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The Importance of Intangible Assets in the Hotel Industry: The Case of Croatia and Slovenia

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Abstract

Studies show an increasing importance of intangible assets (hereinafter IA) and a positive relationship between IA and company performance. The purpose of this paper is to analyse the importance of IA for Croatian and Slovene hotel companies and to find out whether companies with a higher share of intangibles are also more profitable. The analysis is based on publicly available financial statements for the five-year period, from 2011 to 2015. The results show that the average share of IA presented in the balance sheets of the analysed hotel companies is low in both countries. Moreover, we could not find a statistically significant relationship between the share of IA and the selected financial performance indicators. The results of our study show that despite the emphasised importance of IA in literature, the publicly available financial data of the selected hotel companies provides very limited information on IA for external stakeholders.

Keywords: intangible assets; hotel industry; financial performance; Slovenia; Croatia.

JEL classification: L83; M40.

1. INTRODUCTION

Studies have proven that intangible assets are increasingly important future value creators. Since the early 1990s, a significant change regarding the asset composition of business enterprises has become apparent (Lev and Daum, 2004). Tangibles are being substituted by intangible value creators in today's knowledge economy (Marr, 2007; Boedker *et al.*, 2008). Intangible assets are the fundamental source of competitive advantages (Lev, 2001; Guthrie, 2001; Corrado *et al.*, 2009). However, in accordance with accounting standards, not all intangible assets meet the criteria to be recognised in financial statements. Intangible assets eligible to be recorded in financial statements in accordance

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with International Financial Reporting Standards (IFRS) are those that meet the following criteria: they have to be identifiable, the company controls the asset and future economic benefits expected to arise from the asset and its cost can be measured reliably (IFRS – International Financial Reporting Standards, 2012, IAS 38). Many internally generated intangible assets do not qualify for recognition in financial statements, since it is difficult to identify whether and when they will generate future economic benefits and to determine their costs reliably. In accordance with International Accounting Standard 38 – Intangible assets (IAS 38) (IFRS, 2012) internally generated brands, customer lists and items similar in substance do not meet the criteria for recognition in financial statements, but are immediately expensed when incurred.

Several studies have shown a positive impact of intangible assets on company performance (Gray *et al.*, 2000, Hanran and Wang, 2014). Nemec Rudež and Mihalič (2007) argue that knowledge is the main driving force behind the hotel industry, and that intellectual capital (IC) is a crucial factor of financial performance in the tourism sector. Thus, it is important how intangibles are recorded in financial statements and reported to external stakeholders.

The purpose of this study is to analyze the importance of intangible assets recognised in the financial statements of Slovene and Croatian hotel companies and to find out whether companies with a higher share of intangibles are also the more profitable.

The remainder of the paper is structured as follows; firstly, in Section 2 we present the theoretical background of the paper, focusing on the importance of intangible assets in contemporary companies, their relation with firms' performance and the key provisions of recognition criteria and subsequent measurement for external financial reporting purposes. The 3rd Section presents the methodological framework and the results of our analysis. Finally, the conclusion presented in Section 4 summarises the most important findings of our research and proposes some possible areas for future research.

2. THEORETICAL BACKGROUND

Goodwin and Ahmed (2006) found that companies which capitalise intangible assets have more increasing earnings value relevance in comparison to those companies that do not capitalise intangibles. Their study was made using Australian data from 1975-2000, since their Generally Accepted Accounting Principles (GAAP) do not limit intangible assets recognition. Their study was motivated by the fact that previous studies from the U.S. showed a decreased value relevance of earnings, which was characterised by different authors as the cause of the increasing value of intangibles, which are too often expensed and not capitalised in financial statements (Goodwin and Ahmed, 2006). Oliveira *et al.* (2010) found that goodwill and other intangibles reported in financial accounts are highly associated with the stock prices of selected companies from the Portuguese Stock Exchange. The value relevance of goodwill for investors was also demonstrated by Jennings *et al.* (1996) and Godfrey and Koh (2001).

