. However, its position is other than Divinus since the firm produced values under 1.23 during three years before the above-mentioned data thus this value falling into the uncertainty zone of 2014 can be reckoned as a development in the right direction.

Unfortunately, a positive change does not apply to every enterprise. Every data of Geotherm has remained under the value of 1.23 which means a bankruptcy according to the model. The interesting thing is that the value had increased between 2011 and 2013, it had converged to the limit of 1.23 but there was a regression from 2013 to 2014. It is imputable to the negative net working capital i.e.

the current liabilities of the enterprise exceeded the values of current assets.

Fundus Ltd is also an enterprise whose result obtained is under the limit of 1.23. Namely, this firm will go bankrupt according to the model. Nevertheless, an improving trend can be observed among the values since this value was already - 0.483 in 2014 while the firm had produced a value of -38.808 in 2011. These negative values can be explained by quotient of the negative net working capital and the negative equity / liabilities i.e. the coverage of debt.

Results of Springate's model can be seen on Table 4. Data of Alföld Ltd and Divinus Ltd have exceeded the limit of 0.862 every year. Accordingly, based on the model, it can be stated that an insolvency and bankruptcy of enterprises are not expected. The following four enterprises – Geotherm, Hajdú Park, Lospiti and Luximpex – have performed under the limit every year. There is no uncertainty part in case of this indicator thus these enterprises will not go bankrupt according to the interpretation of this indicator. It can be observed that each enterprise has strived to improve the indicator even if it was not conscious. If we compare the obtained data of 2011 to the results of 2014, it can be seen well that the value of the indicator has increased in case of each company.

This improving trend can also be observed in case of Luximpex Ltd but, unfortunately, data of last year is still negative. This is because that the coefficients X2 and X2 – quotient of Earnings before interest and taxes / Total assets and Earnings before taxes / Current liabilities – were negative every year. The effect of these values generates negative end results.

There is an interesting duality in case of Fundus Ltd. During the first two years, it had remained under the limit and, moreover, it had produced negative results. However, it already exceeded the limit of 0.862 in 2013 and it also continued this improving trend in 2014 when a value of 4.696 was produced which is the highest value among the results obtained. This marked shift from 2012 to 2013 can be explained by that the values of all four indicators used in the formula have improved. And, background of the result drastically increased from 2013 to 2014 is that all four indicators have become positive and the increase of coefficient X2 – Earnings before interest and taxes / Total assets – has been outstanding in which Earnings before interest and taxes have increased by HUF 90 568 thousand from 2013 to 2014.

Conclusions

We have concluded from my calculations that the liquidity indicators calculated during the examination of financial situation and the results of the bankruptcy prediction models are consistent

with each other. This means that the bankruptcy prediction of enterprises producing indicators has achieved a good result as well. However, the bankruptcy models are also showing duality in case of such enterprises where the values of indicators calculated are not as unequivocal and ideal i.e. there is such a model which reckons a given enterprise among the category of "won't go bankrupt / solvent" while another model states the exact opposite of it.

The data, which were provided by such financial indicators that can be calculated in dozens of orders of magnitude, are representing a huge set of information. For the future estimation of enterprises, we need not only figures but such correlations and conclusions from them based on which a judgement can be drawn up about the future management situation of a company.

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An English translation should be provided in

Table nr.1.

Results of general liquidity indicators

Description	2011	2012	2013	2014
ALFÖLD	4,7	3,3	3,0	2,0
DIVINUS	1,2	1,6	2,4	6,0
GEO THERM	1,0	1,3	1,2	0,7
HAJDÚ PARK	1,5	2,8	4,1	7,1
LOSPITI	0,7	0,7	0,3	0,3
LUXIMPEX	0,2	0,2	0,1	0,1
FUNDUS	0,3	0,3	0,3	0,5

Source: own calculation based on annual reports

Table nr.2.

Results of acid test ratios

Description	2011	2012	2013	2014
ALFÖLD	4,6	3,2	2,9	1,9
DIVINUS	1,1	1,3	2,2	5,8
GEO THERM	0,9	1,2	1,1	0,6
HAJDÚ PARK	1,4	2,8	4,1	7,0
LOSPITI	0,6	0,6	0,2	0,2
LUXIMPEX	0,2	0,2	0,1	0,04
FUNDUS	0,2	0,3	0,3	0,4

Source: own calculation based on annual reports

Table nr.3.

Results of Altman's bankruptcy model

Description	2011	2012	2013	2014
ALFÖLD	14,735	11,893	10,325	9,855
DIVINUS	1,681	4,400	4,334	6,719
GEO THERM	0,563	0,687	0,853	0,318
HAJDÚ PARK	3,524	3,842	3,736	4,205
LOSPITI	0,713	1,008	0,979	1,401
LUXIMPEX	8,802	7,165	7,850	7,419
FUNDUS	-38,808	-19,923	-14,297	-0,483

Source: own calculation based on annual reports

Table nr.4.

Results of Springate's bankruptcy models

Description	2011	2012	2013	2014
ALFÖLD	1,255	0,907	1,016	1,222
DIVINUS	3,411	4,574	2,121	2,496
GEO THERM	0,249	0,282	0,408	0,405
HAJDÚ PARK	0,399	0,403	0,312	0,568
LOSPITI	0,399	0,606	0,506	0,672
LUXIMPEX	-0,460	-0,414	-0,080	-0,236
FUNDUS	-3,511	-0,186	1,834	4,696

Source: own calculation based on annual reports