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# ECONOMICAL ASPECTS OF THERMAL AND MEDICAL TOURISM

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**Abstract:** Thermal and medical tourism in Hungary are characterised by a continuous development. The management, efficiency, operational effectiveness and offer of enterprises in the field of tourism influence the competitiveness of Hungary's tourism. In the present day economic life the thorough analysis of the enterprises' economy is indispensable. The result of the analytical methods applied by the report provide information for different stakeholders (owners, transporters, customers, employees, habilitators). The aim is to have data which inform us about the functioning, financial situation and profitability of the economic entities parallel with the factors and conditions determining these elements. In our paper we present the financial situation of the Demjén Thermal Spa Ltd., being one of the newest thermal spas of Hungary.

**Keywords:** financial situation, thermal spa, medical tourism, wellness tourism, investment

## Introduction

Nowadays health plays a great role in people's life. In our rapidly changing world there is not always time to pay attention to one's health and to its preservation. That is why wellness tourism, being a type of tourism is quickly gaining ground. The healing power of thermal water has been known for centuries, however, it has come into the limelight only in the latest decades. Hungary is one of the internationally acknowledged traditional medical touristic destinations. Due to its exclusive richness in medicinal waters wellness tourism represents one of the most significant touristic attractions of the country. Medicinal water has been used for treating different illnesses for thousands of years. Thanks to social changes and transformation of lifestyle nowadays thermal spas become more and more popular. On the one hand life full of stress increases the demand for relaxation and recreation and the health-conscious way of life is spreading continuously. These lead to the popularisation of wellness. On the other hand, the role of traditional medical wellness is also getting stronger, as in the developed Western world life expectancy at birth steadily grows, thus the proportion of the elder is also increasing. They frequently need to treat their illnesses. Thermal spas play an important role in Hungary's tourism. The country has high-quality medicinal waters, however, several spas are not in the appropriate condition. Significant developments have taken place recently, as a result of which service quality greatly improved. The Demjén Thermal Spa Ltd. is such an enterprise, situated in the Eger micro region of Heves County, 10 kilometres from Eger in the Demjén Thermal Valley. The Demjén Thermal Spa Ltd. was opened for the public in 2007 by constructing a spa on

10 hectares, on a well from which thermal water springs from 690 metres. The effects of its 68 Celsius degrees water has a wide range, concerning its ingredients it has a high proportion of iron and silicon acid. The Thermal Spa and Aquapark serving experience and wellness tourism can take pride in 6 outdoor pools with thermal water, a swimming pool, a pool for children, and a wellness department. Apart from these, on the grounds of the spa visitors can find a self-service restaurant, a buffet and a pizza restaurant too. The Ltd. could realise the abovementioned developments from self-financing and credit. Thanks to the excellent quality of water and its role in medical science the number of guests has been increasing year by year. In the year of its opening the spa had 7000 visitors, by 2011 this number increased to 330 000. The management soon realised that it is worth expanding the capacities of the spa. The company finished the Hotel CASCADE\*\*\*\* Resort & Spa investment in 2012. The hotel was opened in December 2012. The aim of *establishing a superior medical and wellness hotel in the Demjén Thermal Valley* project is to be able to provide accommodation for those arriving at the spa and those guests coming for the cave bath. They aim to keep the visitors at the locale and meet the requirements of guests at a high quality level in any season. The project was realised in the confines of the New Széchenyi Plan North Hungary Operational Programme (NHOP) in the quality development of commercial accommodation and services section. There are 4 conference halls and 50 rooms in the hotel, out of which 4 are accessible for the disabled; altogether accommodation is available for 106 persons. The company would like to meet primarily the requirements of wellness and conference tourism with the investment. Establishing more than 30 workplaces is an important segment of the project. The spa started the

realisation of the CASCADE cave and experience bath in 2012, and opened it in 2015. The investment has been made possible by self-financing, credit and the financial sources of the New Széchenyi Plan. The development of wellness tourism is included in the strategic goals of the company together with the increase of national and foreign guest nights, the protection of medicinal water, the improvement of the environment, the boost of tourism in the village Demjén and the growth in the number of employees. On the basis of the annual report of the Demjén Thermal Spa Ltd. we present the effects of the investments carried out in the examined period of time on the financial situation of the enterprise.