Sahut *et al.* (2011) explored 1,855 European companies over a six-year period, from 2002 to 2007. Since the transition of companies from local GAAP to IFRS, they found that intangible assets, other than goodwill, have a higher informative value in explaining the stock price and stock market returns. Literature suggests that goodwill is of less value relevance in comparison to other intangibles assets (Wyatt, 2008). In her opinion, this might

show that the value of goodwill is less reliably measured and as such is observed by investors (Wyatt, 2008).

To date, studies have demonstrated that intangible assets in financial statements are value relevant for investors and thus it is of crucial importance whether they are capitalised or expensed (i.e. it is important how many intangibles companies record in their financial statements).

Until now, the majority of studies dealing with recognised intangibles in financial statements (book values of intangibles) were done on samples of publicly traded companies. Sahut *et al*. (2011) found that the book value of intangibles (other than goodwill) in selected European companies is higher after the transition to IFRS in comparison to the book value which was reported in accordance with national GAAP. In line with IFRS, companies reported an average share of goodwill in their balance sheets of 13.18% (median 6.07%) and other intangible assets of 5.41% (median 0.98%). Thus, the average share of total intangible assets amounted to 18.59%. Out of nine countries included in the sample, six of them reported an average share of total intangible assets which exceeded 10% of total equity. Glaum and Wyrwa (2011) analysed 322 European publicly traded companies included in the stock indices of one or more of the 12 European countries. The data shows that goodwill is the most significant intangible asset in the financial accounts of the analysed companies, representing 43.8% of common equity on average. In 10% of the cases its value even exceeded the value of total equity.

The findings showed a great importance of intangible assets in the financial statements of the analysed European companies. The results of these studies from the EU show that the most important intangible item is goodwill. Studies from the U.S. also show the high and growing importance of goodwill amongst total assets (Holtzman and Sinnett, 2009; Hayn and Hughes, 2006). Holtzman and Sinnett (2009) analysed 5,951 companies that were included in the S&P Capital IQ index and found that in 2008 goodwill represented on average 14.1% of total assets; the highest shares of goodwill were found in the pharmaceutical and information-communication technology industries. The average value of goodwill in 2007 was 21.8% and 22.4% respectively. Hayn and Hughes (2006) concluded similar findings; their analysis of companies included in the Compustat database showed that in 1988, the share of goodwill in the balance sheet amounted to 10.7% of total assets. Its importance rose to an average value of 16.8% of total assets in 2001.

2.1 Intangible assets in the hotel industry

Most of the studies from the hotel industry analyse the importance of IC, only a few have focused on recorded intangibles in financial statements. Regarding IC, the service sector is one area that has not been studied in enough detail (Bontis *et al.*, 2015). Most studies focus on the financial sector, while the hospitality industry is rarely analysed.

Lee and Ghiselli (2011) explored 70 U.S. publicly traded hospitality companies from the Compustat database; they found that only 31.9% of the variability of companies' market value could be explained by selected book values of assets. The book value of assets was measured as the sum of current assets, property, plant and equipment and capitalised intangible assets. Their results show that a large part of hospitality companies' market value could not be explained by assets recorded in the balance sheet.

Nemec Rudež and Mihalič (2007) studied the influence of IC (human, structural and relationship capital) on financial performance in the Slovene hotel industry. The novelty of their paper was the division of relationship capital into end-customer-relationship capital and non-end-customer-relationship capital. They found a significant positive impact of IC on financial performance. Their study suggests that hotel management should improve IC by investing in human capital and information technology. Engström *et al.* (2003) explored the relationship between IC and company performance in 13 Radisson SAS hotels. They found a strong relationship between human, structural and customer capital. The most important was found the relation between human and structural capital.

Another interesting study was performed by Bontis *et al.* (2015). They analysed value added intellectual capital (VAIC) in 34 Serbian hotels for the three-year period, from 2009 to 2012. They found that there was a growth in values of VAIC efficiency coefficients.

These studies show the importance of IC for the hotel industry. At the same time, Lee and Ghiselli (2011) found that book values of recorded intangibles explain only a limited part of the variability of hospitality companies' market value. That is why it is important that companies capitalise intangibles instead of expensing them.

