

PRELIMINARY REPORT

**Ivor Altaras
Penda****PROFIT OF TOURISM
COMPANIES AND
THEIR MARKET
EVALUATION ON ZSE**

ABSTRACT: The author of this paper presents a statistical analysis of data on realized profits of companies in the tourist sector, whose shares are listed on the Zagreb Stock Exchange and used for active trading. Data on the realized profit for the companies in accounting period 2010 - 2015 is correlated with the prices of shares. Based on the above obtained results about the direction and strength of this correlation the author concludes about the extent to which the market takes into account profit of the companies as a relevant indicator for investments. This information can be extremely significant because, on the one hand, it provides information about the functionality of the market as a comprehensive socio-economic

mechanism that anticipates all the available information based on which the prices of the shares are created as a monetary expression of the presumed value of companies. On the other hand, this information tells us about the expectations of active market participants about the future development of the tourism sector, which already accounts for almost 20% of the Croatian GDP. In addition, the author examines what other explanations could be used for the part of variance which is not explained with the correlation between profit and price of shares.

KEY WORDS: ourism companies, ZSE, earnings, share price

INTRODUCTION

The Republic of Croatia is very proud of its abundant natural and cultural beauty. And rightly so. On the *World Heritage* list under the protection of UNESCO¹ there are currently one natural and 7 cultural sites², and additional 16 are on the application list for consideration to receive the protected status. In addition, we currently have 14 registered elements on the World's Intangible Heritage of Humanity list.³ By the number of protected tangible and intangible heritage by UNESCO, and given the number of inhabitants, the Republic of Croatia is among the best in the world. It is thus not surprising that Croatian people are aware of the importance and beauty of the country in which they live, and that their relationship to their environment is woven into the national anthem which, not coincidentally, is titled "Our Beautiful Homeland". This kind of beauty is a gift of God⁴ that has been given to us for safekeeping, but also for economic exploitation. In the absence of industrial development which we have, not for economically justifiable reasons, abruptly interrupted after our independence, it is the natural and cultural heritage as well as our gastronomy that has shown itself as the single most important source of economic growth, primarily through various forms of tourist activities. Thus we, little by little, come to the fact that tourism contributes to Croatian GDP with a significant percentage of about 20%. This, along with Malta, makes us a country where tourism contributes most to the overall economy in the European Union. If we know that there is no country in the world that can functionally cover all of its expenses with only one economic sector, then we can ask the question: What would be the acceptable level at which it is appropriate to rely on certain industries? Of course, there are no universal metrics that could accommodate all of the countries, but the economic profession almost unanimously adopted the view that for a country with similar characteristics as Croatia⁵ tourism as an industry should contribute to GDP with a

maximum of 20%, which has already been reached in Croatia. Should this share further increase this would represent a significant increase in risk for the economy in the event of an economic crisis situation⁶ on the one hand, while on the other hand this would not speak of the power of tourist activities but of the weakness of other economic sectors which are not developing sufficiently.

In any case, the fact is that Croatian tourism has made a considerable progress in the last decade as seen in the documents on increasing the share of tourism in GDP from 14.9% in 2010 to 18% in 2014. (Altaras: 2015: 19), Today, in 2016, the figure has, as I have already mentioned, further increased.

It would be expected that if the tourism industry is progressing, then also the companies engaged in tourism business should show better financial results, which should be reflected in their financial statements. Consequently, **the value of these companies should increase and this should consequently result in an increase in share prices of those tourist companies that are registered as joint share companies and whose shares are listed on the regulated capital market.** This claim is also the basis of the hypothesis of this paper that I will try to analyse and confirm.

TOURISM THROUGH THE PRISM OF EARNED PROFIT AND SHARE PRICES

In the twentieth century, Croatian regions have experienced two major waves of emigration. The first one occurred at the beginning of the century when, because of the phylloxera (vine disease) hundreds of local people would leave from the coastal areas and especially Dalmatia to the big wide world⁷ on an almost daily basis. They were looking for a better life, so we consider them economic migrants. The second wave took place at mid-century, i.e. after the World War II. Then, in search of a better life, many left their homes hoping to avoid a life behind the "Iron Curtain" as Winston Churchill figuratively said in his

famous speech held in 1946 in the United States, describing the political situation which stretched from the Baltic to the Adriatic.