### **Wellness tourism in Hungary**

Nowadays wellness tourism is one of the most dynamically developing touristic product; in a market where Hungary possesses excellent natural resources in international context too. The word spa is said to be originating from Latin, from the expression “sanitas per aqua” – meaning health from water. Mostly health and physical wellbeing can be found in the centres of European spas; thus their visit nowadays does not exclusively have a physical and medical aim but qualifies as a relaxing and self-pampering activity. Concerning their history these places were considered rehabilitation institutions, where ill persons could have a bath. (Smith-Puczkó 2010.) Wellness tourism is a complex notion, which is difficult to define as there are significant differences on the international market between the wellness touristic policies of the countries. Generally it can be stated that it belongs to that segment of tourism where the guest's main goal is the improvement and protection of their health. At present two sectors can be differentiated: wellness and medical tourism. Hungary has first-class endowment. Medicinal and thermal waters are important elements in its most significant natural resources. Internationally our country is one of those five where the highest number of thermal water springs can be found; besides us Japan, Italy, Iceland and France are also present on the market. (Halassy 2007.) Hungary has a significant quantity of thermal water and favourable geothermic conditions. Thermal water can be found on 80% of the country's territory; these are not only of a high temperature, but have a high level of mineral content. Hungary is considered to be the 5<sup>th</sup> most significant country in this context after Japan, Iceland, Italy and France. Almost 1200 thermal water wells, 220 acknowledged medicinal, 195 acknowledged mineral water and 70 thermal spas can be found in Hungary. (New Széchenyi Plan: Healing Hungary – Health Industry Program, 2010.) Wellness tourism is that part of tourism which has a greater capacity for making profit. This originates from the fact that compared to average tourists the guests of medical tourism spend a longer time at one place: according to statistical data this means 13 guest nights instead of the average 3,7. They spend by 1,6 more money in the hotel compared to guests staying for other reasons. There are other advantages of medical tourism too, the most significant of which is the following: a more economic management can be

realised, as this form of tourism is independent of the weather and the seasonal fluctuation, helping the underdeveloped settlements in development, creating possibility of work locally mostly for well-qualified professionals; the longer stay contributes to the creation of further services and options for entertainment. (Bodnár 2005.)

Wellness tourism and the related services have similar effects on environment as any other type of tourism. The influences of tourism can be grouped in three categories: economic, socio-cultural and environmental. Among economic effects employment, economy and living conditions appear as determining factors. Concerning the field of economy, it can be stated that health-tourists characteristically spend more as they are accommodated in high-category hotels for a longer period. Moreover they have resort to personal services which require human resources. Moreover, economic effects directly affect living conditions. Local inhabitants are glad of developing infrastructure, since several towns and villages have been made famous by their thermal springs. Popularity helps attracting more visitors and investors, thus development can be considered continuous, which has a positive impact. Concerning socio-cultural influences employment appears again, and cultural heritage should also be mentioned together with population and community. Employment creates new workplaces and the possibility for earning money, thus the whole community can profit from wellness tourism. Concerning environmental effects, flora and fauna play an important role, because if any negative transformation happens, the process can also change the natural resources in return. In the case of centres it is of vital importance to have an untouched environment, as it is part of the attraction of the locale. (Smith-Puczkó 2010.)

### **Medicinal and thermal spas in Hungary**

The peculiarity of Hungary's wellness tourism can be found mainly underground, as we have internationally unique geological conditions. As a result, the country has a significant amount of thermal water supply. Our country is sometimes called thermal-water-power, a label stemming not only from the excellent geothermic conditions but the mineral content of the thermal water (Michalkó 2007). Hungary offers ideal possibilities for those who would like to spend their free time and holiday in our bathing-resorts. Besides bathing, several cultural, sports and other possibilities are offered for recreation in the whole territory of the country. Several hundreds of thermal establishments await tourists and guests, who primarily use our water for bathing. Our thermal waters have a more varied mineral content compared to other countries and have a specifically positive effect on health. Concerning their benignity these waters are mainly appropriate for rheumatic illnesses, post-treatment of accidents and prevention of illnesses. Till 1956, 29 thermal spas were to be found in Hungary, at the moment this number exceeds 150, and they can receive as many as 300 000 guests. Only 1/6 portion of the spas are open during winter time and the number of qualified