Despite the increase of studies on IC over the last decade, Bontis *et al.* (2015) state that there is still a gap in literature regarding the relationship between IC and financial performance in the hotel industry, especially within developing countries.

2.2 Intangible assets and companies' financial performance

Studies that were made on samples of hotel companies were focused on relationships between IC and overall financial performance. Canina *et al.* (2006) analysed the relationship between different dimensions of IC and operating income. Their sample was divided into full-service hotels (offer complete on-site food and beverage facilities and distinguish themselves through their services) and limited-service hotels (hotels not defined as full-service hotels). They found a significant influence of systems capital, customer capital and service employees in both groups of hotels. On the other hand, support employees were found to have a significant negative influence in the case of limited service hotels. Finally, professional employees were not found as significant. Based on their study of 563 U.S. lodging hotels, they found that investments in certain forms of IC improve operating income.

Saldamli (2008) analyzed the relationship between IC and financial performance in 52 Turkish hotels based in Istanbul. His study suggests that all components of IC (human, structural and customer capital) have an influence on financial performance. Structural capital was found as the least influential. Similarly, Nemec Rudež and Mihalič (2007) found a significant impact of total IC on the financial performance of Slovene hotels. However, only end-customer relationship capital proved to have a strong direct impact on performance. Human capital, structural and non-end-customer-relationship capital were shown as non-significant.

Kim *et al.* (2012) explored 13 high-end luxury hotels from Seoul, Korea. They found that intangible capital dimensions (human, organisational and customer capital), with the exception of human capital, directly affect financial performance. Human capital was shown to have an indirect effect. Engström *et al.* (2003) analysed the relationships of various dimensions of IC with the financial performance of 13 hotels. They found a positive relationship between structural capital and financial performance. They used gross operating profit (GOP) percent, revenue per available room (RevPar), occupancy percent, rooms' profit, F&B profit, and

personnel cost as their financial performance indicators. It was found that generally there was a strong relationship between structural capital with rooms profit and F&B profit.

In the study of Bontis *et al.* (2015), IC was found not to be significantly related with the operating profit, ROA and ROE of Serbian hotels. Financial performance was mainly determined by physical capital. The exception was profitability (calculated as the ratio of operating profit to achieved sales revenues) which is significantly affected by the human capital and the structural capital.

Based on the findings from the hotel industry studies, IC was found to have a positive influence on the financial performance of the hotel companies. The theoretical review of research shows the most common factor directly influencing financial performance is customer capital, followed by structural capital. Human capital was found to mostly have an indirect influence.

On the other hand, results of studies that were based on publicly available data and did not include the internal data of companies are mixed. Guzić (2014) analysed the correlation between the value of intangibles and the companies' profit. He found a positive and statistically significant relationship. He performed his analysis on data from the largest trading companies in Croatia. His analysis was based on the value of identifiable intangible assets recognised in financial statements. A similar study was performed also by Guo *et al.* (2011) who have also investigated the impact of intangibles (among other variables in the model) on financial performance. Their dependent variables were: earnings per share from operations, net cash flow per share from operating activities and sales growth. A positive and significant relation was found between intangible assets and the first two dependent variables. Their analysis was also made on publicly traded companies.

Bubić and Susak (2015) analysed the relationship between selected profitability ratios and intangible assets in Croatian manufacturing, wholesale and retail companies for the 2011 financial year. Based on a sample of 100 companies (90% of them were small companies) they found a very weak and most often non-significant correlation between the share of intangibles and selected profitability ratios.

Guzić (2014) and Guo *et al.* (2011) found positive relationships in their analysis on publicly traded companies, while in the majority of cases, Bubić and Susak (2015) could not find a significant correlation in their sample of non-traded companies. Further studies are needed to find out the relationship between identifiable intangibles recognised in financial statements and financial performance.

In order to more thoroughly understand the recognition criteria and the initial and subsequent measurement of intangibles in financial statements, we present the most important provisions from IFRS.

2.3 Intangible assets and their measurement

In accordance with IFRS – IAS 38 an intangible asset is an identifiable non-monetary asset without physical substance (IFRS, 2012, IAS 38). Examples of intangible assets are licenses, patents, copyrights, trademarks, intellectual property, etc. The first IAS dedicated exclusively to intangible assets was published in 1998. To date, many amendments and revisions have been made.

