INDICATORS FOR DEFINING THE EMITTING AREAS IN TOURISM

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Abstract

Risk estimation or volatility estimation at financial markets, particularly stock exchange markets, is complex Tourism will continue to grow at a faster pace in the future, and it will be one of the leading businesses in the development of global prosperity and welfare but it will be heavily influenced by contemporary trends, such as; demographic trends expressed by the demographic characteristics of the population; economic trends expressed by a decline in poverty and a growth of the middle class; technological revolution and evolution; digitalization of society and tourism; modern and healthy lifestyle; political tensions; security; the threat of terror etc. When we talk about tourism the first signs can be found from the statistic indicators, which show the movement of the tourism markets and the movement of the tourists. Every area of the globe, more or less has a certain attractions that can attract tourist. The authors believe that the most important thing in the development of tourism is how to define the target groups and in which direction to move the tourist offers and destinations so they can be attractive to a certain population. The purpose of this paper will be the analysis of tourist flows in several countries from which we will define the indicators in finding emitting areas in tourism.

Keywords: Tourism, trends, indicators, target groups and demographics.

INTRODUCTION

Hospitality and tourism have become two of the largest global industries in the last decades. As the World Travel & Tourism Council indicated, the combined scale of the two businesses in 2011 represented 9.1% of the global GDP, an equivalent of 6 trillion US dollars; the percentage is estimated to reach 9.6% in 2021 for an equivalent of 9.2 trillion US dollars (Cheng, Tsai, and Lin 2016). Tourism is a vitally important to many regions of the world and forms an important and growing part of the world's economy (Jarvis, Stoeckl, and Liu 2016).

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Every destination, every tourist region and beyond, every country has its own tourism potential which can be offered to visitors depending on their attractiveness and appeal. Not all regions have the same tourist potential and therefore participation in tourist flow is not the same. There are elements which are natural, durable and rarely or never suffer changes as well as the cultural and historical heritage which they have to offer. Certainly treasures of such potential represent competitive advantages for tourism in relation to other areas. Amongst other important factors for the destination is finding sustainable tourism development for the area. Researchers have recognised that the success of sustainable tourism development is largely dependent on the policies, planning and management tools used. Indeed, integrated comprehensive planning has been recognised as the most appropriate form of planning for sustainable tourism development (Farmaki 2015).

Tourism offers are a dynamic category and the industry is able to intervene and transform spaces figuratively overnight by creating new tourist attractions, there are many examples in the world.

Over time tourists change their habits, look for new content and therefore these modern trends should be followed and every destination should try to adapt them. As world income continues to grow and countries develop, demand for tourism should be expected to increase. The dynamics of tourism and its growing importance has increased tourism demand studies (Yamaura and Thompson 2015).

We need to have in mind that the population is gradually aging, especially in the European countries and are the major indicators for the specific destinations. An aging population brings with it many social issue concerns over welfare provision, employment, health, transportation, and personal mobility (Kim, Fidgeon, and Kim 2015). The demographic characteristics of the destination should also be taken into account when planning the tourism offer. In addition, it has also demonstrated that countries with regressive population pyramids have greater difficulties for tourism growth improve their socioeconomic conditions (Sanchez-Rivero and Cardenas-Garcia 2014).

With the growth of the middle class and their quest for travel, the value for money the varied tourist interests will be apparent, the need of connections to destinations in the future will play a very significant trend in leisure travel. Economic characteristics of home countries can cause considerable variations in the tourism demand. Thus different tourist nationalities are associated with different level of expenditures and risk (Zhang, Botti, and Petit 2016). Since the beginning of the industrial revolution, during which work occupied most of the day of the working class, labor patterns have changed substantially and, it seems, irreversibly. Social differentiation in leisure time-use patterns has been found in many developed countries with long-standing capitalist traditions (Jarosz 2016).

An important feature for the analyzed region is the presence of the emitting diasporas. Travelling back to their original home country of the diaspora is often seen as one of the main strategies that many diaspora members utilise to 'taste' home as well as to maintain their cultural and emotional ties with their home country (Etemaddar, Duncan, and Tucker 2016).

