

## ***Financial Potential of Listed Tourism Companies in Republic of Croatia***

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**Abstract:** *The Republic of Croatia is renowned for its natural beauty and mild Mediterranean climate. The consequences are significant tourism revenues each year which is why the tourism is considered as the most important activity. However, tourism is a specific activity that occurs seasonally (at certain time of the year). It would therefore be interesting to analyze how much can tourism revenues distributed throughout the entire financial year contribute to financial result presented in financial statements, that is, to analyze whether their impact on profitability ratios is above average. The main aim of this research is to compare financial performance of listed companies which belong to accommodation and food service activities on one side and financial performance of companies from all other activities on another side. Intention of the research is to determine the financial potential of tourism listed companies. Sample consists of non-financial companies in Republic of Croatia listed on Zagreb Stock Exchange (ZSE) which are divided into two subsamples. First subsample consists of companies which belong to accommodation and food service activities and second subsample comprises companies from other activities. Activities are classified according to National Classification of Activities. Statistical analysis will be applied on financial data collected from financial statements publicly available on ZSE official website. Sample includes non-financial companies and excludes banks, insurance companies and other financial companies due to their particularities in comparison with non-financial companies.*

**Keywords:** *accommodation, food service, stock exchange, non-financial companies, Croatia*

### **Introduction**

Economic theory in the last twenty years, especially in tourism, generally emphasizes the importance of creating and adding value in order to gain and maintain the competitive advantage (Porter, 1985) [7]. Product or service in tourism that consumers choose is defined as a destination which is a complex element of offer. Offer as an element or product has a great number of features which together have the effect of its attractiveness, that is, its value. In order to achieve most favourable overall results, all entities participating in creating or adding value must cooperate. Each link in the chain of tourism activity is a participant which offers products or services to the market and participates individually, but also collectively. Tourism activity because of its specificity should be viewed in terms of its connection with the activities of wholesale and retail trade, transport, accommodation and food and other tangent activities. W. Hunziher and K. Krapf give a definition of tourism that is accepted by AIEST (“Association Internationale D’Experts Scientifiques du Tourisme”) (1954), and tourism is defined as a set of relationships and phenomena arising from the travel and stay of visitors on some destination, if this stay doesn’t lead to permanent residence and if such stay is not linked with any of their economic activities (Pirjevec, 1998) [6].

From the terminological point of view, offering the total value is increasing in its frequency, while, on the other side, the offer of certain products and services is slowly disappearing. An important driving force in the totality of tourism activities are companies listed on the capital market due to its size, capacity and number of employees, and their impact on activities that are closely related to the supply or transportation, accommodation and food services. Economic theory sets the destination or product and lasting added value for consumers of tourist products in the centre of the tourist offer: in spite of the above, this paper focuses on classical formulas which will evaluate the financial potential of listed tourism companies in Croatia with analysis of indicators such as ROE, ROCE, ROA, EBIT and EBITDA.

## 1. Tourism Sector Analysis

Analysis of the main tourism activity indicators in Croatia is observed through the main sectorial indicators for the period from 2009 to 2013 as shown in Table no. 1. As can be seen from the data of key sectorial indicators, an increase is present regarding all key indicators.

**Table no. 1 The main sectorial indicators**

	2009	2010	2011	2012	2013
Number of overnight stays (in million €)	56.3	56.4	604.4	62.7	64.8
Tourism revenues (in billion €)	6.4	6.2	6.6	6.8	7.2
The share of employees (% of total)	5.9	6.0	6.0	6.1	6.3
Activity shares in export (in %)	39.5	39.9	36	36	37.3
Number of permanent beds (in 000)	899.1	833.1	852.4	805.5	872.7
The share of Activity (in %)	3.8	3.9	4.1	4.1	4.5

*Source: Group of authors (2014): Ekonomski institut Zagreb, Sektorske analize, No.33. p.3.*

Analysis of the indicators (Table no. 1) indicates that the Croatian tourism activity achieved 5.12 percent growth in the number of arrivals in 2013. Taking into consideration the growth of all key indicators of Croatian tourism in 2013, it is evident that the share of tourism in GDP has increased by 0.4 percentage points. Using the added value to factor cost ratio, which was available for the activity "I - Accommodation and Food Services Activities", it was estimated that the gross added value for activity "I" in 2013 and its share in total added value and gross domestic product in 2013 have the presence of a constant share increase of the tourism activity in the gross added value and gross domestic product. According to that estimate, the share of the tourism sector in total gross value added in 2013 was 5.3 percent.