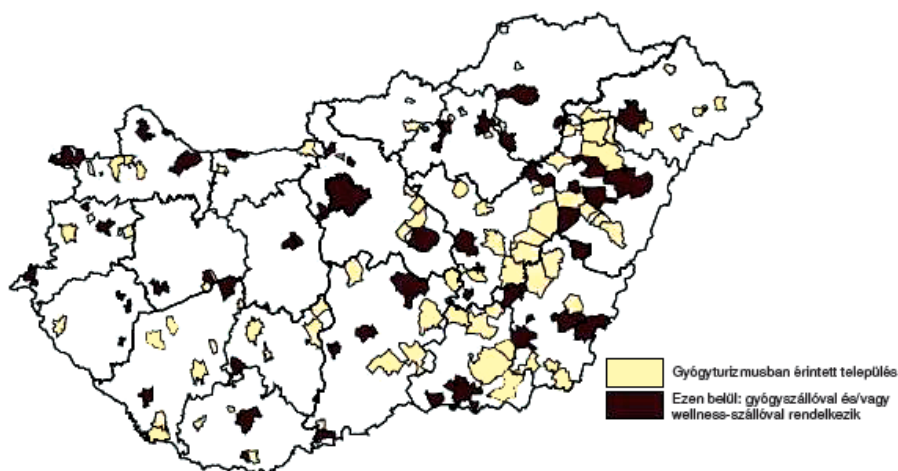
spas is really low. Thermal water can be found on the two third parts of the country, which means waters above the temperature of 30 Celsius degree. Thermal waters in Hungary can be gained from 18 metres underground, while the average depth in Europe is 33 m. Thus it is evident how favourable the conditions in Hungary are (Bodnár 2005.)

With the help of Figure 1 the settlements involved in medical tourism in 2012 in Hungary can be examined. In 2012 altogether 137 settlements possessed medicinal waters with different utilization. Their geographic situation is varied, they can be found in all counties, but these settlements are situated mainly east of the River Tisza, in Hajdú-Bihar, Jász-Nagykun-Szolnok, Békés and Bács-Kiskun Counties. All regions of the country and all but one counties are involved in medical tourism. 101 of the total are in towns, originating from their functional role and the exploitation of economic possibilities, since a town can develop better than a village. 55 of the settlements possess wellness or medical hotel, the number of these has increased steadily in the last two years. Half of the Hungarian population live in a settlement where medical tourism is present. (KSH, 2013) On the basis of the abovementioned we can say that medicinal and thermal spas are emphatic parts of national tourism. Most of the foreigners travel to Hungary because of the popularity of our thermal spas; at the same time we can say that Hungarians gladly visit national thermal establishments too thanks to the fact that the country has several thermal and medicinal springs with high temperature, high-quality content and ideal environmental location. The role of spas in healing is significant, it is justified by the fact that the Romans had already discovered and used thermal springs as locales of bodily and mental revival. Natural healing practices are widespread nowadays, which can help spas to operate more successfully. By studying medicinal and thermal tourism it was discovered that this type of tourism is more advantageous than traditional tourism, which motivates establishments to develop.

### Possibilities of development for medical and thermal tourism

Tourism based on thermal springs primarily appears as business, characterised by a profit-oriented approach. The conscious development of spa centres is indispensable, as it is important for medicinal and thermal centres providing high-quality services to be established, because they are able to speed up the development of the whole branch. Now we present the financial supports provided by the Hungarian State or the European Union. Wellness tourism has got into the focus of touristic developments due to our excellent capacities and possibilities. Following the change of regime economic difficulties presented themselves in the country, which did not make it possible for the state to invest greater sums of money for the renovation of thermal spas and related hotels. However, in 2000 the country launched touristic developments, in which programme thermal spas were paid particular attention. Between 2001 and 2004, with the help of the Széchenyi Plan investments and developments were realised which increased the quantity and quality indicators of wellness tourism offers. During the programme 127 projects were financed in the value of 31 milliard HUF. As a result, investments in the value of 81 milliard HUF were realised on the whole territory of the country. The project consisted of 5 topics, namely the development of regional and micro regional spas, expansion of accommodation and medical capacities of spas and the establishment of wellness tourism education. The highest number of investment was carried out in the development of regional spas. (Michalkó et al. 2011.)