A trend in the world is to develop new destinations in the dramatically changing tourist movement. New destinations are emerging which absorb a huge number of tourists in 2016 from the 20 top destinations visited in the world, 10 were in Asia. To

endure such great competition, all of countries of Southeastern Europe should join perform and create a tourist product that will attract tourists from remote areas especially from Asia which is an emitting area and the majority of tourists are from China, Japan and South Korea. If in 1950 97% of tourists were concentrated only in 15 different countries, today there are about 100 countries that receive more than 1 million tourists a year, confirming the fact that there is an emergence of new destinations and competition.

1. METODOLOGY

In the paper, the authors are guided by the basic theoretical assumption that the identification and notification of the main emissive tourist areas for the analyzed region should contribute to the proper adaptation of the region's tourist offer, targeted tourism marketing and better tourist planning of the region. Bearing in order to make proper identification, the authors through the application of desk research come to the necessary statistical data on the origin of foreign tourists who visit countries in the analyzed region. In the further processing, the authors use a statistical method for data processing, while the results obtained are further processed using the method of analysis and comparison.

2. RESULTS AND DISCUSSION

As the authors stated at the very beginning one of the most important indicators for the development and survival of a tourist destination is defining the target groups and the emitting areas. For this purpose, they analyzed part of the countries of Southeastern Europe, or more precisely the countries of the former Yugoslavia. Of the current six countries only one state has extremely developed tourism and that is Croatia, which annually has over ten million tourists, next is Slovenia with nearly three million foreign tourists, but there are countries such as Macedonia and Bosnia and Herzegovina where tourism is still underdeveloped and the number of tourists is under a million tourists annually. Therefore the purpose of this paper is to find tourists which have the same needs so they can be utilized to connect the region with its tourist offer and thereby increase the number tourists. In Particular the focus should be for potential tourists from more distant regions and the offer should cover the entire region, by doing that the tourist will stay longer and spend more time in the region. The paper only deals with data from foreign tourists due to the multifunction of foreign tourists on the destination. International tourism generates both macro- and microeconomic effects. Among the latter, international tourism improves the quality of labour employed in the industry, uses sources efficiently under high competition, benefits from scale economies, and develops new facilities adapted to international standards and demand and supply in the tourism sector (Panahi, Mamipour, and Nazari 2015). Individually perhaps Croatia is able to offer tourists something with its outlet to the sea in the summer season. But the point is to overcome seasonal tourism and make the region attractive throughout the year; individually it's very difficult that any of these countries can independently achieve this.

Croatia is one of the leading countries in Europe in the field of tourism; in 2016 over 13,808,532 foreign tourists visited the country. It has a continuous increase in the number of tourists compared to 2011, the number increased by 28%, which ranks among the

countries with the fastest growth of tourism. Analyzing the data in the last 5 years it will be noted that the dominant role have is from tourists from Europe with an average of 90%.Although there is a slight downward trend from 93.7% in 2011 to 87.9% in 2015, they will continue to be the dominant tourists in Croatia. In the analyzed period there is an evident growth of tourists from Asia with a 3.6% share in total mass of tourists in 2011 to 7.7% in 2015, due mostly to tourists from South Korea and the Republic of China. There is also a certain growth of tourists from the US with 2.5% in 2011, and in 2015 it increased to 4.2%. The number of tourists from other regions of the world is minor and its only 0.2%.

Table 1. Visiting foreign tourists by region – Croatia

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	9.927	100	10,369	100	10,948	100	11,623	100	12,683	100
Europe	9.303	93,7	9,591	92,5	10,003	91,36	10,342	88,9	11,149	87,9
America	251	2,5	292	2,8	381	3,5	435	3,74	531	4,2
Asia	360	3,6	469	4,5	545	4,97	823	7,1	979	7,7
other		0,2		0,2		0,17		0,26	24	0,2