Furthermore, the tourism sector in Croatia for many years employs about 6 percent of total value of employed in the Republic of Croatia. (Group of Authors, 2014) [3]. These data show that the increase in the share of the tourism sector in gross added value and Croatian GDP is the most propulsive sector of the Croatian economy and it is largely export-oriented.

According to the Croatian National Bank (HNB), foreign revenues from tourism activity amounted 7.2 billion euro's in 2013. This also points to the fact that Croatian tourism in total Croatian exports participates with 40 percent. It is important to point out that the different calculation methodology of Croatian tourism as an export product would likely provide different indicators in comparison with this previous indicator, because the total realized revenue should be viewed according to the methodology which conducts calculation on a net basis with the distinction between foreign, domestic and total tourism product revenue.

Some economic sources use the term "invisible exports" because during the tourist spending, which is the basis of a series of economic effects, there is no physical crossing of goods or services across the border. As stated earlier, the term "invisible" points to the difficulty in monitoring the phenomenon of international tourism in the balance of payments.

The financial potential of listed companies has also had an impact on the price index CROBEXturist, which comprises all leading public limited companies from the analyzed activity (Valamar Riviera plc, Maisto plc, Plava laguna plc, Istraturist Umag plc, Borik plc, Arenaturist plc, Globalna hrana plc, Liburnia Riviera Hotels plc, Solaris plc and Adriatic Luxury Hotels plc), provided that they are traded 70 percent of days in the year on 18th November 2014. CROBEXturist was at 2.111 points, which represents a doubling of the index value on an annual basis (Group of authors, 2014) [3].

The paper also presents some of the basic aggregated values and average values that Croatian listed companies achieved in 2013. The basic items such as: non – current assets, total assets, non – current liabilities, current liabilities, total revenues and total expenses.

**Table no. 2 The basic items of Croatian public listed companies (aggregated and averaged data)**

Balance Sheet Item		Accommodation and Food Service Activity		Other Activities	
		2013 (000 000 HRK)	2013 (000 000 €)*	2013 (000 000 HRK)	2013 (000 000 €)*
Non – current Assets	Agg.**	17,050.59	2,251.33	79,793.36	10,535.80
	Avg.***	532.83	70.35	645.63	85.25
Total Assets	Agg.	18,352.33	2,423.21	134,523.92	17,762.34
	Avg.	592.01	78.17	1,026.02	135.47
Non – current Liabilities	Agg.	3,475.11	458.85	17,026.92	2,248.21
	Avg.	108.60	14.34	136.68	18.05
Current Liabilities	Agg.	3,534.12	466.64	41,991.00	5,544.43
	Avg.	110.44	14.58	303.50	40.07
Total Revenues	Agg.	4,341.91	573.30	102,743.60	13,566.11
	Avg.	140.06	18.49	723.55	95.54
Total Expenses	Agg.	4,165.45	550.00	102,192.39	13,493.33
	Avg.	134.37	17.74	718.63	94.89

Source: Author's calculation (calculated using financial statements publicly available at Zagreb Stock Exchange (ZSE) official website, accessible at: [www.zse.hr](http://www.zse.hr))

Legend:

\*Calculated according to Croatian Central Bank (HNB) averaged annual average exchange rate for 2013. (1 € = 7,573548 HRK), accessible at: [www.hnb.hr/tecajn/htecajn.htm](http://www.hnb.hr/tecajn/htecajn.htm)

\*\*Aggregate Values

\*\*\*Average Values

According to Table no. 2, we can conclude that listed companies from tourist activity achieved the lowest aggregate values for all analyzed positions of non – current assets, total assets, long – term liabilities, current liabilities, total revenues and total expenses in 2013. Analysis of the average values of listed companies and other non-tourist sector companies has significant discrepancies for all of these positions in business, except for non-current assets and non-current liabilities.

## 2. Data and Hypotheses

### 2.1. Data

Sample consists of 150 non-financial companies listed on Zagreb Stock Exchange. Besides companies listed on ZSE regulated market in 2013, companies listed on ZSE Multilateral Trading Facility in 2013 were also included. Unlike regulated markets, investing in companies that are on Multilateral Trading Facility is riskier due to lower requirements for securities trading. Sample is divided into two subsamples. First subsample comprises companies which belong to accommodation and food service activity and second subsample comprises companies from all other activities. Activities classification is done according to National Classification of Activities – NKD 2007. Reason why listed financial companies were excluded from sample is because of their special features in relation to the non-financial companies. Statistical Package for the Social Sciences (SPSS) will be used for statistical analysis.