Today, however (although we almost continuously live in a time of some current crisis), Croatian littoral, has become extremely trendy. We talk about the Mediterranean diet as the best nutrition to sustain life and health, and this on a global level; real estate has achieved exceptional prices; every year dozens of new hotels are being opened; private accommodation increases in quality and the number of visitors is increasing each year. Adriatic rental position has thus become like winning the lottery. In such circumstances, it is not surprising that the coastline with its associated tourism activities is the toughest part of our economy.⁸

Tourism is, of course, a comprehensive economic branch that involves the existence of a number of other production and service sectors that serve to support it.⁹ And all this with a final purpose to create additional value or *profit* at the end of the business process. This is a universal business rule that is the lifeblood of a business enterprise. It should, therefore, be applicable to the tourism sector. If there is no gain, there is no rational reason for the existence of a certain activity.

The exact calculation of the overall economic reach of tourist activities in the wider national economy is one of the most difficult economic areas because even with the most sophisticated econometric methods we cannot get a completely accurate Tourism Satellite Account, which would answer the question of reach. Here it should be noted that even when expressing the share of tourism in GDP we speak only on the level of assessment, and it is significant that the Central Bureau of Statistics as the official source of data only states the realized income in tourism, but says nothing about the realized profit. Therefore, possible profit remains the great unknown. And in fact, it is realized profit that would give us economically relevant information. In doing so, the conceptual difference between the income and the realized profit is enormous.

Besides being the purpose of any business enterprise, as I have already stated, profit represents the final (ultimate) statement of business efficiency. At least this is so in terms of theoretical concepts.

In reality, however, in many of its elements, stated profit does not necessarily represent the real state of affairs of a company. The reasons for this are multiple. Probably the most common one is the fact that different legal regulations and international accounting standards allow companies to recognize a variety of different costs and business investments that are considered to be recognized as deductions and which reduce profits. Entrepreneurs gladly use this fact because this also reduces the tax base and, consequently, the amount of profit tax. Experience tells us that this area is particularly suitable for the so-called “creative accounting” in which entrepreneurs try as much as possible to reduce the tax base while governments introduce increasing restrictions on such occurrences through their everyday legislations.

In addition, and particularly visible in the public sector, there are companies (and even whole sectors), which, although often have market (and natural) monopoly in their business activities, do not even seek to realize profits, as their primary objective of existence is to offer public service or to be a place for (social) care of many people whose workplace, in terms of business efficiency, is not always completely justified.

Due to these serious constraints of profit as the indicator of business excellence, in the analysis of the financial and business state of a company, I will take into account several, or even a multitude of different indicators which will then be considered in a broader time interval.

As in this paper I analyse companies that realize their earnings in the market and are mainly privately owned¹⁰, their profits and prices of financial instruments (shares) which are traded on a regulated market remain the fundamental indicators of business success (or lack thereof) and attractiveness of investing in them.

METHODOLOGY OF WORK AND FINDINGS

In this paper, I analyse profit per share as the most common way of displaying company profit and will correlate this data with the prices of shares of analysed companies. In doing so I have used popular methodological practices for calculating earnings per share, according to which data on net income attributed to equity holders (not comprehensive income) is used as data.

I used business years 2010 to 2015 as the observed period.

I selected this period for two reasons. First, despite the fact that the mentioned period of time is the period of stagnation of Croatian economy (which was evident in the decline of GDP), it was from 2010 onwards that Croatian tourism started to increase its share in GDP. This growth is only in its small part a result of contraction of the overall economy, and it is mainly due to the original inner growth of tourism as an economic branch. The other reason is that our period of five years can serve as a good enough indicator of the consistency of the profit (or loss) of individual companies. It is believed that in the analysis of any individual financial indicators, including the reported profit, it is necessary to observe a minimum of a three-year period. In this context, the five-year period may serve as relevant.