Negotiations between the European Commission and the Hungarian government were terminated in 2007 concerning the New Hungary Development Plan. This development plan designated operative programmes for 2007-2013 with the aim of improving the economic competitiveness, the ability of tourism for producing more income, and the creation of an attractive economic climate and neighbourhood. The New Széchenyi Plan Healing Hungary – Health Industry Program (2011-2013) considers wellness tourism the most important priority inside national tourism. In the confines of the programmes mostly the effects of tourism on quality of life were to be optimised. Between the years 2011 and 2013 approximately 2000 milliard HUF was available for Hungary from European Union sources, helping to improve the country's competitiveness and the expansion of employment. The Széchenyi 2020 development programme provides new European Union financial sources for the period between 2014 and 2020 with new goals. Among the latter wellness tourism is naturally included, as Hungary's capacities are perfect for the development of this branch in the future.



Settlements concerned in medical tourism  
Among these: the ones having medical and/or wellness hotel

Fig. 1. Settlements concerned in medical tourism in Hungary (2012). Source: KSH, 2013



## Material and method of analysis

The basic data for analysis was provided by the Demjén Thermal Spa Ltd's annual report, which was available from the governmental website: [www.ebeszamolo.kim.gov.hu](http://www.ebeszamolo.kim.gov.hu). Analytical methods are the analytical methods of financial status, which are the distributional coefficient, calculated from the data of the balance sheet.

### *The presentation of the Demjén Thermal Spa Ltd's financial status*

The analysis of the enterprise's financial situation is made on the basis of the data from the balance sheet. It aims to present the enterprise's development as a result of comparing information about several years. The evaluation can be concluded by the thorough analysis of the balance sheet and the detailed analysis of certain items of the balance sheet. (Pollert et al., 2010) The movement of the assets of the balance shows the changes in the form of the assets, from the liabilities indicators of capital structure can be calculated, which answer the question of how much the enterprise is financed from equity and external capital.

**Chart 1.** The distribution of assets between 2011 and 2013

Designation	2011		2012		2013	
	Thousand HUF	%	Thousand HUF	%	Thousand HUF t	%
<b>Fixed assets</b>	<b>1 249 004</b>	<b>83,3</b>	<b>2 412 341</b>	<b>93,27</b>	<b>2 816 689</b>	<b>94,19</b>
Intangible assets	1 543	0,10	115 965	4,48	33 571	1,12
Tangible assets	1 247 461	83,20	2 296 376	88,78	2 783 118	93,07
Fixed financial assets	0	-	0	-	0	-
<b>Current assets</b>	<b>250 387</b>	<b>16,70</b>	<b>174 202</b>	<b>6,73</b>	<b>164 529</b>	<b>5,50</b>
Stocks	1 211	0,08	10 331	0,40	6 372	0,21
Claims	245 301	16,36	148 148	5,73	120 802	4,04
Security	0	-	0	-	0	-
Cash	3 875	0,26	15 723	0,61	37 355	1,25
<b>Active accruals and deferrals</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>9 282</b>	<b>0,31</b>
<b>Assets total</b>	<b>1 499 391</b>	<b>100</b>	<b>2 586 543</b>	<b>100</b>	<b>2 990 500</b>	<b>100</b>

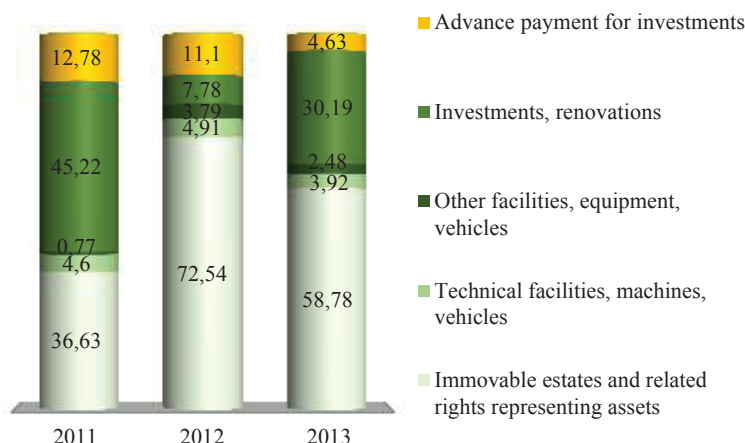
Source: Calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