At their initial recognition, intangibles are measured at their cost. After its initial recognition, companies have to choose between the cost model and the revaluation model.

The cost model measures intangibles at their cost, minus any accumulated amortisation and impairment loss. On the other hand, the revaluation model measures intangibles at a revalued amount (being its fair value) minus any accumulated amortisation and impairment loss. The difference between the two accounting policies is that the revaluation model allows companies to revalue intangible assets to higher values than their carrying values, while this is not possible when using the cost model.

Companies must also assess if a recognised intangible asset has a definite or indefinite useful life. Intangibles with definite useful lives are subject to amortisation, while those with indefinite useful lives are not amortised, but are only tested for impairment.

Slovene accounting standards (hereinafter SAS) from 2006 are in line with IFRS. SAS 2016 is currently applicable in Slovenia. However, companies included in our analysis reported in accordance with SAS 2006. Slovene hotel companies do not use The Uniform System of Accounts for the Lodging Industry (USALI) (for more details see Ivankovic, 2005).

According to the Croatian accounting act, companies whose shares are listed on a regulated market, large Croatian companies, banks, insurance companies, leasing companies and other financial institutions including those whose securities do not trade in a regulated market, must prepare their financial statements in accordance with IFRS Standards. All other companies are classified as either medium or small enterprises and are required to prepare their stand-alone financial statements in accordance with Croatian Financial Reporting Standards (NN 78/15, 134/15, 120/16).

3. METHODOLOGICAL FRAMEWORK, DATA ANALYSIS AND RESULTS

The purpose of our analysis is to find out how important intangible assets are for the Croatian and Slovene hotel companies, and if companies with a larger share of intangibles are also more profitable. We hypothesise that:

***H1**: Intangible assets that meet the criteria for recognition in financial statements are increasingly important in the Croatian and Slovene hotel industry.*

To date, studies have emphasised the importance of IC for the hotel industry (Nemec Rudež and Mihalič, 2007; Engström *et al.*, 2003; Krambia-Kapardis and Thomas, 2006). However, these studies from the hotel industry were mainly focused on IC. There is a lack of studies which analyse intangibles recognised in financial statements. This type of study was done for other industries (Guzić, 2014; Guo *et al.*, 2011; Bubić and Susak, 2015), but there is insufficient data for the hotel industry. Analysis of IC are based also on company's internal data, while intangibles recognised in financial accounts for external users represent publicly available data for decision makers. Since only certain intangibles meet the criteria for recognition in financial statements, and taking into account the significance of IC for the hotel industry (Nemec Rudež and Mihalič, 2007; Engström *et al.*, 2003), we aim to investigate the importance of intangible assets in the financial statements of the selected hotels.

***H2**: Croatian and Slovene hotel companies which have a higher share of intangibles recorded in financial statements are also more profitable.*

Studies have shown a positive impact of IC on the financial performance of contemporary organisations (Gray *et al.*, 2000; Hanran and Wang, 2014). This is also the

case for the hotel industry (Nemec Rudež and Mihalič, 2007; Engström *et al.*, 2003). Nemec Rudež and Mihalič (2007) found that the amount of IC has a significant positive impact on the financial performance of Slovene hotel companies. Based on the most recent findings, we believe that those companies with a higher proportion of recorded intangibles are also more profitable.

Our sample includes Croatian and Slovene hotel companies. Entrepreneurs were excluded from the analysis since in Slovenia they are not obliged to prepare annual reports if they determine the taxable base taking into account flat-rate expenses. Moreover, usually an entrepreneur operates as a small or micro entity and as such provides less data for external financial reporting purposes in comparison to corporations.