The Zagreb Stock Exchange (ZSE) as the only regulated capital market in the Republic of Croatia, in addition to its oldest and best-known index (CROBEX), has also been keeping sectoral indices since 2013, wishing thereby to further enhance the measurement of the overall market sentiment. Thus, there are sectoral indices for industrial areas (CROBEXindustrija), food (CROBEXnutris), transportation (CROBEXtransport) and even tourism (CROBEXturist). The tourism sector is particularly interesting due to its characteristics. Within this sector there are currently as many as 30 shares listed, making it the most represented by the number of companies. It could be used to make

conclusions on the development of our tourism sector on the Zagreb Stock Exchange. However, this information can greatly deceive us because trading data of some shares show us that only 18 of the 30 shares were traded with at least five times within the past year.

In addition, as a major structural problem of this index is the fact that it is composed of only 5 shares. Throughout the history of the new index, there was a period (for example, from 8 November 2013 to 8 May 2014) when CROBEXturist was constructed from only two shares. Therefore, we can be justified in asking the question: how meaningful is the calculation of the tourism sector index if it contains only 2 (or 5) shares? What value have we gained with such a calculation? From the position of statistical analysis this situation actually prevents any appropriate conclusion, but it also reveals that our capital market is shallow and non-liquid. This is perhaps in itself the best indicator of the current investment situation in the Republic of Croatia.

Therefore, the analysis of this work will not be guided by the tourist sector index but the overall tourism sector present at the Zagreb Stock Exchange.

As the basic conditions set for making this analysis I took two criteria:

1. That the observed companies have made publicly available the information on realized profit per share for each year in the analysed period - here I was led by the principle of comparability of published financial statements.
2. That the observed shares were used for trading at least 5 times within each analysed year - here I was led by the principle of the minimum liquidity of financial instruments.

With these set conditions, I arrived to the fact that of the 30 listed tourism companies only 22 meet these requirements. This made their shares my overall statistical sample.

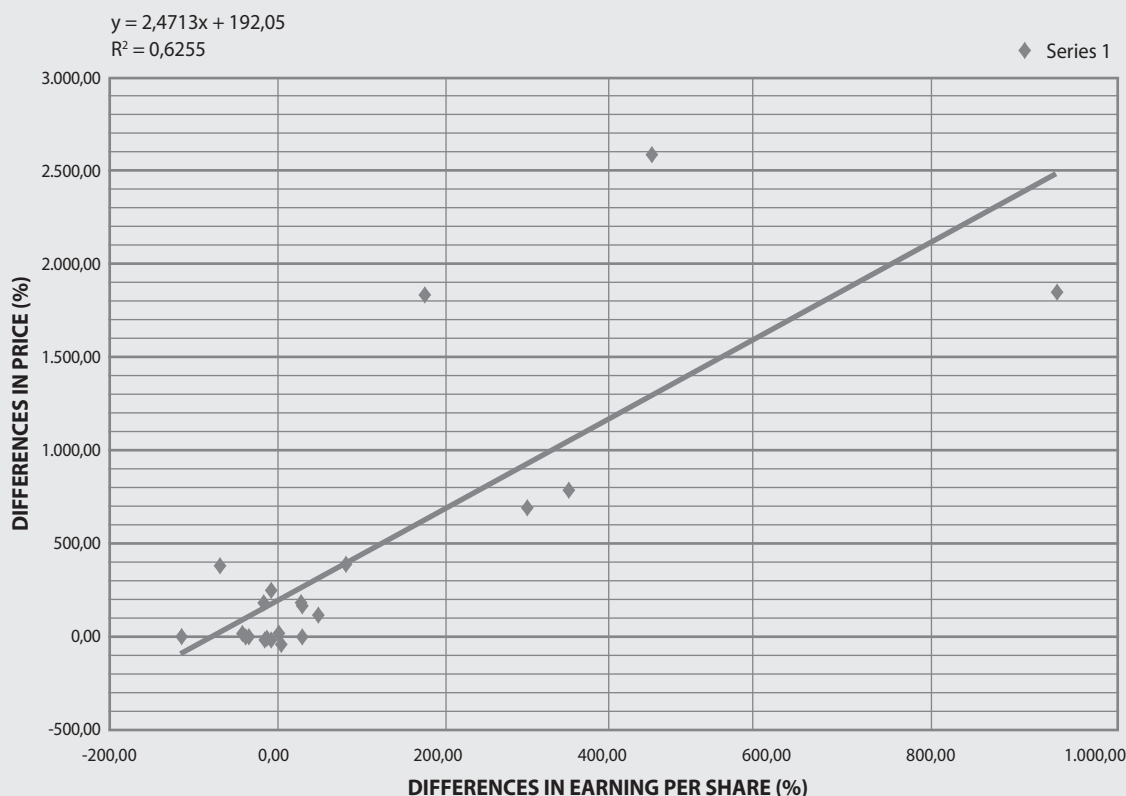
Then, for each of these 22 observed shares I found information about the price (P) and earnings per