On the basis of the balance sheet total of the assets of the enterprise a continuous increase can be seen, illustrated by Chart 1. In 2012, compared to the previous year there is a growth of 72, 5%, which further intensified by 15,6%. The value of fixed assets almost doubled by 2012 and increased by next year with a further 16,8%. At the same time, current assets decreased by 34, 3% in total, which was mainly the result of the lessening of claims. To be able to understand the

formation of dynamic change of value we have to know the assets' distribution coefficients, also reflected by Chart 1. With the help of coefficients the asset structure of the enterprise can be analysed well, moreover it reflects the management and development of the enterprise. On the basis of the distribution coefficients it is striking that the proportion of fixed assets greatly exceeds the proportion of current assets in every year. This is the result of the fact that the Ltd. expanded the fixed assets because of its large-scale investments. In the following part the formation of assets is analysed in more detail, considering the three years, which explains the significant difference between the value of current and fixed assets.

In the examined period the value of intangible assets constitutes a smaller proportion of the fixed assets. In the years 2011 and 2013 their value can be considered minimal, however in the 2012 business year it constituted 4,48% of the fixed assets. The growth resulted from the capitalised value of the experience development, which meant 110.566 thousand HUF in this year. The reason for this is the launch of a new mud development programme by the Demjén Thermal Spa Ltd. in a close cooperation with the Eszterházy Károly College. In the confines of the project currently in progress new mud-treatment technologies are worked out, combined with new electro therapy, and they intend to justify the effectiveness of mud treatment chemically too. During the project the prototype of a complex mud treatment system is planned to be constructed. The proportion of tangible assets shows the proportion of permanently deposited assets concerning total assets. The indicator informs us about the vertical division of assets and the measure of stock deposited in assets. The high value of permanently deposited assets can refer to the existence of modern equipment and the utilisation of new projects as far as possible. The high proportion of tangible assets is frequently the basic condition for an active part in the branch, which can secure competitiveness in the market (Jacobs-Oestreicher, 2000). The tangible assets form the highest proportion in the balance sheet total and concerning the liabilities of the enterprise. In the first year of the examined period this proportion was more than 83%, then it further intensified in the following two years. In our opinion, concerning such a high proportion it has to be presented what kind of balance sheet items in which proportion represented the value of tangible assets. Thus we present it with the help of a diagram, which makes the motives for rearrangement clear.

Illustrated by Fig. 2 concerning the last three years, the most significant part was constituted by immovable estates and related rights representing assets at the Demjén Thermal Spa Ltd. By 2012 their value more than tripled, namely to 1, 665, 793 thousand HUF, by this constituting 72,54% of the tangible assets. This is due to the fact that the enterprise



Source: Calculated on the basis of the reports of the Demjén Thermal Spa Ltd.

Fig. 2. Distribution of tangible assets between 2011 and 2013

capitalised its investment in the CASCADE Hotel in this year. The value of capitalisation was more than 1,351 million HUF. The value of technical equipment and vehicles almost doubled, the measure of growth concerning other equipment, facilities and vehicles was 77,543 thousand HUF in the period of the hotel's capitalisation. These appliances are directly necessary for performing the services. Furniture, kitchen, laundry and confectionary machinery and office equipment constitute this group. The value of advance payment for investments increased by 2012, however its part in tangible assets was smaller. Among tangible assets the value of investments and renovations was the highest in 2013, when 840,279 thousand HUF was in the statements among unfinished investments. From the sum, 113 million HUF is connected to the new mud development programme, 727 million HUF is connected to the cave bath investment, which was planned to be capitalised in December, 2014.

Summing up the facts it can be stated that the increase in the value of the fixed assets was provided by the hotel investment and the cave bath investment in 2012.

Current assets show a decreasing tendency in the period designated for analysis. The distribution of current assets can be termed minimal compared to the total assets and the tangible assets. It constituted only 16,7% of the enterprise's asset structure in 2011, and then this number further decreased by 10%. Among current assets the highest proportion is provided by the claims balance group. Analysing the data we can see that their absolute value decreased by 40% by 2012 and further decreased by 18,5%. This drop is due to the decrease of receivables, whose greatest part was indicated among the other claims. The value of stock varied during the three years. Their value increased more than eightfold by 2012, then in the following year it decreased by 38,3%. The greatest part among the assets are constituted by the products of catering industry. The value of cash in the examined period showed a continuous growth, which influenced the operation of the Ltd positively. In 2011/2012 the increase was 11,848 thousand HUF in value, then this number more than doubled by next year. Cash plays an important role during the analysis of the

financial situation, planned to be examined later. In the 2011/2012 business year no prepayments were accounted, however in 2013 9,282 thousand HUF was in the statements, which originated from the fact that the billing of the hotel service at the end of the year affected the next year.