Slovenia and Croatia were selected due to the fact that in both countries the tourism industry has a large impact on GDP. Recent data for Slovenia shows that in 2015 the total impact (direct and indirect) of tourist spending represented 13% of Slovene GDP (STO, 2016). Within the Slovene tourism sector, hotels and similar establishments represent the most important tourism industry, both in terms of total revenues and in the number of employees (AJPES, 2016). In Croatia, tourism revenues generated 18.9% of the GDP in 2015 (Ministry of Tourism Republic of Croatia, 2017). Croatia is ranked 35th in the Travel and Tourism Competitiveness Index with its main competitive advantages in health and hygiene, tourism infrastructure, affinity for travel and tourism, cultural resources and ICT infrastructure (World Economic Forum, 2013).

The analysis is focused on the five-year period, i.e. 2011-2015. For the purpose of our analysis, we have collected the value of total intangible assets recognised in the balance sheet, the separate values of all parts of intangible assets, value of total assets, value of equity, net income for the financial year, value of total revenues and number of employees. All this data was collected from financial statements prepared for external reporting purposes.

Data for Slovene hotel corporations was obtained from the GVIN financial database (GVIN, 2016), while data for Croatian companies was obtained from the Croatian Financial Agency FINA (FINA, 2016). The sample includes hotel corporations from both countries that were active in the analysed period of time. Since the number of active companies differs throughout the period, our sample size varies from year to year. Initially, we had a list of 336 Slovenian companies and 1,134 Croatian companies (not all of the companies were operating throughout the entire period of analysis). Companies with any missing intangible asset data during our period of analysis were excluded from further research, as were companies without employees. Furthermore, we have excluded outliers (there was a high standard deviation of data) and made the sample more homogeneous.

The number of companies used for the analysis is presented in Table no. 1 (Croatian corporations) and Table no. 2 (Slovene corporations). As expected, due to the size of the hotel industry in each country, the Croatian sample is larger than the Slovene one. In the case of Croatia, the number of companies varies between 507 (2011) and 561 (2015). In the Slovene sample, the number ranges between 171 (2011) and 236 (2015). Both countries show the lowest number of companies in the first year of our analysis, while the largest sample size is in the last.

For the purpose of testing the first hypothesis, the share of intangibles in the balance sheet was calculated. The importance of intangible assets was calculated as the book value of total intangible assets divided by the book value of total assets (Guo *et al.*, 2011; Tudor *et al.*, 2014; Bubić and Susak, 2015).

For the purpose of testing the second hypothesis, a correlation analysis was performed between the selected financial performance indicators and share of intangibles. Previous studies have already analysed the relationship between intangible assets and financial performance, however they are based on samples of publicly traded companies (Guo *et al.*, 2011; Guzić, 2014). Consequently, they use dependent variables that are characteristic for publicly traded companies. Since our sample does not include publicly traded companies, the variables are properly adjusted. The profitability of selected companies is calculated using 3 ratios: 1) the net profitability ratio, which is calculated as net income for the financial year divided by total revenues for the financial year, 2) return on equity, which is calculated as net income for the financial year divided by average value of total equity (total equity from the beginning of the financial year plus total equity from the end of the financial year divided by two) and 3) return on assets, which is calculated as net income for the financial year divided by average value of total assets (total assets from the beginning of the financial year plus total assets from the end of the financial year divided by two). All these ratios are expressed as a percentage. The relationship between the share of intangibles and selected profitability ratios was analysed using the correlation analysis (Guzić, 2014). Since our analysis is based on publicly available financial data, we are unable to gather data about other performance indicators in hotels which are calculated based on internal data (for example: revenue per available room (RevPar), occupancy percent, rooms profit, F&B profit, etc.).

The majority of the selected Slovene companies prepare their annual reports in accordance with SAS. Only few companies report in line with IFRS. The 2006 SAS are harmonised with IFRS in basically all aspects of recognition and measurement (Jerman and Novak, 2014). Thus, financial statements of these companies are comparable as are the financial statements of the Croatian companies.

In Slovenia, for the purpose of external financial reporting, intangible assets and long-term deferred costs are categorised as follows: long-term (deferred) development costs, long-term property rights, goodwill, and other intangible assets. On the other hand, in Croatia the structure is the following: expenditure for development, long-term property rights, goodwill, advances for intangible assets purchases, qualifying intangible assets and other intangible assets.