share (EPS) as of 30 May of each year observed. Although I could have chosen a different reference point for the analysis of share prices, this date is convenient because it is far enough from the final statutory deadline for publication of the final, audited and consolidated annual financial statements of companies. This is important in order to avoid possible influences of financial statements of companies on the movement of share prices. The phenomenon of increased price fluctuations before and after the announcement of important information from the company is well-

known, and the annual reports are without a doubt such important information.

Having received the necessary information, I set out to calculate the overall result of the profit / loss for each company in a way that I added up all of the profit / loss for the year under review for each share. This gave me the total amount of the profit / loss that in a direct way tells us whether the owners of the company (shareholders) in general achieved total profit or loss in the period 2010 - 2015.

FIGURE 1. SCATTER DIAGRAM AND STATISTICS FOR THE ENTIRE SAMPLE OF SHARES OF THE TOURISM SECTOR ON THE ZSE



Number of analysed shares: 22; $R^2 = 0.625$; $p < 0.000$; Pearson's coefficient: 0.790

Interesting data emerged from this analysis that out of the 22 observed shares of the tourism sector in the period 2010 - 2015, only 12 of them made profit, while 10 of them recorded a total loss. This fact is, perhaps, outside the usual perception of Croatian tourism as an industry in which the achievement of profit is easy and implied with regard to the development of our tourist activities. It turned out that this was not so.

Although stated profit somewhat hides the right business situation in companies (it is not the same if the loss was due to inadequate business or the reported loss is a result of investment in new accommodation facilities, which are shown as an expense before the reported profit), the fact is that company profits are the item that is used to pay out the dividends to shareholders. Therefore, the ability of generating a profit is a strong motive for investing in the equity of companies.

Next, I brought the obtained data on the total reported profit / loss in connection with the information on the difference between the price of each share earned in the observed reference days (the difference in price on 30 May, 2016 in relation to the price realized on 30 May, 2011), through statistical methods of linear regression (as often applied econometric method in the analysis of the interdependence of two variables). In doing so, the share price on 30 May 2011, tells us about the effect of the financial statements from the year 2010, while the price on 30 May 2016 about the effect of operations from 2015.

Graphic view of performed analysis can be seen in Figure 1.

The results obtained offer us valuable information.

Firstly, given the fact that the p value is less than 0.05 (which in social sciences is considered maximum value to confirm the existence of a statistical association between the variables), we can confirm that there is a statistically significant relationship between the two observed variables – the total shown profits and realized variations

in the market price of the shares from the tourist sector listed on the Zagreb Stock Exchange (ZSE) in the business period between 2010 - 2015. This confirms the hypothesis of this paper.

In addition, we can note that even 62.5% of the scatter variance can be explained by an independent variable (for $R^2 = 0.625$), which I think is a very good result. In addition, Pearson's coefficient further confirms this fact, because its value is a high 79%.

This result of the study is not surprising given the confirmation of statistically significant association between these variables with other relevant research on this subject, which have so far been conducted in Croatia and around the world – the United States, Turkey, Romania, Scandinavia, Great Britain and many other countries. (Collins, D., Maydew, E. and Weiss, I., (1997); Harris, T.; Lang, M. and Moller, H., (1994); Pervan, I.; Vasilj, M. (2008)).

The remaining part of the unexplained variance can, certainly, be well explained by the whole set of other variables that have their influence in the process of trading in the capital market. These other variables may include: shortcomings of profit as an indicator of the real state of the company; other financial indicators of surveyed companies; other information on the operations of the observed companies that are not included in the financial statements like, for example, certificate of marriages and still unrealized jobs in the future or subjective expectations of the investors; inefficiency and lack of liquidity of domestic capital markets; prevailing trade sentiment that strongly varies - from intense fear to euphoria and other possible impacts.