When analysing the financial situation of the enterprise it is important to collect data about the liabilities of the balance, with which the management can be examined and estimated. The examination focuses on the demand to have information about the proportion of balance sheet main groups and balance sheet groups concerning all sources. Calculations will be carried out after constructing the assets; as the first step I analyse equity, then I study the change of claims and accrued expenses and deferred income. In the last three years the enterprise did not build up provisions.

From among capital structure indicators I analyse equity ratio first, which refers to the proportion of equity concerning sources.

$$\text{Equity ratio, \%} = \frac{\text{Equity}}{\text{Total sources}}$$

It is an indicator frequently applied in the international practice, informing us about the structure of equity and the measure of self-financing. The high proportion of equity helps in maintaining the financial security of the enterprise, as no interest payment obligation or repayment obligation is connected to it. The value of indicator regularly varies according to branches, thus theoretically no minimal requirement level can be determined; however, the decrease in equity ratio is not favourable. (Herczeg, 2014).

Among the indicators of equity structure the equity growth rate helps in the further analysis of the enterprise's financial situation, the use of which is often applied in analysing assets. The indicator can be termed favourable if there is a continuous growth, or if its value is more than 100%.

$$\text{Equity growth rate, \%} = \frac{\text{Equity}}{\text{Share capital}}$$

Besides the study of the equity ratio the relation of equity and external capital can be demonstrated by the indicator of equity stress. Its value indicates how much external finance prevails inside the enterprise compared to equity, namely how much the enterprise depends on external capital. Its result can be calculated by correlating foreign capital to equity.

$$\text{Equity stress, \%} = \frac{\text{External capital}}{\text{Equity}}$$

There is no appropriate value for this indicator, as all enterprises have different goals they can sometimes achieve by the increase of external capital. Thus each time when evaluating the indicator a different value is optimal. (Jacobs & Oestreicher, 2000.)

**Chart 2.** The formation of equity between 2011 and 2013

Indicator	2011 (%)	2012 (%)	2013 (%)
Capital strength	44,06	29,05	29,56
Capital growth ratio	258,07	293,49	345,32
Equity stress	67,77	153,52	145,31

Source: Calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

Chart 2 includes the indicators of equity and their changes, with the help of which the analysis can be concluded. Equity continuously grew in the examined period, all these stemmed from the changes in retained earnings, the committed reserves and the result balance sheet group. Share capital was unchanging during these three years. The 365, 288 thousand HUF retained earnings from 2012 was increased by the result of previous year with 179,055 thousand HUF according to the balance sheet, and it was also decreased by the development reserves. The value of deposit was 39. 980 thousand HUF this year. In 2013 the development reserve increased to 73,600 thousand HUF, however the value according to the balance sheet increased the retained earnings only by 90,678 thousand HUF.

Thus, equity grew year by year, however, it amounted to a smaller and smaller proportion of the sources, which cannot be termed positive. In 2011 the equity ratio was 44, 06% which is optimal, nevertheless, in the following two years it decreased below 30%. This is due to the fact that the commitments of the enterprise significantly increased in the year 2012/2013. The equity growth rate presents the total growth of equity. On the basis of the calculated indicator we can see that a continuous growth can be traced, moreover their value is more than 100%. We can state that concerning the Demjén Thermal Spa Ltd. the two expected requirements were realised in the past period, also illustrated by Chart 2. The indicator grew to 35, 42% by 2012, then in 2013 it intensified by 51, 38%. On the basis of the results of the equity stress indicator we can see that inside the enterprise external financing predominates more and more. As for evaluation, if the value of the indicator is 100%, then the proportion of equity and external capital splits evenly, possibly this ratio does not work out this way in any enterprises. In 2011 the value of the indicator was 67, 77% stemming from the fact that the value of the equity was 660, 668 thousand HUF, while external capital was 447,734 thousand HUF. In the following two years the value of the indicator was a good deal more than 100%, resulting from the initiation of high external capital into the enterprise. Concerning evaluation it is unfavourable; however, without initiating new loans the development of the enterprise would not have taken place. The ratio of liabilities shows the proportion of the total liabilities inside the total sources. Generally no optimal or critical rate can be determined for this indicator. The growth or consistency of the ratio of liabilities cannot be termed negative in all cases; in the case of pronouncedly expanding activities and stabile, profitable course of business. By growing indicators it is important to note the burden of external liabilities and the fact