Data analysis and results

Firstly, the share of intangibles in total assets was calculated for the Croatian companies. As shown in Table no. 1 the average share of intangibles recognised in the balance sheet varies between 1.41% (2013) and 1.59% (2014).

Table no. 1 – Share of intangible assets in total assets – Croatian hotel corporations

	2011	2012	2013	2014	2015
Average	1.42%	1.53%	1.41%	1.59%	1.53%
Min.	0%	0%	0%	0%	0%
Max.	54.44%	60.71%	63.11%	59.00%	58.99%
St. deviation	6.23%	6.74%	6.35%	6.46%	6.29%
No. of companies	507	531	530	532	561

Source: FINA (2016), own calculations.

In contrast with our expectations, the share of intangibles is not as influential as expected. Moreover, their importance did not increase significantly in the latest five-year period. The minimum value is equal to zero, while the maximum value amounts to 63.11%.

A more detailed analysis showed that 312 (2011), 309 (2012), 299 (2013), 327 (2014) and 351 (2015) companies recorded no intangibles in their financial statements. The number of such companies exceeds half of the total sample size. On the other hand, companies that recorded intangibles have, on average, a share of 3.44% (2011), 3.70% (2012), 3.38% (2013), 3.64% (2014) and 3.68% (2015) respectively.

In the Slovene sample the average share of total intangibles in the balance sheet is even lower than in the Croatian sample. The share varies between the lowest value of 1.18% (2011) and the highest value of 1.52% (2014). The minimum value is equal to zero in all analysed years. The lowest maximum value was recorded in 2011 – 24.44% and the highest one in 2012 – 35.47%. Similarly to Croatia, the number of Slovene companies not having recognised any intangibles is relatively high, e.g. 84 (2011), 91 (2012), 104 (2013), 107 (2014) and 101 (2015). These companies represent almost half of the sample. The average share of total intangibles of those companies that have recorded intangibles in their balance sheet amounts to 2.36% (2011), 2.86% (2012), 2.68% (2013), 3.27% (2014) and 2.91% (2015) respectively.

Table no. 2 – Share of intangible assets in total assets – Slovene hotel corporations

	2011	2012	2013	2014	2015
Average	1.18%	1.34%	1.32%	1.52%	1.22%
Min	0%	0%	0%	0%	0%
Max	24.44%	35.47%	29.96%	29.85%	30.72%
St. deviation	3.67%	4.65%	4.29%	4.73%	4.07%
No. of companies	171	192	213	225	236

Source: GVIN (2016), own calculations.

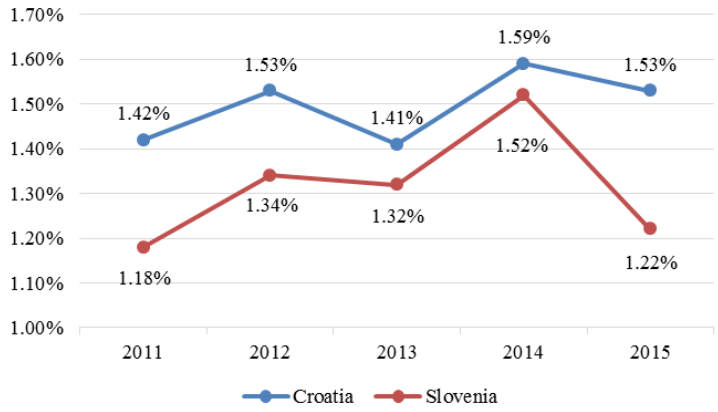

Figure no. 1 – Average share of intangible assets in total assets in Croatian and Slovene hotel enterprises

Source: FINA (2016), GVIN (2016), own calculations.

Figure no. 1 shows the average value of total intangible assets in Croatia and Slovenia in the period from 2011 to 2015. Neither of the countries show a significant increase in the

share of intangible assets during the period 2011-2015. In order to verify whether there are any significant annual fluctuations in the share value of intangible assets, we performed the nonparametric Wilcoxon Signed Ranks test. The average share of intangible assets was significantly different in both countries during the period 2011-2012 (significant increase), and during the period 2014-2015 in Slovenia and 2012-2013 in Croatia when in both countries there was a significant decrease of the average share of intangible assets.