**Table no. 3 Structure of sample according to National Classification of Activities**

Activity	Number of Companies in Sample	%
Agriculture, Forestry and Fishing	10	7%
Manufacturing	53	35%
Construction	10	7%
Retail and Wholesale Trade, Repair of Motor Vehicles and Motorcycles	16	11%
Transport and Storage	10	7%
Accommodation and Food Service	32	21%
Information and Communication	3	2%
Real Estate	4	3%
Professional, Scientific and Technical Activities	10	7%
Administrative and Support Service Activities	1	1%
Arts, Entertainment and Recreation	1	1%

Source: Author's calculation

## 2.2. Hypothesis and Sub-hypotheses

Hypotheses and sub-hypotheses read as follows:

*Hypothesis 1 – there is statistically significant difference between profitability ratios of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.1. – there is statistically significant difference between ROE of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.2. – there is statistically significant difference between ROCE of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.3. – there is statistically significant difference between ROA of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.4. – there is statistically significant difference between NPM of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.5. – there is statistically significant difference between OPM of companies which belong to accommodation and food service activity and listed companies from other activities,*

*Sub-hypothesis 1.6. – there is statistically significant difference between EBIT of companies which belong to accommodation and food service activity and listed companies from other activities,*

## 3. Findings

### 3.1. Results of Statistical Analysis

Following profitability ratios were analyzed in this research:

**Table no. 4 Profitability ratios included in analysis**

<b>Abbrev.</b>	<b>Ratio</b>	<b>Formula</b>
ROE	Return on Equity	Net Profit / Total Equity
ROCE	Return on Capital Employed	EBIT / Total Assets
ROA	Return on Assets	Net Profit / Total Assets
NPM	Net Profit Margin	Net Profit / Total Revenues
OPM	Operative Profit Margin	(Operating Profit – Operating Revenues) / Sales Revenues
EBIT	Earnings before Interest and Taxes	Net Profit + Interest + Profit Tax

Independent samples t-test was used to compare financial ratios means between companies from Accommodation and Food Service Activity and companies from all other activities. Statistics for these two groups are presented in Table 5 which contains values for size of the groups (N), means, standard deviations and standard error means. It is obvious that the missing data is negligible if we take into account the number of observations in whole sample (N=150). Column named “Mean” can be used for comparison of means for every financial ratio from two groups of companies.

**Table no. 5 Group Statistics for all profitability ratios**

Financial ratio	Activity (0 - Other, 1 - Tourism)	N	Mean	Std. Deviation	Std. Error Mean
ROE	0	117	-0.1536	0.92499	0.08552
	1	33	-0.0464	0.44218	0.07697
ROCE	0	117	-0.0770	0.91784	0.08485
	1	32	0.0233	0.06277	0.01110
ROA	0	117	-0.1029	0.91644	0.08472
	1	32	0.0008	0.07053	0.01247
NPM	0	116	-3.2041	31.28879	2.90509
	1	32	-0.2072	0.75692	0.13381
OPM	0	114	-1.1091	8.59257	0.80477
	1	32	-0.0920	0.69020	0.12201
EBIT	0	117	2.5319E7	2.27463E8	2.10289E7
	1	33	2.8674E7	8.99124E7	1.56517E7

The results of statistical analysis presented in Table no. 6 reveal that there is no significant difference between financial ratio means of two analyzed groups of companies. In other words, there is no significant difference between profitability ratios of companies in tourism activity and other activities.

**Table no. 6 Independent Samples Test**

Financial ratio		Levine's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig.*	M. D.*	S.E.D.*	95% Confidence Interval of the Difference	
									Lower	Upper
ROE	EVA*	1.43	0.23	-0.64	148	0.520	-0.11	0.17	-0.44	0.22
	EVNA*			-0.93	112.5	0.353	-0.11	0.12	-0.34	0.12
ROCE	EVA	0.99	0.32	-0.62	147	0.539	-0.10	0.16	-0.42	0.22
	EVNA			-1.17	119.9	0.244	-0.10	0.09	-0.27	0.07
ROA	EVA	1.04	0.31	-0.64	147	0.524	-0.10	0.16	-0.42	0.22
	EVNA			-1.21	120.9	0.228	-0.10	0.09	-0.27	0.07
NPM	EVA	1.06	0.31	-0.54	146	0.590	-3.00	5.55	-13.96	7.96
	EVNA			-1.03	115.5	0.305	-3.00	2.91	-8.76	2.76
OPM	EVA	2.30	0.13	-0.67	144	0.506	-1.02	1.52	-4.03	2.00
	EVNA			-1.25	118	0.214	-1.02	0.81	-2.63	0.59
EBIT	EVA	0.79	0.38	-0.08	148	0.934	-3355895	40538498	-83464933	76753143
	EVNA			-0.13	132.6	0.898	-3355895	26214363	-55208313	48496523