that by continuous growth an enterprise can be more and more dependent on liabilities. (Kresalek, 2012).

$$\text{Ratio of liabilities, \%} = \frac{\text{Liabilities}}{\text{Total sources}}$$

**Chart 3.** Ratio of liabilities inside total sources

Indicator	2011 (%)	2012 (%)	2013 (%)
Ratio of liabilities	29,86	44,6	42,95
Ratio of subordinated liabilities	-	-	-
Ratio of long-term liabilities	20,01	16,43	24,25
Ratio of short-term liabilities	9,85	28,17	18,7

Source: Calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

We have already had a look at the measure of the initiated external capital on the basis of indicators studied for the analysis of equity; however, during further analysis the ratio of liabilities gives a more accurate picture of the reasons and measure of initiating external capital. We illustrate the ratios of liabilities inside the source structure on the basis of Chart 3, also complemented by the ratio of subordinated, long-term and short-term liabilities.

In the case of the Demjén Thermal Spa Ltd. a large-scale growth can be observed in the examined period concerning the ratio of liabilities. In 2011 the value of the indicator was 29, 86% which increased to 44, 6% by 2012. In this year long-term and short-term liabilities amounted to 1, 153, 501 thousand HUF. The reason for the change of long-term liabilities is the fact that the enterprise borrowed 125 million HUF investment and development loan in 2012. Thus, the long-term credit of the enterprise amounted to 425, 000 thousand HUF together with the loan borrowed in 2011. However, the most significant reason for the change of liabilities is the considerable growth of short-term liabilities; by 2012 their sum was almost fivefold; its biggest proportion was given by loans and delivery debts. It is important to note that the initiation of external capital was inevitable because of the hotel investment in 2012.

For the sake of realising the cave bath investment in 2013 new investment and development loans were to be initiated, by these long-term liabilities grew to 725, 249 thousand HUF. The growth stemmed from the fact that the company borrowed money several times, a total amount of 262, 500 thousand HUF. Parallel to this, short-term liabilities decreased by 23%. The main reason for this is the decrease of delivery debts by 76%. Repayment of long-term loans borrowed in 2011 started in July, 2013, as the enterprise received a grace period of 24 months. The amount of payment was 8, 743 thousand HUF, which was listed among short-term liabilities in the statement. Summing up the abovementioned we can say that the initiation of external capital significantly grew in the three years. Thus the funding structure of the enterprise hugely transformed, which made the economic operation of the enterprise riskier. The company is far from the critical 70%

limit value. If an enterprise is close to this value, then we can say that bankruptcy evolves, which may lead to liquidation. From the liabilities of the balance sheet we can see that accrued expenses and deferred income amounted to 27% of the liabilities on average, thus I consider their presentation important.

Ratio of accrued expenses and deferred income % =  $\frac{\text{accrued expenses and deferred income}}{\text{total sources}}$

**Chart 4.** The ratio of accrued expenses and deferred income inside total sources

Indicator	2011 (%)	2012 (%)	2013 (%)
Ratio of accrued expenses and deferred income	26,08	26,36	27,48

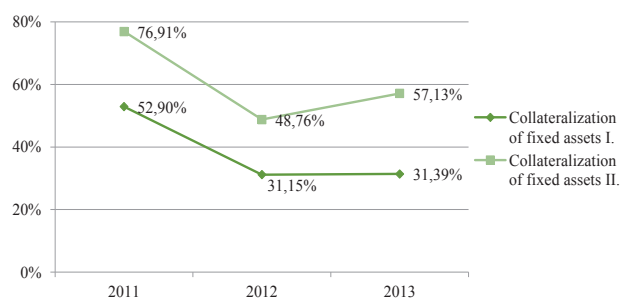
Source: calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

Accrued expenses and deferred income inside the funding structure grew year by year, but only slightly, a trend illustrated by Chart 4. They amounted to 26% of the total sources in 2011/2012; then the figure increased to 27, 48% by 2013. Most of the balance sheet main group is provided by the deferred income, originating from that part of the non-refundable support which was not accounted for by that time. By 2012 the sum increased by 76%, by 2013 a further 20% was registered. The growth is connected to the 267 million HUF support of the CASCADE Hotel and the 500 million HUF support of the CASCADE cave and experience bath.