All this confirms the view that the fundamental indicators of the company, although for a shorter period of time, may not have a significant impact. In the long term, it is the ability of the management and the business strength of the company that determine the price of shares of the observed companies.

CONCLUSION

Given the findings of this work, it can be concluded that, despite the objective shortcomings of the profit of companies as the fundamental variable for analysis in relation to the change of prices of observed shares in the tourism sector in a given time interval, there is a statistically significant correlation between these two variables. Direction of that correlation is positive, but given the level of explained variance it is also a very powerful one. This fully confirms the hypothesis of this paper. This analysis result is consistent with other research conducted on this subject made in the Republic of Croatia and abroad.

Additionally, as an unexpected finding of this research it was found that 45% of companies in the tourism sector despite the strong growth of tourism as an economic sector in the Republic of Croatia in the period from 2010 - 2015, did not achieve an overall positive result of reported profit. This information can be very meaningful and interesting for the investor community, economic analysts and in particular shareholders of companies from the tourism sector.

REFERENCES

- ¹ United Nations Educational, Scientific and Cultural Organization.
- ² These are: The old town of Dubrovnik, Diocletian's Palace in Split, the historical core of Trogir, Episcopal Complex of the Euphrasian Basilica in Poreč, St. James in Šibenik, Starogradsko polje on Hvar and Plitvice Lakes National Park, and during the writing of this paper as the seventh cultural site on the Croatian territory (or in the region i.e. Bosnia and Herzegovina and Serbia) medieval tombstones (stecaks) were added to the list.
- ³ These are: Ojkanje, Singing in two voices of Istria and the Croatian coast, Klape harmony singing, Bečarac, the Kastav Carnival, Silent Wheel dance of Dalmatia, Alka, lace making, making traditional wooden toys, Procession of the Cross in Hvar, Feast of St. Blaise from Dubrovnik, the procession of the queen from Gorjani, gingerbread hearts and the Mediterranean diet.
- ⁴ Big fans of our country love to recount a folk legend about how God left this piece of land for himself, and since he gave all the other countries to other nations, he had no choice but to leave it as a legacy just for us.
- ⁵ This primarily refers to the geographical location, population, political constitution and other socio-cultural characteristics.
- ⁶ From an ecological disaster in the Adriatic Sea to terrorist threats that would jeopardize our tourism.
- ⁷ Mostly in the Americas, but also in Australia and New Zealand.
- ⁸ The share of tourism in the continental part of the Croatian does not exceed 5% of our tourism.
- ⁹ From the food sector all the way to the construction sector.
- ¹⁰ The Republic of Croatia has especially activated the privatization process in the tourism sector lately, so shares in tourism companies such as hotels Imperial (Rab), Sunčani Hvar (Hvar), Hotels Živogošće (Igrane) and others are on sale.

LITERATURE

Books and scientific journals

ALTARAS PENDA, I. (2015), "Tourism sector on the Zagreb Stock Exchange (ZSE): the worth of Croatian tourism?" *Acta Economica Et Turistica*, No. 1, Vol 1/2015, 15-40

COLLINS, D., MAYDEW, E. AND WEISS, I. (1997), "Changes in the value relevance of earnings and book values over the past forty years". *Journal of Accounting and Economics*, 24, 39-67

DELOITTE (2015), *IFRS in your pocket – 2015*. London: Deloitte (available online at: <http://www2.deloitte.com/hr/hr/pages/audit/articles/ifrs-in-your-pocket-2015.html> – accessed 20/03/2016)

HARRIS, T., LANG, M. AND MOLLER, H. (1994), "The value relevance of German accounting measures: An empirical analysis". *Journal of Accounting Research*, 32 (2): 187-209

PERVAN, I., VASILJ, M. (2008), "Vrijednosna važnost glavnice i dobiti – empirijska analiza za hrvatske korporacije sa zagrebačke burze". *Ekonomika istraživanja*, Vol. 22, No. 4, 2009, Zagreb

ŽAGER, K., ŽAGER, L. (1996), *Analiza financijskih izvještaja*. Zagreb: Masmedia

Internet resources

Financial Agency – www.fina.hr

My shares – www.mojedionice.com

Central Depository and Clearing Company – www.skdd.hr

Zagreb Stock Exchange – www.zse.hr