The results presented in Tables no. 1 and no. 2 and those of the Wilcoxon Signed Ranks test show that we cannot confirm our first hypothesis. Intangible assets that meet the criteria for recognition in financial statements, are not increasingly important in the Croatian and Slovene hotel industry in the period 2011-2015. The only significant increase occurred during the period 2011-2012.

In contrary to theory, the median share of intangibles in these two countries shows that for the majority of the selected hotel enterprises, intangibles are not present in their financial statements.

A more in detail analysis of total intangibles assets showed that the majority of the Slovene hotel companies provides a very limited extent of information regarding the structure of intangibles. The value of long-term (deferred) development costs was provided by a maximum of 16 companies. In all other cases the value is equal to zero. In the case of long-term property rights, the values were also provided by a maximum of 16 companies, while in all other cases the data was not provided (companies are not required to do so). The same situation was found in the case of goodwill and other intangible assets.

Contrary to Slovene data, Croatian companies provided more detailed data about the structure of intangibles. We analysed the importance of all items that form intangible assets. The importance of each item was calculated by dividing its book value by the book value of the total intangible assets. The results show that the most important group of intangibles are concessions, patents, licences, trademarks, software and other intellectual property. The second most important item is represented by other intangible assets and the third most important item are qualifying intangible assets. The first group represented on average 66.18% of total intangible assets in 2011 and 72.18% in 2015. The value of this item was disclosed by 229 companies in 2011 and 268 in 2015. Among those companies that have a value higher than zero (168 in 2011 and 207 in 2015), this item represents on average 90.20% of total intangibles in 2011 and 93.44% in 2015. The group "other intangible assets" represented on average 20.62% of total intangibles in 2011 and 19.61% in 2015. 58 companies had a value greater than zero in 2011 and 64 in 2015 (the average importance was 81.41% in 2011 and 82.12% in 2015). All other items were disclosed by less than 10% of the companies included in the sample.

For the purpose of testing the second hypothesis, we performed a correlation analysis between the share of intangible assets and selected financial performance indicators (Table no. 3). The analysis of Croatian hotel enterprises shows that the correlations are positive, but very weak. Thus, we could not find a significant relationship between the importance of intangibles in the balance sheet and financial performance of selected companies. In the case of Croatia, only one relationship (out of the 15 analysed) resulted as being (weakly) significant. Across all the years analysed, the relationship strength does not exceed 0.1.

The results for Slovenia are similar to the Croatian data. Even in the case of Slovenia, the relationship between analysed data is very weak (most often it does not exceed the value of +/- 0.1). However, in contrast to Croatian enterprises, in the case of Slovenia the correlations are also negative. Interestingly, in 2012 all relationships between the share of

intangibles and financial performance indicators resulted as negative. Two negative relations were also found in 2013.

Table no. 3 – Correlation analysis between the share of intangible assets and selected financial performance indicators - Spearmans correlation

Country	Performance indicator	Correlation	2011	2012	2013	2014	2015
Croatia	ROE	Correlation	.014	.027	.005	.043	.027
		Sig	.748	.530	.908	.319	.522
	ROA	Correlation	.078	.022	.087*	.052	.065
		Sig	.077	.954	.043	.221	.119
	Net profit margin	Correlation	.084	.045	.084	.060	.056
		Sig	.057	.326	.074	.191	.202
Slovenia	ROE	Correlation	.031	-.139	.030	.056	.090
		Sig	.686	.052	.666	.397	.163
	ROA	Correlation	.013	-.091	-.024	.005	.080
		Sig	.864	.203	.722	.937	.218
	Net profit margin	Correlation	.039	-.097	-.021	.023	.111
		Sig	.624	.201	.772	.742	.091

**. Correlation is significant at the 0.05 level (2-tailed).*
Source: own calculations.

The results of the correlation analysis do not confirm the previous findings from literature, where studies have shown a positive relationship between intangible assets and the financial performance of companies (Guo *et al.*, 2011; Guzić, 2014). Our results are in line with the findings of Bubić and Susak (2015) who found a very weak and most often non-significant correlation between the share of intangibles and selected profitability ratios.