\*Legend:

- EVA - Equal variances assumed
- EVNA - Equal variances not assumed
- Sig. (2 – tailed)
- M.D. – Mean Difference
- S.E.D. – Std. Error Difference

### 3.2. Hypothesis and Sub-hypotheses

After taking into account results of statistical analysis, conclusions can be drawn regarding acceptance and rejection of hypothesis and it's sub-hypotheses as follows:

**Table no. 7 Acceptance and rejection of hypothesis and sub-hypotheses**

<b>Hypothesis and sub-hypotheses</b>	<b>Content</b>	<b>Acceptance / Rejection</b>
H <sub>1</sub>	<i>Hypothesis 1 – there is statistically significant difference between profitability ratios of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.1</sub>	<i>Sub-hypothesis 1.1. – there is statistically significant difference between ROE of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.2</sub>	<i>Sub-hypothesis 1.2. – there is statistically significant difference between ROCE of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.3</sub>	<i>Sub-hypothesis 1.3. – there is statistically significant difference between ROA of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.4</sub>	<i>Sub-hypothesis 1.4. – there is statistically significant difference between NPM of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.5</sub>	<i>Sub-hypothesis 1.5. – there is statistically significant difference between OPM of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected
H <sub>1.6</sub>	<i>Sub-hypothesis 1.6. – there is statistically significant difference between EBIT of companies which belong to accommodation and food service activity and listed companies from other activities,</i>	Rejected

### Conclusions

Listed companies should be carriers and drivers of tourism activity and, therefore, the existence of their financial potential is important. As the tourism product is specific because all other tangent activities should be included, it is also necessary that other activities that actually create chain of value generate positive effects in the business as well. According to economic theory, which in the centre of the tourist offer sets the destination or product, i.e. existence of added value for consumers of tourism product, research is focused on the classic formula that has been used to test the financial potential of listed companies in tourism activity in Croatia with the analysis of indicators such as ROE, ROCE, ROA, EBIT and EBITDA.

Statistical analysis leads to the rejection of the discussed hypothesis and the six sub – hypotheses, that is, to the conclusion that there is no significant difference in the profitability of companies that belong to the „Accommodation and Food Service“ activities and companies that belong to all other activities. It can be concluded that the revenues which tourism companies earn in the "active" months of the tourist season are sufficient to achieve a level of profitability similar to the level of profitability that companies in other industries have.

But on the other hand, Croatian listed companies from tourism activity achieved the lowest total values for all analyzed positions of non-current assets, total assets, long-term liabilities, current liabilities, total revenue and total expenditure. Average values of listed companies and other non-tourist sector companies show significant discrepancies for all key items in business. Non-current assets and non-current liabilities show the smallest discrepancies in average values. In further considerations of strategic management of the tourism sector, measures and policies that will result in

increased financial potential of Croatian listed companies of the tourism sector should be taken into account in order to decrease the existing differences.

Tourism companies generate extra profits in the months of the tourist season, while revenues in residual period of a year can not be compared with them in size. The statistical confirmation of these assumptions could be the subject of some future research.

### References

- [1] Belak, V., (2014), *Analiza poslovne uspješnosti*, RRiF Plus d.o.o., Zagreb
- [2] Croatian National Bank (Hrvatska Narodna Banka), [www.hnb.hr/tecajn/htecajn.htm](http://www.hnb.hr/tecajn/htecajn.htm)
- [3] Group of authors, (2014), *Ekonomski institut Zagreb*, Sektorske analize, p. 33
- [4] Narodne Novine (Official Gazzette) 102/07
- [5] Pallant, J., (2007), *SPSS Survival Manual*, Third Edition, McGraw-Hill
- [6] Pirjevec, B., (1998), *Ekonomska obilježja turizma*, Golden Marketing, Zagreb, p. 9
- [7] Porter M.E., (1985), *Competitive Advantage. Creating and Sustaining Superior Performance*, NY: Free Press
- [8] The Zagreb Stock Exchange, [www.zse.hr](http://www.zse.hr)