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*
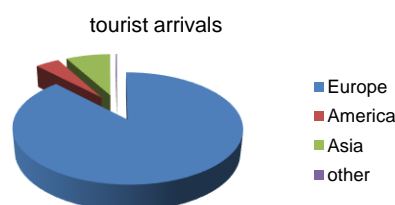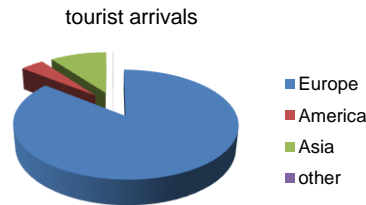
tourist arrivals

Figure 1. Foreign tourists arrivals by regions in Croatia in 2015

Slovenia is one of the countries which also have a rapid growth of tourism. Also it has a continuous increase in the number of tourists in comparison with 2011 the number has increased by 25% and it was among the countries with the biggest growth of tourism. Analyzing the data from the last 5 years it will be noted that the dominant role of tourists are from Europe with an average of 90%.Although there is a slight downward trend from 90.8% in 2011 to 85.6% in 2015, they will continue to be the dominant tourists in Slovenia. In the analyzed period the growth of tourists from Asia is evident with 5.2% share of the total tourists in 2011 to 10% in 2015 that is mostly to tourists from South Korea and the Republic of China. There is also a certain growth of tourists from the United States but it is much smaller, with 3.3% in 2011, it increased to 4.17% in 2015. The share of tourists from other regions of the world are minor, only 0.23%.

Table 2. Visiting foreign tourists by region – Slovenia

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	2.037	100	2.156	100	2.259	100	2,411	100	2,707	100
Europe	1,850	90,8	1,942	90,1	2,017	89,3	2,091	86,7	2,317	85,6
America	68	3,3	76	3,5	88	3,9	96	3,98	113	4,17
Asia	106	5,2	133	6,17	148	6,5	218	9,0	271	10
other		0,7		0,23		0,3		0,32	6	0,23

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*
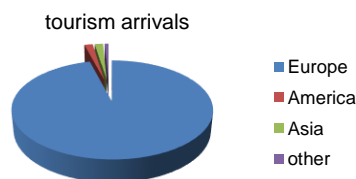
Figure 2. Foreign tourists arrivals by regions in Slovenia in 2015

Montenegro is the smallest by area and population with approximately 620,000 thousand people. Its geographical position and the outlet to the Adriatic Sea contribute to the development of tourism and in 2016 over 1.5 million tourists visited the country. Also it has a continuous increase in the number of tourists in comparison with 2011, the number rose to 24% and it was among the countries with the biggest growth of tourism.Analyzing the data from the last 5 years it will be noted that the tourists from Europe dominate with over 95%.Although therewas a slight downward trend and it was very small for the analyzed period and it was only 1.6%.The share of tourists from the US and Asia is identical but its very low compared with tourists from Europe and it is only 1.66% each.

Table 3. Visiting foreign tourists by region – Montenegro

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	1,201	100	1,264	100	1,324	100	1,350	100	1,560	100
Europe	1,172	97,6	1,227	97	1,282	96,8	1,302	96,4	1,496	96
America	13	1,08	13	1,0	13	0,98	20	1,48	26	1,66
Asia	6	0,5	6	0,5	7	0,5	25	1,85	26	1,66
other		0,82		1,5		1,72		0,7	12	0,68

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*

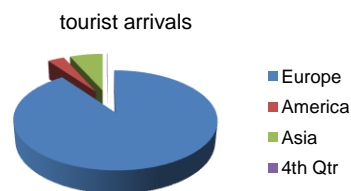**Figure 3.** Foreign tourists arrivals by regions in Montenegro in 2015

Serbia is a country in the specified region with the highest growth of tourism in the analyzed period. The political unrest in recent decades placed tourism at the margins of economic activity, but by addressing the political problems and soothing the situational accelerated pace of tourism development emerged. In the analyzed period Serbia has increased growth of 36%, and the trend continues, in the future tourism will be an important industry.Although landlocked there is a rapid development of alternative

forms of tourism.As for the origin of the tourists as stated in the previously analyzed countries the predominated tourists are from Europe with about 90%.Growth of tourists from the United States is very small for the given period and it does not exceed 1%.The percentage increase in tourists from Asia is evident,primarily with tourists from China with 1.6% in 2011 and an increase of 6.4% in 2015.This is primarily due to the traditional good political and economic relations of Serbia and the Republic of China and also the introduction of visa-free travel regime.The number of tourists from other continents is very small and it is about 1.5%.