In accordance with the currently applicable accounting standards, most internally generated intangible assets cannot be recognised in financial statements, while at the same time the majority of intangibles are recorded in the merger and acquisition processes. Therefore we are wondering if larger companies have a higher share of intangibles than smaller companies. Since mergers and acquisitions are more frequently practiced in larger companies, these kinds of companies have more possibilities to recognise more intangibles. The results of the Spearmans correlation analysis are presented in Table no. 4.

Table no. 4 – Correlation analysis between the share of intangible assets and companies' size

Country	Correlation	2011	2012	2013	2014	2015
Croatia	Correlation	.328**	.330**	.269**	.302**	.303**
	Sig	.000	.000	.000	.000	.000
Slovenia	Correlation	.248**	.325**	.347**	.269**	.227**
	Sig	.000	.000	.000	.000	.000

***. Correlation is significant at the 0.01 level (2-tailed).*
Source: own calculations.

Our findings show that larger companies have a higher share of intangibles. All correlation coefficients are positive and have a value between 0.248 (2011) and 0.347 (2013) in the case of Slovenia and between 0.269 (2013) and 0.330 (2012) in Croatia. The results show that the correlation coefficients indicate on average a medium correlation.

4. CONCLUSIONS

Research has shown that intangibles are important value creators in today's knowledge economy (Marr, 2007; Boedker *et al*., 2008). Most of the studies from the hotel industry analysed the importance of IC, while there is a lack of research focusing on the importance of identifiable intangible assets recognised in financial statements. The majority of studies focusing on recorded intangible assets in financial statements of European companies were made on samples of publicly traded companies. There is a lack of studies which analyse non-traded companies (we believe that one of the major reasons is the unavailability of data). Therefore, our study makes a contribution to the field of external financial reporting on intangibles in the hotel industry in post-transition economies, especially because such analyses for the hotel industry are lacking.

In contrast to previous findings (Sahut *et al.*, 2011; Glaum and Wyrwa, 2011), our results show that the share of identifiable intangibles in financial statements in both countries of analysis is very low. Moreover, the results have shown that their importance is not increasing over time, and thus we cannot confirm our first hypothesis.

Since recent studies have emphasised the importance of IC for the hotel industry (Nemec Rudež and Mihalič, 2007; Engström *et al.*, 2003), our study suggests that there is a large gap between IC and recorded intangibles in the financial statements of hotel companies. The majority of intangible factors are not recognised in financial statements and therefore, external users of financial reports have very limited information about their values.

Further analysis focusing on the relationship between the share of intangibles and financial performance of analysed companies showed that companies with a higher share of recorded intangibles were not more profitable. Therefore, we were unable to confirm our second hypothesis and previous findings from literature (Guo *et al.*, 2011; Guzić, 2014).

Our analysis has shown that the share of intangibles in Croatian and Slovene hotel companies is relatively small. In contrast to this, studies (Sahut *et al.*, 2011; Glaum and Wyrwa, 2011) show that intangibles are very important assets among European publicly traded companies. Since both studies found that goodwill is the most important intangible asset, we believe that one of the reasons for such a small share of intangibles in the balance sheets of the hotel companies included in the sample is the absence of external growth through merger and acquisition activities, which would allow companies to record more intangibles. Indeed, goodwill can be recorded only in cases of mergers and acquisitions. This is supported with our further analysis, which proved that larger companies have a higher share of intangibles.

Our study draws attention to current accounting practices, which do not allow a large part of intangibles to be recognised in financial statements. Unless companies have the possibility to capitalise intangibles, the latter will not be recorded in financial statements and thus external users of financial accounts will only gather a limited amount of information. Companies must provide more information on intangible factors in their accompanying notes to financial statements and thus improve current information asymmetry.

Our study is limited to publicly available financial data and thus does not include internally available data about all components of IC. Future studies could extend the sample of post-transition economies and examine in more detail the gap between reported values of intangibles for external financial purposes and intangible factors that are not recorded in financial accounts.

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