To be able to evaluate the harmony of assets and liabilities the analysis of the most significant indicators is used. First of all I present the funding of fixed assets followed by the analysis of the equity multiplier.

Collateralization of fixed assets I., % =  $\frac{\text{Equity}}{\text{Fixed assets}}$

Collateralization of fixed assets II., % =  $\frac{\text{Equity} + \text{Long-term liabilities}}{\text{Fixed assets}}$



Source: Calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

**Fig. 3.** Collateralization of fixed assets between 2011-2013

The I-II. indicators of collateralization of the fixed assets present the relation of permanent liabilities and the permanently committed assets. Matching principles of the balance sheet state that the maturity of liabilities has to be in accordance with the returns of assets, namely permanent liabilities have to be financed from permanent sources. By evaluating the first indicator no minimum value can be determined; the calculated rate is appropriate for comparing it to data of other enterprises with the same time-period or activity range. The expected value of the second indicator is 1. (Siklósi-Veress, 2011).

The collateralization of fixed assets indicator I. shows a decrease of 21, 57% from 2011 by 2012, thus the rate is only 31, 15% this year, as illustrated by Fig. 3. The decrease is due to the fact that the fixed assets increased by 93% as the result of the realised project compared to the previous year. As a result, the assets funding capacity of the equity worsened in the three years.

On the basis of Fig. 3 we can see that the value of the indicator of collateralization of fixed assets indicator II. significantly decreased during the years, and it fell away from the expected result of 100% in every year. The lowest collateralization rate was in 2012, in that year the indicator amounted only to 48, 76%, which can be termed really unfavourable. On the basis of the calculated indicators we can unequivocally state that the Ltd. finances the permanently committed assets mostly from external capital, for which it had already had to use short-term credits and loans. It is a positive tendency that the indicator shows an increase in 2013, however, it falls away from the expected limit value in a great degree.

The equity multiplier, in other words capital intensity rate, is the ratio of total assets and equity. It shows what kind of assets the enterprise can activate with the equity, namely how many times it could multiply its equity in the examined period. (Soenen-Tarnóczy, 1995).

Equity multiplier =  $\frac{\text{Total assets}}{\text{Equity}}$

**Chart 5.** Formation of equity multiplier between 2011 and 2013

Indicator	2011	2012	2013
Equity multiplier	2,270	3,443	3,383

Source: calculated on the basis of the reports by the Demjén Thermal Spa Ltd.

The figures of the equity multiplier ratio between 2011 and 2013 are illustrated by Chart 5. A significant growth can be traced, thanks to the fact that the value of fixed assets more than doubled, while the value of the equity increased only minimally. Thus the value of the indicator was above 3 by the years 2012/2013. As we can see the company created an asset value exceeding the equity, which grew year by year.



## Conclusion

Hungary offers excellent possibilities for those who wish to use our baths for relaxation or recovery. Among our natural assets medicinal waters and thermal waters have a high priority, as a result of which wellness tourism significantly develops. There are several thermal water springs in Hungary, and that is why this territory has to be developed. Besides, it is reasonable to catch up with other countries, with which demand for medical and thermal tourism could be increased. The Demjén Spa is situated in Northern Hungary, more precisely in the Eger micro region. The Demjén Thermal Spa Ltd. was going through a dynamic phase in the examined period; by revealing positive and negative factors stemming from this situation we drew conclusions about the financial situation of the enterprise. Due to restraints on length, the paper examines only the financial situation. The enterprise went through a significant development in the previous two years, which resulted in important changes concerning assets and liabilities. The enterprise continuously increased its assets between 2011 and 2013, whose bigger part was constituted by the fixed assets. All this happened as the result of capitalised charges and investments in process, which can be evaluated as positive factors, since they contain the basic conditions of a successful future management.

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