Table 4. Visiting foreign tourists by region – Serbia

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	764	100	810	100	922	100	1,029	100	1,137	100
Europe	711	93	746	92	837	90,7	932	90,6	1,011	88,9
America	19	2,5	22	2,7	24	2,6	31	3,0	37	3,25
Asia	12	1,6	15	1,85	23	2,5	53	5,15	73	6,4
other		2,9		3,45		4,2		1,25	16	1,45

*Source*: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*

Figure 4. Foreign tourists arrivals by regions in Serbia in 2015

Bosnia and Herzegovina together with the Republic of Macedonia are the only countries that have less than a million foreign tourists annually. In these countries as in Serbiathe political instability contributed for tourism not reaching its maximum potential. In 2016 over 613,000 thousand foreign tourists visited Bosnia which is an increase of 36% compared to 2011 and is at the same level with Serbia and Macedonia. In 1984 the winter Olympic games were held In Sarajevo with exceptional conditions for winter sports tourism, Bosnia also has a small sea outlet on the Adriatic Sea near Neum and it also has one of the most attractive places for religious tourism in Medjugorje adding all that up Bosnia can't be satisfied with the number of tourists and the revenue it generates. Unlike the other countries in the region which were analyzed, the share of tourists from Europe is the smallest and in 2015 dropped to 79%, while there is an evident growth of tourists from Asia, which in 2011 participated with 2.3%, while in 2015 their share was 13.1%. Interesting, despite the tourists from South Korea there is an evident participation of tourists from the Arab countries, especially the United Arab Emirates, this corresponds to the religious composition of the population in Bosnia and Herzegovina.There is also a percentage increase of tourists from the United States, which has an increase from 2.55% in 2011 to 4.2% in 2015.

Table 5. Visiting foreign tourists by region – Bosnia and Herzegovina

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	392	100	439	100	529	100	536	100	678	100
Europe	356	90,8	384	87,5	462	87,3	441	82,2	536	79
America	10	2,55	12	2,73	19	3,6	22	4,1	29	4,2
Asia	9	2,3	12	2,73	35	6,6	58	10,8	89	13,1
other		4,35		7,04		2,5		2,9	24	3,7

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*
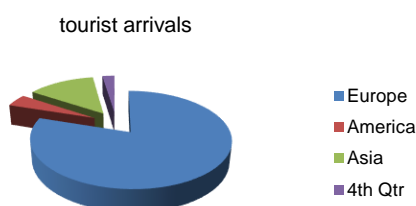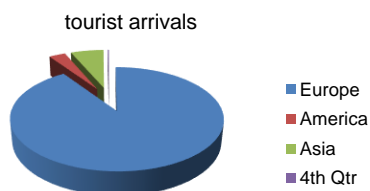
tourist arrivals

Figure 5. Foreign tourists arrivals by regions in Bosnia and Herzegovina in 2015

Macedonia as a tourist destination in 2016 was visited by 510,804 foreign tourists. Macedonia also has an increasing trend of foreign tourists and the growth is somewhere on the level with Serbia and is around 36%.As with other countries in the region over 90% of the tourists are from Europe. The interesting fact for the Republic of Macedonia in the analyzed period is the percentage decline of tourists from the United States. Compared to the tourists from the United States there is a trend of growth in the number of tourists from Asia with 3.36% in 2011 it rose to 6.17% in 2015 with the dominant number of tourists from the People's Republic of China. The number of tourists from other parts of the world is insignificant.

Table 6. Visiting foreign tourists by region – Macedonia

Year	Tourist arrivals									
	2011	%	2012	%	2013	%	2014	%	2015	%
Total	327	100	351	100	400	100	425	100	486	100
Europe	304	92,9	325	92,5	368	92	388	91,3	440	90,5
America	11	3,36	11	3,1	13	3,25	13	3,06	15	3,08
Asia	12	3,67	15	4,27	18	4,5	23	5,4	30	6,17
other		0,7		0,13		0,25		0,24	1	0,25

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*

tourist arrivals

Figure 6. Foreign tourists arrivals by regions in Macedonia in 2015

If we look at the aggregate data for the whole region we will notice that the data generally corresponds with the data which was obtained for each country.In 2015 the region was visited by 19,251,000 tourists which is an increase of 4,603,000 million compared to 2011, or over one million increase in the number of international tourists per year, or an annual average around 7 to 8%. Also collectively when you look at the numbers there is an immediate conclusion that the region is dominated by tourists from Europe which are around 90%, although there is a downward trend. All this corresponds to one of the basic indicators of tourism, that the development depends on the geographical location and the proximity to the emitting areas or the factors of space and time. The region of the former Yugoslavia has an outstanding tourist geographic position and also Europe is the main emitting area which in every respect is the leader in the field of tourism. In the analyzed period there is an increasing trend of tourists from the United States, from 2.54% to 3.9% but the absolute numbers are still far in relation to tourists form Europe. The interesting fact is the appearance of tourists from Asia and their accelerated growth so despite the great distance the increase in the total mass of tourists in 2015 rose to 7.6% and the number tourist came close to 1.5 million.

Table 7. Visiting foreign tourists by region – the whole region

Year	2011	%	2012	%	2013	%	2014	%	2015	%
					Tourist arrivals					
Total	14,648	100	15,659	100	16,382	100	17,374	100	19,251	100
Europe	13,696	93,5	14,215	90,7	14,969	91,37	15,496	89,2	16,949	88
America	372	2,54	426	2,7	538	3,28	617	3,55	750	3,9
Asia	505	3,5	650	4,15	776	4,73	1,200	6,9	1,468	7,6
other		0,06		2,45		2,45		0,4	84	0,47

Source: UNWTO. 2017. *Compendium of Tourism Statistics, Data 2011– 2015.*

tourist arrivals

■Europe
■America
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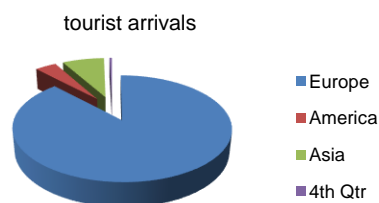
Figure 7. Foreign tourists arrivals by regions in the whole region in 2015

CONCLUSION

Simple SMA and EWMA models are used to calculate the volatility of the daily stock returns of the 10 shares comprising index MBI10 to find out if they are working well for stock risk estimation and which model works better. Rolling window that is used is 100 observation for both models and for EWMA model, different smoothing constant λ is used: 0.90, 0.94 and 0.96. Risk Metrics model is based on the unrealistic assumption of normally distributed returns, and completely ignores the presence of fat tails in the probability distribution, a most important feature of financial data and even though it is expected that will seriously underestimate risk it was found that works satisfactorily well.

Due to the simplicity, this model is widely used and the goal of this study was to check if it works for risk estimation on the Macedonian Stock Market.

Systematic backtesting was a part of regular VaR reporting in order to constantly monitor the performance of the model. Risk managers at MSE can use SMA (100) model and EWMA (100), with smoothing constant λ of 0.96 to estimate risk for most of the shares of MBI-10 at 95% confidence level. Risk estimation for ALK, KMB, GRNT, OHB and SBT is better to be done with simple SMA model. Volatility of STB, MPT, TEL, TNB and MTUR is better to be estimated with EWMA (100) smoothing constant of 0.96. Risk metrics EWMA model 0.94 (proposed by Risk Metrics) is best to estimate risk for the index MBI10. The backtesting results using BLF method shows that at high quintiles (99) both models failed. The risk is underestimated with both models. Using EWMA (100) at 99% confidence level works better with λ of 0.96 than with 0.94 and 0.90 even though risk is underestimated. Estimation volatility for MBI-10 at 99% confidence level can be done the same with both models: SMA (100) and EWMA (100) with λ of 0.96 and 0.94.

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